1. Gerson, F.; Müllen, K.; Vogel, E., The Structure of 2,5-Semiquinones derived from 1,6-Bridged [10] Annulenes. *Helvetica Chimica Acta* **1971,** *54* (4), 1046-1054.
2. Gerson, F.; Müllen, K.; Vogel, E., Effect of Non-Planarity on the Paramagnetic Ring Current in the Dianion of 1,6;8,13-Propanediylidene[14]annulene. *Angewandte Chemie International Edition in English* **1971,** *10* (12), 920-921.
3. Gerson, F.; Müllen, K.; Vogel, E., Unusual Features in the ESR. Spectra of 1, 6-Methano[10] annulene Radical Anion. A modified mcconnell equation for non-planar π-radicals. *Helvetica Chimica Acta* **1971,** *54* (8), 2731-2744.
4. Müllen, K., Protonenresonanzuntersuchungen an Tellur-, Schwefel- und Sauerstoff-substituierten Benzolderivaten. *Organic Magnetic Resonance* **1971,** *3* (3), 331-337.
5. Vogel, E.; Lohmar, E.; Böll, W. A.; Söhngen, B.; Müllen, K.; Günther, H., Dicarbonyl Derivatives of 1,6-Bridged [10]Annulenes. *Angewandte Chemie International Edition in English* **1971,** *10* (6), 398-399.
6. Gerson, F.; Müllen, K.; Vogel, E., Effect of Nonplanarity in Bridged [14]Annulenes on the Electron Spin Resonance Spectra of Their Radical Anions. *Journal of the American Chemical Society* **1972,** *94* (9), 2924-2929.
7. Müllen, K.; Reel, H., Die Elektronenstruktur des Dicyclohepta[c d, g h]pentalens. *Helvetica Chimica Acta* **1973,** *56* (1), 363-368.
8. Vogel, E.; Brinker, U. H.; Nachtkamp, K.; Wassen, J.; Müllen, K., Semibullvalenes as Potential Homoaromatic Compounds. *Angewandte Chemie International Edition in English* **1973,** *12* (9), 758-760.
9. Gerlach, H.; Müllen, K., Die Konfiguration der stereoisomeren Tris(glycinato)-Kobalt(III)-Komplexe. *Helvetica Chimica Acta* **1974,** *57* (7), 2234-2237.
10. Gleiter, R.; Müllen, K., Model Calculations on the Squalene Cyclization. *Helvetica Chimica Acta* **1974,** *57* (3), 823-831.
11. Müllen, K., The Radical Anions of Heptalene and 1, 7-Methano-[12]annulene. *Helvetica Chimica Acta* **1974,** *57* (8), 2399-2406.
12. Oth, J. F. M.; Müllen, K.; Gilles, J. M.; Schröder, G., Comparison of 13C- and 1H-Magnetic Resonance Spectroscopy as Techniques for the Quantitative Investigation of Dynamic Processes. The cope rearrangement in bullvalene. *Helvetica Chimica Acta* **1974,** *57* (5), 1415-1433.
13. Oth, J. F. M.; Müllen, K.; Königshofen, H.; Mann, M.; Sakata, Y.; Vogel, E., The Dianions of 1,7-and 1,6-Methano[12]annulenes— Novel Aromatic 14π Electron Systems. *Angewandte Chemie International Edition in English* **1974,** *13* (4), 284-285.
14. Oth, J. F. M.; Müllen, K.; Königshofen, H.; Wassen, J.; Vogel, E., The Dianion of Heptalene. *Helvetica Chimica Acta* **1974,** *57* (8), 2387-2398.
15. Vogel, E.; Königshofen, H.; Müllen, K.; Oth, J. F. M., 1,7-Methano[12]annulene—the 12π Analog of 1,6-Methano[10]annulene. *Angewandte Chemie International Edition in English* **1974,** *13* (4), 281-283.
16. Vogel, E.; Königshofen, H.; Wassen, J.; Müllen, K.; Oth, J. F. M., A Heptalene Synthesis from 1,6-Methano[10]annulene; Evidence for a Fast π-Bond Shift. *Angewandte Chemie International Edition in English* **1974,** *13* (11), 732-734.
17. Vogel, E.; Mann, M.; Sakata, Y.; Müllen, K.; Oth, J. F. M., 1,6-Methano[12]annulene. *Angewandte Chemie International Edition in English* **1974,** *13* (4), 283-284.
18. Gerson, F.; Müllen, K.; Wydler, C., Methyl Substitution as a Probe for π-Spin Distribution in the Radical Anion of 1,6-Methano[10]annulene. *Helvetica Chimica Acta* **1976,** *59* (4), 1371-1375.
19. Müllen, K., Zur Frage der Ladungsverteilung in ionischen π-Systemen. *Helvetica Chimica Acta* **1976,** *59* (4), 1357-1359.
20. Oth, J. F. M.; Müllen, K.; Runzheimer, H. V.; Mues, P.; Vogel, E., Configuration,

Conformation, and Dynamics of Octalene. *Angewandte Chemie International Edition in English* **1977,** *16* (12), 872-874.
21. Wagemann, W.; Müllen, K.; Vogel, E.; Pilati, T.; Simonetta, M., syn-4,13;6,11-Dimethano[15]annulenone, a 14π-Analog of Tropone—Synthesis and X-Ray Structure Analysis. *Angewandte Chemie International Edition in English* **1977,** *16* (3), 170-171.
22. Deger, H. M.; Müllen, K.; Vogel, E., syn,syn-1,6:8,17:10,15-Trismethano[18]annulene Dication—Dication of a [4n+2]Annulene. *Angewandte Chemie International Edition in English* **1978,** *17* (12), 957-958.
23. Gerson, F.; Huber, W.; Müllen, K., The Berson-Willcott Rearrangement of 11,11-Dimethyltricyclo[4.4.1.01,6]undeca-2,4,7,9-tetraene and Its Radical Anion. *Angewandte Chemie International Edition in English* **1978,** *17* (3), 208-209.
24. Müllen, K., The Dianions of Phenanthrene and 1,2,3,4-Dibenzocyclooctatetraene. *Helvetica Chimica Acta* **1978,** *61* (4), 1296-1304.
25. Müllen, K., The Unexpectedly Stable Dianion of a Naphthalene-Tolan Photoadduct. *Helvetica Chimica Acta* **1978,** *61* (4), 1305-1309.
26. Müllen, K., The Dianions of Pyrene and Pyrene Isomers as (4n)π-Perimeters. *Helvetica Chimica Acta* **1978,** *61* (7), 2307-2317.
27. Müllen, K.; Huber, W., [2+2]-Cycloadditionen und -Cycloreversionen in Radikalanionen. Eine ESR.-spektroskopische Beschreibung am Beispiel 2,2'-disubstituierter Biphenyle. *Helvetica Chimica Acta* **1978,** *61* (4), 1310-1326.
28. Frei, B.; de Weck, G.; Müllen, K.; Wolf, H. R.; Jeger, O., Photochemische Reaktionen. 103. Mitteilung [1]. Zur Photochemie konjugierter Epoxy-en-carbonylverbindungen der Jonon-Reihe: UV.-Bestrahlung α,β-ungesättigter ε-Oxo-γ, δ-epoxy-carbonylverbindungen und Untersuchung des Mechanismus der Epoxy-enon/Furan-Isomerisierung. *Helvetica Chimica Acta* **1979,** *62* (2), 553-576.
29. Gerson, F.; Huber, W.; Müllen, K., Rearrangement of the Radical Anions of 1,6-Bridged[10]Annulenes to Derivatives of 5H-Benzocycloheptene and Benzotropylium. *Helvetica Chimica Acta* **1979,** *62* (7), 2109-2128.
30. Müllen, K.; Oth, J. F. M.; Engels, H. W.; Vogel, E., Dianion and Tetraanion Octalene. *Angewandte Chemie International Edition in English* **1979,** *18* (3), 229-231.
31. Seebach, D.; Siegel, H.; Müllen, K.; Hiltbrunner, K., Direct 13C-NMR Spectroscopic Observation of Cyclopropylidene Bromolithiocarbenoids. *Angewandte Chemie International Edition in English* **1979,** *18* (10), 784-785.
32. Huber, W.; Müllen, K., Tetra-anion of 9,9'-bianthryl. *Journal of the Chemical Society - Series Chemical Communications* **1980,** (15), 698-700.
33. Huber, W.; Müllen, K.; Wennerström, O., Dianion and Tetraanion of [24] Paracyclophanetetraene—New Unusual Perimeter Systems. *Angewandte Chemie International Edition in English* **1980,** *19* (8), 624-625.
34. Oth, J. F. M.; Müllen, K.; Schmickler, H.; Engels, H. W.; Vogel, E., π-Bond Configurations, Conformations, and Dynamic Behaviour of Benzo[c]octalene and Dibenzo[c,j]octalene. *Helvetica Chimica Acta* **1980,** *63* (8), 2411-2425.
35. Gerson, F.; Huber, W.; Müllen, K., The Radicals and Radical Dianions of Bridged [11]- and [15]Annulenyls as Compared with Those of Benzotropyl and 2,3-Naphthotropyl. *Helvetica Chimica Acta* **1981,** *64* (8), 2766-2781.
36. Huber, W.; Lex, J.; Meul, T.; Müllen, K., trans-15,16-Dimethyl-1,4:8,11-ethanediylidene[14]annulene. *Angewandte Chemie International Edition in English* **1981,** *20* (4), 391-393.
37. Huber, W.; Und, A. M.; Müllen, K., Ladungsinduzierte Konformationsumwandlungen in Biphenyl- und Cyclooctatetraenyl-System. *Chemische Berichte* **1981,** *114* (4), 1318-1336.

38. Müllen, K.; Bender, S.; Kotzamani, E.; Schmickler, H.; Frei, B.; Wolf, H. R., 13C-nmr of carbonyl compounds 1. Stereodynamic behaviour of acyclic and cyclic dienones. *Tetrahedron Letters* **1981,** *22* (36), 3513-3516.
39. Huber, W.; Irmen, W.; Lex, J.; Müllen, K., Reductive transformations. 2. Cis- and trans-1,2-addition of electrophiles to dianionic π-systems. *Tetrahedron Letters* **1982,** *23* (38), 3889-3892.
40. Huber, W.; Müllen, K.; Busch, R.; Grimme, W.; Heinze, J., A Bishomocyclooctatetraene Dianion. *Angewandte Chemie International Edition in English* **1982,** *21* (4), 301-302.
41. Huber, W.; Müllen, K.; Busch, R.; Grimme, W.; Heinze, J., Ein Bishomocyclooctatetraen-Dianion. *Angewandte Chemie International Edition in English* **1982,** *21* (4 S), 566-574.
42. Müllen, K.; Huber, W.; Meul, T., Highly Reduced π-Systems. *Bulletin des Sociétés Chimiques Belges* **1982,** *91* (5), 362-362.
43. Müllen, K.; Huber, W.; Meul, T.; Nakagawa, M.; Iyoda, M., Highly Reduced Annulenes. Novel Probes for Spectroscopy and Theory. *Journal of the American Chemical Society* **1982,** *104* (20), 5403-5411.
44. Schnieders, C.; Altenbach, H. J.; Müllen, K., Ein 2,6-Diazasemibullvalen. *Angewandte Chemie International Edition in English* **1982,** *21* (8 S), 1353-1359.
45. Schnieders, C.; Altenbach, H. J.; Müllen, K., A 2,6-Diazasemibullvalene. *Angewandte Chemie International Edition in English* **1982,** *21* (8), 637-638.
46. Vogel, E.; Engels, H. W.; Huber, W.; Lex, J.; Müllen, K., Octalene-[14]Annulene Conversion: 1,8-Dimethyl[14]annulene. *Journal of the American Chemical Society* **1982,** *104* (13), 3729-3731.
47. Becker, B. C.; Huber, W.; Schnieders, C.; Müllen, K., Struktur und Reaktivität polycyclischer Ionenpaare. *Chemische Berichte* **1983,** *116* (4), 1573-1594.
48. Becker, B. C.; Neumann, G.; Schmickler, H.; Müllen, K., Direct Synthesis of a [13]Annulenide Ion. *Angewandte Chemie International Edition in English* **1983,** *22* (3), 241-242.
49. Becker, B. C.; Neumann, G.; Schmickler, H.; Müllen, K., Direkte Synthese eines[13]Annulenid-Ions. *Angewandte Chemie International Edition in English* **1983,** *22* (3 S), 282-287.
50. Gammon, G. D.; John, K.; Rothblum, E. D.; Mullen, K.; Tischler, G. L.; Weissman, M. M., Use of a structured diagnostic interview to identify bipolar disorder in adolescent inpatients: Frequency and manifestations of the disorder. *American Journal of Psychiatry* **1983,** *140* (5), 543-547.
51. Gobble, D.; Mullen, K., Relationships between wellness role modeling and professional training in health education. *Health values* **1983,** *7* (3), 19-24.
52. Hoell, D.; Schnieders, C.; Müllen, K., 1-Lithio-1-phenylcyclopropanes—Structure and Dynamics. *Angewandte Chemie International Edition in English* **1983,** *22* (3), 243-244.
53. Hoell, D.; Schnieders, C.; Müllen, K., 1-Lithio-1-phenyl-cyclopropane–Struktur und Dynamik. *Angewandte Chemie International Edition in English* **1983,** *22* (3 S), 299-306.
54. Huber, W.; Unterberg, H.; Müllen, K., Successive Electron Transfers in Molecules with Two Electrophoric Groups: Novel Singlet, Doublet, and Triplet States. *Angewandte Chemie International Edition in English* **1983,** *22* (3), 242-242.
55. Huber, W.; Unterberg, H.; Müllen, K., Sukzessive Elektronenübertragungen in Molekülen mit zwei elektrophoren Gruppen: Neue Singulett-, Dublett- und Triplett-Zustände. *Angewandte Chemie International Edition in English* **1983,** *22* (3 S), 288-298.
56. Müllen, K.; Huber, W.; Meul, T.; Nakagawa, M.; Iyoda, M., Ion-pairing and ring current effects. *Tetrahedron* **1983,** *39* (9), 1575-1581.
57. Müllen, K.; Kotzamani, E.; Schmickler, H.; Frei, B., 13C nmr spectroscopy of carbonyl compounds. 2. Conformational amd configurational dependence of the (z)-epoxyenone/furan isomerization. *Tetrahedron* **1983,** *39* (22), 3821-3831.
58. Irmen, W.; Huber, W.; Lex, J.; Müllen, K., Novel Double-Layered Annulenes—Models for the

Investigation of Successive Electron Transfers. *Angewandte Chemie International Edition in English* **1984,** *23* (10), 818-820.
59. Müllen, K., Reduction and Oxidation of Annulenes. *Chemical Reviews* **1984,** *84* (6), 603-646.
60. Müllen, K.; Kotzamani, E.; Schmickler, H.; Frei, B., 13C NMR of carbonyl compounds. 3. Structure and dynamics of protonated enones and dienones. *Tetrahedron Letters* **1984,** *25* (49), 5623-5626.
61. Mullen, K.; Unterberg, H.; Huber, W.; Wennerström, O.; Norinder, U.; Tanner, D.; Thulin, B.; Huber, W., Diatropic Cyclophane Dianions. *Journal of the American Chemical Society* **1984,** *106* (24), 7514-7522.
62. Schnieders, C.; Müllen, K.; Braig, C.; Schuster, H.; Sauer, J., The cope rearrangement in substituted semibullvalenes as studied by dynamic 13C NMR. *Tetrahedron Letters* **1984,** *25* (7), 749-752.
63. Schnieders, C.; Müllen, K.; Huber, W., The alkali metal reduction of pyrene structural and preparative aspects. *Tetrahedron* **1984,** *40* (10), 1701-1711.
64. Baierweck, P.; Hoell, D.; Müllen, K., New Bicyclic Ketones and the Stereochemistry of Their Reaction with Carbanions. *Angewandte Chemie International Edition in English* **1985,** *24* (11), 972-973.
65. Bernard, J.; Schnieders, C.; Müllen, K., Lithium 2-lithio-1,1,3,3-tetraphenylpropenide1. *Journal of the Chemical Society - Series Chemical Communications* **1985,** (1), 12-14.
66. Fry, A. J.; Powers, T. A.; Müllen, K.; Irmen, W., Electrochemical behavior of layered annulenes. *Tetrahedron Letters* **1985,** *26* (40), 4879-4882.
67. Huber, W.; Müllen, K.; Neumann, G.; Schnieders, C.; Unterberg, H., Alternative Routes for Reductive Alkylations in Liquid Ammonia and Their Selection via Spectroscopic Evidence1. *Journal of the American Chemical Society* **1985,** *107* (4), 801-807.
68. Müllen, K.; Meul, T.; Vogel, E.; Kürschner, U.; Schmickler, H.; Wennerström, O., Doubly charged ions of bridged [4n] annulenes. An evaluation of diatropic ring current effects. *Tetrahedron Letters* **1985,** *26* (26), 3091-3094.
69. Schnieders, C.; Huber, W.; Lex, J.; Müllen, K., 1,5-Diazocines. *Angewandte Chemie International Edition in English* **1985,** *24* (7), 576-577.
70. Bender, D.; Unterberg, H.; Müllen, K., Poly(anthrylenetrimethylene) and 9,10-Bridged Anthracenes by Reductive Alkylation. *Angewandte Chemie International Edition in English* **1986,** *25* (5), 444-446.
71. Eliasson, B.; Edlund, U.; Müllen, K., Unusually low 13C chemical shift sensitivity to charge in cyclic 4nπ anions. Potential relation to anisotropic ring current effects. *Journal of the Chemical Society, Perkin Transactions 2* **1986,** (7), 937-940.
72. Fiedler, J.; Huber, W.; Müllen, K., Synthesis and Redox Properties of Compounds with Several Separated Anthracene Electrophores. *Angewandte Chemie International Edition in English* **1986,** *25* (5), 443-444.
73. Heinz, W.; Langensee, P.; Müllen, K., Non-planar and conformationally mobile dianions of cyclo-octatetraene systems. *Journal of the Chemical Society, Chemical Communications* **1986,** (12), 947-949.
74. Hoell, D.; Müllen, K.; Lex, J., Novel Benzyllithium Structures. *Journal of the American Chemical Society* **1986,** *108* (19), 5983-5991.
75. Huber, W.; Müllen, K., Effects of Electron-Transfer Processes on Conformation. *Accounts of Chemical Research* **1986,** *19* (10), 300-306.
76. Huber, W.; Müllen, K.; Schnieders, C.; Iyoda, M.; Nakagawa, M., Perimeter-Type Structures in Charged [4n + 2] Annuleno [4n + 2] annulenes. The Importance of the Frontier-Orbitals. *Helvetica Chimica Acta* **1986,** *69* (4), 949-954.
77. Müllen, K., Novel π-structures via Electron Transfer Processes—from Spectroscopy to synthesis. *Pure and Applied Chemistry* **1986,** *58* (1), 177-186.

78. Müllen, K.; Schmickler, H.; Frei, B.; Wolf, H. R., 13C NMR of carbonyl compounds -4. Solution conformation of β-ionone and related dienones. *Tetrahedron Letters* **1986,** *27* (4), 477-480.
79. Neumann, G.; Mullen, K., Reductive Alkylation of Aceheptylene—A Simple Route to a Series of Novel π-Perimeters. *Journal of the American Chemical Society* **1986,** *108* (14), 4105-4110.
80. Tanner, D.; Wennerström, O.; Norinder, U.; Müllen, K.; Trinks, R., The dianion of [2.2.2]paracyclophene; a 20 π-perimeter species? *Tetrahedron* **1986,** *42* (16), 4499-4502.
81. Cerra, F.; Blackburn, G.; Hirsch, J.; Mullen, K.; Luther, W., The effect of stress level, amino acid formula, and nitrogen dose on nitrogen retention in traumatic and septic stress. *Annals of Surgery* **1987,** *205* (3), 282-287.
82. Heinz, W.; Langensee, P.; Müllen, K., Dibenzo[fg,mn]octalene and Cycloocta[def]phenanthrene. New Models for the Conformational Analysis of Biphenyl Systems. *Angewandte Chemie International Edition in English* **1987,** *26* (12), 1291-1293.
83. Heinze, J.; Mortensen, J.; Müllen, K.; Schenk, R., The charge storage mechanism of conducting polymers: A voltammetric study on defined soluble oligomers of the phenylene-vinylene type. *Journal of the Chemical Society, Chemical Communications* **1987,** (9), 701-703.
84. Klabunde, K. U.; Huber, W.; Lex, J.; Müllen, K., 1,2,3,4,5-[1′,8′] Anthra-8,9;10,11-dibenzo[13]annulene and 1,8-Distyrylanthracene as Models for Phenylenevinylene Species. Syntheses, Structures, and Redox Properties. *Chemische Berichte* **1987,** *120* (9), 1491-1497.
85. Klabunde, K. U.; Müllen, K.; Vogler, H., 1H nmr chemical shifts of [14]annulenes and their dianion salts. A combined experimental and theoretical approach. *Tetrahedron* **1987,** *43* (6), 1183-1196.
86. Krummel, G.; Huber, W.; Mullen, K., The Dependence of Intramolecular Electron Transfer on Structure in a Spiro Compound Containing Two Cyclooctatetraene Moieties. *Angewandte Chemie International Edition in English* **1987,** *26* (12), 1290-1291.
87. Müllen, K., New Reductive Transformations of Unsaturated Cyclic Hydrocarbons [New Synthetic Methods (66)]. *Angewandte Chemie International Edition in English* **1987,** *26* (3), 204-217.
88. Müllen, K.; Allison, N. T.; Lex, J.; Schmickler, H.; Vogel, E., Structure and fluxional behaviour of heptaleneirontricarbonyl and heptalenebis (Irontricarbonyl). *Tetrahedron* **1987,** *43* (14), 3225-3236.
89. Müllen, K.; Meul, T.; Schade, P.; Schmickler, H.; Vogel, E., Dianions and Dications Derived from Bridged [An + 2]Annulenes. Paratropism as a Function of Ring Size, Conformation, and Configuration. *Journal of the American Chemical Society* **1987,** *109* (16), 4992-5003.
90. Trinks, R.; Müllen, K., The Reductive σ Bond Cleavage of Barbaralane and 2,6-Diphenylbarbaralane. *Chemische Berichte* **1987,** *120* (9), 1481-1490.
91. Baierweck, P.; Simmross, U.; Müllen, K., Biindenyls, Biindenylides, and Diindeno-Fused Heterocycles from Oxidative Coupling of 1- and 2-Indanone. *Chemische Berichte* **1988,** *121* (12), 2195-2200.
92. Bender, D.; Herbst, H.; Schade, P.; Müllen, K., Synthesis of oligomeric chains with 9,10-dihydroanthracene units by carbanion alkylation. *Chemische Berichte* **1988,** *121* (6), 1177-1186.
93. Bender, D.; Müllen, K., Novel Alkylanthracenes Synthesis, Reductive Alkylation, and Reductive Polymerization. *Chemische Berichte* **1988,** *121* (6), 1187-1197.
94. Krummel, G.; Müllen, K., Reductive transformations - 11. stereoselective cycloannelation and bridging of the cyclooctatetraene dianion1 1 Part 10 : D. Bender, K. Müllen, Makromol. Chem., Rapid. Commun. 1988, 9, in press. *Tetrahedron Letters* **1988,** *29* (23), 2809-2812.
95. Röhrich, J.; Wolf, P.; Enkelmann, V.; Müllen, K., A Donor Cage with Bent Tetrathiafulvalene Moiety. *Angewandte Chemie International Edition in English* **1988,** *27* (10), 1377-1379.
96. Schenk, R.; Huber, W.; Schade, P.; Müllen, K., Electron Transfer and Conformational Interconversions in 1,n-Diphenylpolyenes. *Chemische Berichte* **1988,** *121* (12), 2201-2208.
97. Trinks, R.; Müllen, K., Alkali-metal induced C,C-bond cleavage, C,H-bond cleavage,

andcyclopolimerization in 1,5-hexadienes. *Tetrahedron Letters* **1988,** *29* (32), 3929-3930.
98. Wolf, P.; Naarmann, H.; Müllen, K., A Conjugated Bis(tetrathiafulvalene) System with Tetrathia-s-indacene Structure. *Angewandte Chemie International Edition in English* **1988,** *27* (2), 288-289.
99. Alexander, J.; Ehrenfreund, M.; Fiedler, J.; Huber, W.; Räder, H. J.; Müllen, K., Stack-Type Redox Systems: Synthesis via Repeated Carbanion Alkylation and Electron Transfer Studies. *Angewandte Chemie International Edition in English* **1989,** *28* (11), 1531-1533.
100. Becker, B.; Cosmo, R.; Müllen, K.; Meerholz, K.; Heinze, J., The different redox-activity of dianthrylbenzene and dianthrylbiphenyl. *Tetrahedron Letters* **1989,** *30* (13), 1629-1632.
101. Becker, B.; Enkelmann, V.; Müllen, K., The Structures of 1,n-Bis(9-lithio-9-fluorenyl)ethane · 8 THF and -hexane · 8 THF as Models for Solvent-Separated Ion Pairs. *Angewandte Chemie International Edition in English* **1989,** *28* (4), 458-460.
102. Bender, D.; Müllen, K., Reductive transformations - 14. Soluble polyesters derived from 9,10-anthracenediols (1). *Polymer Bulletin* **1989,** *22* (2), 137-141.
103. Cosmo, R.; Kautz, C.; Meerholz, K.; Heinze, J.; Müllen, K., Highly Reduced Porphyrins. *Angewandte Chemie International Edition in English* **1989,** *28* (5), 604-607.
104. Heinz, W.; Räder, H. J.; Müllen, K., Changing the size of a cavity via an electron-transfer: synthesis and reduction of 1,5,22,26-tetraoxa-[5,5]-(2,8)-dibenzo[a,e]cylooctatetraenophane. *Tetrahedron Letters* **1989,** *30* (2), 159-162.
105. Kohnz, H.; Düll, B.; Müllen, K., From the Bicyclo[3.3.0]octane Framework to Multiply Bridged [12]Annulenes and Semibulvanes. *Angewandte Chemie International Edition in English* **1989,** *28* (10), 1343-1345.
106. Maresch, G. G.; Mehring, M.; Von Schütz, J. U.; Werner, H. P.; Gökelmann, K.; Enkelmann, V.; Müllen, K.; Klabunde, K. U., Investigation of the spin diffusion in (dicyclopentaheptalene) 2SbF6 by pulsed electron spin resonance. *The Journal of Chemical Physics* **1989,** *91* (8), 4543-4547.
107. Mullen, K., Glasgow's temperance story: changing approaches towards the control of alcohol abuse. *Health bulletin* **1989,** *47* (6), 304-310.
108. Räder, H. J.; Scherer, U.; Wolf, P.; Müllen, K., Conjugated 'bis'-tetrathiafulvalenes: Donors for a new class of conducting radical cation salts. *Synthetic Metals* **1989,** *32* (1), 15-23.
109. Schenk, R.; Hucker, J.; Hopf, H.; Räder, H. J.; Müllen, K., Bis-Stilbene Systems: Reduction to the Tetraanions. *Angewandte Chemie International Edition in English* **1989,** *28* (7), 904-906.
110. Adam, M.; Wolf, P.; Räder, H.; Müllen, K., Conjugated 'tris'-tetrathiafulvalenes. *Journal of the Chemical Society, Chemical Communications* **1990,** (22), 1624-1625.
111. Bohnen, A.; Koch, K. H.; Lüttke, W.; Müllen, K., Oligorylene as a Model for "Poly(perinaphthalene)". *Angewandte Chemie International Edition in English* **1990,** *29* (5), 525-527.
112. Eliasson, B.; Johnels, D.; Sethson, I.; Edlund, U.; Müllen, K., 13C chemical shift sensitivity to charge in delocalized carbocations and its relation to ring current anisotropy. *Journal of the Chemical Society, Perkin Transactions 2* **1990,** (6), 897-900.
113. Hammel, D.; Kautz, C.; Müllen, K., Funktionalisierte meso-Arylporphyrine als Edukte für die Synthese von Oligoporphyrinylen. *Chemische Berichte* **1990,** *123* (6), 1353-1356.
114. Müllen, K.; Heinz, W.; Klärner, F. G.; Roth, W. R.; Kindermann, I.; Adamczak, O.; Wette, M.; Lex, J., Inversionsbarrieren Ortho,ortho'-verbrückter Biphenyle. *Chemische Berichte* **1990,** *123* (12), 2349-2371.
115. Müllen, K.; Lex, J.; Schulz, R. C.; Walter, F., An ionene with spirane structure (spiroionene). *Polymer Bulletin* **1990,** *24* (3), 263-269.
116. Pollmann, M.; Wohlfarth, W.; Müllen, K.; Lex, J., 1,2,5,6-Tetra-exo-methylenecynclooctane and [2.2]-(2,3)- Furanophane as bis-diene components in diels-alder reactions. *Tetrahedron Letters*

1990, *31* (19), 2701-2704.
117. Schenk, R.; Ehrenfreund, M.; Huber, W.; Müllen, K., The extension of a polaron (radical anion) over oligophenylenevinylene chains. *Journal of the Chemical Society, Chemical Communications* **1990,** (23), 1673-1675.
118. Schenk, R.; Müllen, K.; Wennerström, O., Multiply charged anions from molecules with extended π-systems. *Tetrahedron Letters* **1990,** *31* (50), 7367-7370.
119. Adam, M.; Bohnen, A.; Enkelmann, V.; Müllen, K., A fully conjugated 'dimeric' BEDT-TTF system;l synthesis, crystal structure, and electrical properties. *Advanced Materials* **1991,** *3* (12), 600-602.
120. Adam, M.; Räder, H. J.; Röhrich, J.; Scherer, U.; Wolf, P.; Müllen, K., Oligomeric tetrathiafulvalenes. *Synthetic Metals* **1991,** *42* (1-2), 1623-1626.
121. Alexander, J.; Baumgarten, M.; Klabunde, K. U.; Müllen, K., Reductive transformations-14. Regioselective addition of carbanions to the "aromatic" pyrene isomer dicyclopenta(ef,kl)heptalene. *Tetrahedron Letters* **1991,** *32* (6), 735-738.
122. Auchter-Krummel, P.; Krummel, G.; Müllen, K.; Lex, J., Reduktive Umwandlungen, 182 Cycloanellierung und Überbrückung von Cyclooctatetraen1. *Chemische Berichte* **1991,** *124* (12), 2819-2831.
123. Auchter-Krummel, P.; Müllen, K., Cyclooctatetraenylene Vinylenes. *Angewandte Chemie International Edition in English* **1991,** *30* (8), 1003-1006.
124. Becker, B.; Bohnen, A.; Wohlfarth, W.; Mullen, K.; Ehrenfreund, M.; Huber, W.; Sakata, Y., Ions Derived from Dianthrylethane Species. How the Mode of Linking Affects the Intramolecular Electron Transfer. *Journal of the American Chemical Society* **1991,** *113* (4), 1121-1127.
125. Brendel, P.; Grupp, A.; Mehring, M.; Schenk, R.; Müllen, K.; Huber, W., Chain length-dependent polaron (P-) width in phenylenevinylene oligomers: a solid state ENDOR investigation. *Synthetic Metals* **1991,** *45* (1), 49-57.
126. Bryce, M. R.; Coffin, M. A.; Hursthouse, M. B.; Karaulov, A. I.; Müllen, K.; Scheich, H., Synthesis, x-ray crystal structure and multistage redox properties of a severely-distorted tetrathiafulvalene donor. *Tetrahedron Letters* **1991,** *32* (42), 6029-6032.
127. Cosmo, R.; Hammel, D.; Kautz, C.; Müllen, K.; Meerholz, K.; Heinze, J., Highly redox-active oligomeric porphyrins. *Synthetic Metals* **1991,** *42* (3), 2643-2646.
128. Fahnenstich, U.; Koch, K. H.; Pollmann, M.; Wegener, S.; Mullen, K. In *Band-type structures via electrocyclic reactions*, American Chemical Society, Polymer Preprints, Division of Polymer Chemistry, 1991; pp 409-410.
129. Heinz, W.; Pollmann, M.; Scheich, H.; Wagner, M.; Wegener, S.; Wohlfarth, W.; Müllen, K., Linear and cage-type cyclooctatetraene oligomers as models for electron transfer and complexation studies. *Synthetic Metals* **1991,** *42* (1-2), 1627-1630.
130. Koch, K. H.; Fahnenstich, U.; Baumgarten, M.; Müllen, K., Polynaphthylenes and oligorylenes, soluble electrophores and chromophores. *Synthetic Metals* **1991,** *42* (1-2), 1619-1622.
131. Koch, K. H.; Müllen, K., Polyarylenes and Poly(arylenevinylene)s, V. Synthesis of Tetraalkyl-Substituted Oligo(1,4-naphthylene)s and Cyclization to Soluble Oligo(peri-naphthylene)s2). *Chemische Berichte* **1991,** *124* (9), 2091-2100.
132. Müllen, K., Novel extended donors: Poly(peri-naphthylenes), poly(tetrathiafulvalenes), poly(arylenevinylenes). *Synthetic Metals* **1991,** *41* (3), 777-782.
133. Müllen, K.; Baumgarten, M.; Tyutyulkov, N.; Karabunarliev, S., A class of narrow-band high-spin organic polymers I. Polymers with direct exchange interaction between orthogonal π-orbitals. *Synthetic Metals* **1991,** *40* (1), 127-135.
134. Müllen, K.; Klabunde, M.; Enkelmann, V., Cyclopropannelation of the Bicyclo[3.3.0]octane Framework. On the Chemical Significance of exo-Positioned Substituents. *Chemische Berichte* **1991,** *124* (8), 1827-1830.

135. Sariciftci, N. S.; Segelbacher, U.; Weigand, B.; Grupp, A.; Mehring, M.; Gregorius, H.; Müllen, K., Optical studies on the intramolecular charge transfer properties of conjugated bridged donor-acceptor supermolecules. *Synthetic Metals* **1991,** *42* (3), 2399-2402.
136. Schade, P.; Schäfer, T.; Müllen, K.; Bender, D.; Knoll, K.; Bronstert, K., Reductive Transformations, 192 Electron-Transfer-Induced Dimerization of β-Alkylstyrenes and the Structures of the Resulting 1,4-Dilithiobutanes1. *Chemische Berichte* **1991,** *124* (12), 2833-2841.
137. Schenk, R.; Gregorius, H.; Müllen, K., Absorption spectra of charged oligo (phenylenevinylene)s: On the detection of polaronic and bipolaronic states. *Advanced Materials* **1991,** *3* (10), 492-493.
138. Schenk, R.; Gregorius, H.; Müllen, K.; Meerholz, K.; Heinze, J., Novel Oligo(Phenylenevinylenes): Models for the Charging of Extended π Chains. *Journal of the American Chemical Society* **1991,** *113* (7), 2634-2647.
139. Schrader, S.; Koch, K. H.; Mathy, A.; Bubeck, C.; Müllen, K.; Wegner, G., Nonlinear optical properties of tetra-tert.-butyl-oligo (rylene) s. *Synthetic Metals* **1991,** *43* (1-2), 3223-3226.
140. Tian, B.; Zerbi, G.; Müllen, K., Electronic and structural properties of polyparaphenylenevinylene from the vibrational spectra. *The Journal of Chemical Physics* **1991,** *95* (5), 3198-3207.
141. Tian, B.; Zerbi, G.; Schenk, R.; Müllen, K., Optical spectra and structure of oligomeric models of polyparaphenylenevinylene. *The Journal of Chemical Physics* **1991,** *95* (5), 3191-3197.
142. Wegener, S.; Müllen, K., 5,6,7,8-Tetramethylenebicyclo[2.2.2]oct-2-ene as "Bis(diene)" in Repetitive Diels-Alder Reactions. *Chemische Berichte* **1991,** *124* (9), 2101-2103.
143. Weitzel, H. P.; Boehm, A.; Klapper, M.; Bartz, T.; Muellen, K. In *Extension and interruption of π-conjugation in polyaromatic compounds*, American Chemical Society, Polymer Preprints, Division of Polymer Chemistry, 1991; pp 415-416.
144. Adam, M.; Enkelmann, V.; Räder, H. J.; Röhrich, J.; Müllen, K., A Donor Cage with Two Tetrathiafulvene Units. *Angewandte Chemie International Edition in English* **1992,** *31* (3), 309-310.
145. Anton, U.; Bohnen, A.; Koch, K. H.; Naarmann, H.; Räder, H. J.; Müllen, K., On the relation between charge-storage capacity and π-topology of different oligonaphthylenes. *Advanced Materials* **1992,** *4* (2), 91-93.
146. Anton, U.; Göltner, C.; Müllen, K., Reductive transformations, 20. Synthesis of n-alkyl-substituted perylenes and terrylenes via alkali-metal induced cyclization of oligonaphthylenes. *Chemische Berichte* **1992,** *125* (10), 2325-2330.
147. Baumgarten, M.; Karabunarliev, S.; Koch, K. H.; Müllen, K.; Tyutyulkov, N., Band structure of quasi-one-dimensional polycondensed aromatic hydrocarbons I. Poly(periacene)s. *Synthetic Metals* **1992,** *47* (1), 21-36.
148. Baumgarten, M.; Müller, U.; Bohnen, A.; Müllen, K., Oligo(9,10-anthrylenes), Organic Compounds with Stable High-Spin States. *Angewandte Chemie International Edition in English* **1992,** *31* (4), 448-451.
149. Böhm, A.; Müllen, K., Eletron-transfer induced valence isomerization of 1,2-distyrylbenzene. *Tetrahedron Letters* **1992,** *33* (5), 611-614.
150. Böhm, A.; Müllen, K.; Meerholz, K.; Heinze, J., Electron-Transfer-Induced Valence Isomerization of 2,2'-Distyrylbiphenyl. *Journal of the American Chemical Society* **1992,** *114* (2), 688-699.
151. Böhn, A.; Adam, M.; Mauermann, H.; Stein, S.; Stein, S.; Müllen, K., Solid-state photoreactivity of ortho-distyrylaromatic compounds. *Tetrahedron Letters* **1992,** *33* (20), 2795-2798.
152. Bohnen, A.; Räder, H. J.; Müllen, K., Charging mechanisms of extended π-systems. A cyclovoltammetric approach to the classification of redox polymers and conducting polymers. *Synthetic Metals* **1992,** *47* (1), 37-63.
153. Düll, B.; Müllen, K., 2,6-diaza-4,8-dicyanosemibullvalene. A short lived intermediate?

Tetrahedron Letters **1992,** *33* (52), 8047-8050.
154. Gregorius, H.; Baumgarten, M.; Renter, R.; Müllen, K.; Tyutyulkov, N., meta-Phenylene Units as Conjugation Barriers in Phenylenevinylene Chains. *Angewandte Chemie International Edition in English* **1992,** *31* (12), 1653-1655.
155. Gügel, A.; Becker, M.; Hammel, D.; Mindach, L.; Räder, J.; Simon, T.; Wagner, M.; Müllen, K., Preparative-Scale Separation of C60 and C70 on Polystyrene Gel. *Angewandte Chemie International Edition in English* **1992,** *31* (5), 644-645.
156. Hammel, D.; Erk, P.; Seliuler, B.; Heinze, J.; Müllen, K., Synthesis and reduction of 1,4-phenylene-bridged oligoporphyrins. *Advanced Materials* **1992,** *4* (11), 737-739.
157. Jost, W.; Adam, M.; Enkelmann, V.; Müllen, K., The Crystal Structure of [(Pyrene•−){Na+[(C2H5)2O]}]: A Model for Stacked Radical Anion Salts. *Angewandte Chemie International Edition in English* **1992,** *31* (7), 878-879.
158. Kiehl, A.; Eberhardt, A.; Adam, M.; Enkelmann, V.; Müllen, K., A Homologous Series of Stable Polyenes: Synthesis, Structure, and Redox Behavior. *Angewandte Chemie International Edition in English* **1992,** *31* (12), 1588-1591.
159. Kistenmacher, A.; Adam, M.; Baumgarten, M.; Pawlik, J.; Räder, H. J.; Müllen, K., Synthesis of new soluble triphenodithiazines and investigation of their donor properties. *Chemische Berichte* **1992,** *125* (6), 1495-1500.
160. Kistenmacher, A.; Müllen, K., A direct synthesis of indolocarbazoles via new dinitroterphenyl precursors. *Journal of Heterocyclic Chemistry* **1992,** *29* (5), 1237-1239.
161. Mortensen, J.; Heinze, J.; Herbst, H.; Müllen, K., Electrochemical generation of highly reduced oligoanthrylene systems ε- a voltammetric study. *Journal of Electroanalytical Chemistry* **1992,** *324* (1-2), 201-217.
162. Müllen, K.; Alexander, J.; Klabunde, K. U.; Klärner, F. G.; Lund, H.; Lund, T., Reductive Transformations, 161 Electron Transfer and Regioselectivity in the Alkylation of a Hydrocarbon Mono- and Dianion. *Chemische Berichte* **1992,** *125* (2), 505-513.
163. Rautter, J.; Grupp, A.; Mehring, M.; Alexander, J.; Müllen, K.; Huber, W., Electron localization and delocalization in biselectrophores. *Molecular Physics* **1992,** *76* (1), 37-45.
164. Röhrich, J.; Müllen, K., A Donor-Type Cyclophane with a Strongly Bent Tetrathiafulvalene Unit. *Journal of Organic Chemistry* **1992,** *57* (8), 2374-2379.
165. Scherf, U.; Müllen, K., Poly(arylenes) and Poly(arylenevinylenes). 11. A Modified Two-Step Route to Soluble Phenylene-Type Ladder Polymers. *Macromolecules* **1992,** *25* (13), 3546-3548.
166. Scherf, U.; Mullen, K., Design and synthesis of extended π-systems: Monomers, oligomers, polymers. *Synthesis* **1992,** (1-2), 23-38.
167. Scherf, U.; Müllen, K., Polyarylenes and poly(arylenevinylene)s: 8. The first soluble ladder polymer with 1,4-benzoquinone-bismethide subunits. *Polymer* **1992,** *33* (11), 2443-2446.
168. Tyutyulkov, N.; Dietz, F.; Müllen, K.; Baumgarten, M., Energy spectra of the poly[peri-acene]s: analytical solution of the LCAO MO problem. *Chemical Physics* **1992,** *163* (1), 55-58.
169. Tyutyulkov, N.; Karabunarliev, S.; Müllen, K.; Baumgarten, M., A class of narrow-band high-spin organic polymers II. Polymers with indirect exchange interaction. *Synthetic Metals* **1992,** *52* (1), 71-85.
170. Adam, M.; Scherer, U.; Shen, Y. J.; Müllen, K., Extended donors based on tetrathiafulvalene. *Synthetic Metals* **1993,** *56* (1), 2108-2112.
171. Anton, U.; Adam, M.; Wagner, M.; Qi-Lin, Z.; Müllen, K., The Stereochemistry of the Trinaphthyl-Terrylene Conversion. *Chemische Berichte* **1993,** *126* (2), 517-521.
172. Anton, U.; Müllen, K., Polyarylenes and Poly(arylenevinylene)s. 12. Synthesis and Chemical Modification of Two Novel Poly(naphthylene)s Carrying Solubilizing Pendant Groups. *Macromolecules* **1993,** *26* (6), 1248-1253.

173. Bartz, T.; Klapper, M.; Müllen, K.; Schulz, R. C., A novel synthesis of polymers with anthracene and dihydroanthracene subunits in the main chain. *Polymer International* **1993,** *31* (2), 153-162.
174. Baumgarten, M.; Anton, U.; Gherghel, L.; Muellen, K., Conjugation length and charge distribution in radical anions on one- and two-dimensional oligo(a)rylenes. *Synthetic Metals* **1993,** *57* (2 -3 pt 6), 4807-4812.
175. Baumgarten, M.; Anton, U.; Gherghel, L.; Müllen, K., Conjugation length and charge distribution in radical anions of one- and two-dimensional oligo (a) rylenes. *Synthetic Metals* **1993,** *57* (2-3), 4807-4812.
176. Baumgarten, M.; Huber, W.; Müllen, K., Electron Storage and Transfer in Organic Redox Systems with Multiple Electrophores. In *Advances in Physical Organic Chemistry*, 1993; Vol. 28, pp 1-44.
177. Baumgarten, M.; Müllen, K.; Tyutyulkov, N.; Madjarova, G., On the nature of the spin exchange interaction in poly (m-aniline). *Chemical Physics* **1993,** *169* (1), 81-84.
178. Belik, P.; Gügel, A.; Kraus, A.; Spickermann, J.; Enkelmann, V.; Frank, G.; Müllen, K., The Diels–Alder adduct of C60 and 4,5-dimethoxy-o-quinodimethane—synthesis, crystal structure, and donor–acceptor behavior. *Advanced Materials* **1993,** *5* (11), 854-856.
179. Belik, P.; Gügel, A.; Spickermann, J.; Müllen, K., Reaction of Buckminsterfullerene with ortho-Quinodimethane: a New Access to Stable C60 Derivatives. *Angewandte Chemie International Edition in English* **1993,** *32* (1), 78-80.
180. Garay, R. O.; Baier, U.; Bubeck, C.; Müllen, K., Low-temperature synthesis of poly(p-phenylenevinylene) by the sulfonium salt route. *Advanced Materials* **1993,** *5* (7-8), 561-564.
181. Göltner, C.; Pressner, D.; Müllen, K.; Spiess, H. W., Liquid-Crystalline Perylene Derivatives as "Discotic Pigments". *Angewandte Chemie International Edition in English* **1993,** *32* (11), 1660-1662.
182. Gregorius, H.; Heitz, W.; Müllen, K., Geometry-induced charge localization in doped phenylene chains. *Advanced Materials* **1993,** *5* (4), 279-281.
183. Gügel, A.; Müllen, K., Preparative separation of fullerene adducts by liquid chromatography on polystyrene gel. *Chromatographia* **1993,** *37* (7-8), 387-391.
184. Gügel, A.; Müllen, K., Separation of C60 and C70 on polystyrene gel with toluene as mobile phase. *Journal of Chromatography A* **1993,** *628* (1), 23-29.
185. Gügel, A.; Müllen, K.; Reichert, H.; Schmidt, W.; Schön, G.; Schüth, F.; Spickermann, J.; Titman, J.; Unger, K., The Incorporation of C60 in Molecular Sieves. *Angewandte Chemie International Edition in English* **1993,** *32* (4), 556-557.
186. Hennecke, M.; Damerau, T.; Müllen, K., Fluorescence Depolarization in Poly(p-phenylphenylenevinylene) and Related Oligomers. *Macromolecules* **1993,** *26* (13), 3411-3418.
187. Hoffmann, U.; Klapper, M.; Müllen, K., Phase-transfer catalyzed synthesis of poly(etherketone)s. *Polymer Bulletin* **1993,** *30* (5), 481-488.
188. Horn, T.; Baumgarten, M.; Gerghel, L.; Enkelmann, V.; Müllen, K., Orthogonal connection of acenes via two-fold Diels-Alder reactions. *Tetrahedron Letters* **1993,** *34* (37), 5889-5892.
189. Horn, T.; Müllen, K., Polymers Containing Silicon Spiro Centers. *Macromolecules* **1993,** *26* (14), 3472-3475.
190. Kistenmacher, A.; Adam, M.; Baumgarten, M.; Pawlik, J.; Shen, Y. J.; Müllen, K., Synthesis of new soluble triphenodithiazines - donor properties, EPR/ENDOR investigation and crystalline radical ion salts. *Synthetic Metals* **1993,** *56* (1), 2034-2038.
191. Muellen, K.; Scherf, U., Novel conjugated polymers. *Synthetic Metals* **1993,** *55* (2 -3 pt 2), 739-752.
192. Müllen, K., Extended π-systems in conjugated oligomers and polymers—the longer, the better? *Pure and Applied Chemistry* **1993,** *65* (1), 89-96.
193. Müllen, K.; Scherer, U.; Shen, Y. J.; Adam, M.; Bietsch, W.; Von Schütz, J. U., Extended

homologues of tetrathioalkyl-tetrathiafulvalenes. *Advanced Materials* **1993,** *5* (2), 109-112.
194. Müllen, K.; Scherf, U., Novel conjugated polymers. *Synthetic Metals* **1993,** *55* (2-3), 739-752.
195. Müllen, K.; Scherf, U., Low band-gap oligomers and polymers. *Makromolekulare Chemie. Macromolecular Symposia* **1993,** *69* (1), 23-33.
196. Müller, U.; Enkelmann, V.; Adam, M.; Müllen, K., Synthesis of Alkyl-Substituted Helianthrones and Mesonaphthobianthrone by Highly Regioselective Photocyclization of Bianthronylidenes. *Chemische Berichte* **1993,** *126* (5), 1217-1225.
197. Simmross, U.; Müllen, K., Tetraindeno-Fused Cyclooctatetraene and Oligomeric Biindenyls by Oxidative Coupling of 2,2'1-Biindenyl. *Chemische Berichte* **1993,** *126* (4), 969-973.
198. Tyutyulkov, N.; Dietz, F.; Müllen, K.; Baumgarten, M.; Karabunarliev, S., Structure and properties of non-classical polymers - IX. Non-alternant polymers. *Theoretica Chimica Acta* **1993,** *86* (4), 353-367.
199. Tyutyulkov, N.; Karabunarliev, S.; Müllen, K.; Baumgarten, M., Band structure of quasi-1D polycondensed hydrocarbons II. Energy spectra of ribbon polymers in relation to graphite. *Synthetic Metals* **1993,** *53* (2), 205-225.
200. Wegener, S.; Müllen, K., New Ladder Polymers via Repetitive Diels-Alder Reaction under High Pressure. *Macromolecules* **1993,** *26* (12), 3037-3040.
201. Wegner, R.; Beye, N.; Fanghänel, E.; Scherer, U.; Wirschem, R.; Müllen, K., Novel oligomeric TTF systems with extended conjugation. *Synthetic Metals* **1993,** *53* (3), 353-363.
202. Woo, H. S.; Lhost, O.; Graham, S. C.; Bradley, D. D. C.; Friend, R. H.; Quattrocchi, C.; Brédas, J. L.; Schenk, R.; Müllen, K., Optical spectra and excitations in phenylene vinylene oligomers. *Synthetic Metals* **1993,** *59* (1), 13-28.
203. Adam, M.; Fanghänel, E.; Müllen, K.; Shen, Y. J.; Wegner, R., Conjugated tris-tetrathiafulvalenes. *Synthetic Metals* **1994,** *66* (3), 275-283.
204. Adam, M.; Müllen, K., Oligomeric Tetrathiafulvalenes: Extended donors for increasing the dimensionality of electrical conduction. *Advanced Materials* **1994,** *6* (6), 439-459.
205. Bartz, T.; Klapper, M.; Müllen, K., Dihydroanthracene dimers as novel bifunctional initiators for anionic polymerization. *Acta Polymerica* **1994,** *45* (3), 248-251.
206. Bartz, T.; Klapper, M.; Müllen, K., Anthracene derivatives as novel initiators for anionic and cationic polymerizations. *Macromolecular Chemistry and Physics* **1994,** *195* (3), 1097-1109.
207. Baumgarten, M.; Dietz, F.; Müllen, K.; Karabunarliev, S.; Tyutyulkov, N., Energy spectra of infinite phenylenes. *Chemical Physics Letters* **1994,** *221* (1-2), 71-74.
208. Baumgarten, M.; Müllen, K.; Koch, K. H., Spin Density Distribution and Electronic Structure of Radical Anions of Ladder-type Oligorylenes. *Journal of the American Chemical Society* **1994,** *116* (16), 7341-7348.
209. Dietz, F.; Müllen, K.; Baumgarten, M.; Tyutyulkov, N., Band structure of quasi-1-dimensional polycondensed π-systems, 3 energy spectra of anti-aromatic polymers. *Macromolecular Theory and Simulations* **1994,** *3* (1), 241-253.
210. Dotcheva, D.; Klapper, M.; Müllen, K., Soluble polyimides containing perylene units. *Macromolecular Chemistry and Physics* **1994,** *195* (6), 1905-1911.
211. Düll, B.; Müllen, K., Synthese und Reaktionen der ersten zweifach überbrückten Fiscellane. *Chemische Berichte* **1994,** *127* (5), 881-885.
212. Fischer, E. W.; Knoll, W.; Müllen, K.; Spiess, H. W.; Wegner, G., Preface. *Macromolecular Symposia* **1994,** *87* (1), ix-x.
213. Fischer, E. W.; Knoll, W.; Müllen, K.; Spiess, H. W.; Wegner, G., 10 years Max-Planck-institute for polymer research, Mainz. *Acta Polymerica* **1994,** *45* (3), 135-136.
214. Garay, R. O.; Naarmann, H.; Müllen, K., Synthesis and characterization of poly(1,4-anthrylenevinylene). *Macromolecules* **1994,** *27* (7), 1922-1927.

215. Graupner, W.; Grem, G.; Meghdadi, F.; Paar, C.; Leising, G.; Scherf, U.; MÜLlen, K.; Fischer, W.; Stelzer, F., Electroluminescence with conjugated polymers and oligomers. *Molecular Crystals and Liquid Crystals Science and Technology. Section A. Molecular Crystals and Liquid Crystals* **1994,** *256* (1), 549-554.
216. Graupner, W.; Mauri, M.; Stampfl, J.; Leising, G.; Scherf, U.; Müllen, K., Photo-excited and doping-induced electronic states in a poly (para-phenylene)-type ladder polymer. *Solid State Communications* **1994,** *91* (1), 7-12.
217. Graupner, W.; Mauri, M.; Stampfl, J.; Unterweger, O.; Leising, G.; Scherf, U.; MüLlen, K., Excited states in polymers of different dimerization. *Molecular Crystals and Liquid Crystals Science and Technology. Section A. Molecular Crystals and Liquid Crystals* **1994,** *256* (1), 431-438.
218. Grüner, J.; Wittmann, H. F.; Hamer, P. J.; Friend, R. H.; Huber, J.; Scherf, U.; Müllen, K.; Moratti, S. C.; Holmes, A. B., Electroluminescence and photoluminescence investigations of the yellow emission of devices based on ladder-type oligo(para-phenylene)s. *Synthetic Metals* **1994,** *67* (1-3), 181-185.
219. Gügel, A.; Kraus, A.; Spickermann, J.; Belik, P.; Müllen, K., Buckminsterfullerene Adducts from Ortho-Quinodimethanes. *Angewandte Chemie International Edition in English* **1994,** *33* (5), 559-561.
220. Heun, S.; Bässler, H.; Müller, U.; Müllen, K., Fluorescence spectroscopy of oligo(anthrylenevinylenes). *Journal of Physical Chemistry* **1994,** *98* (30), 7355-7358.
221. Hoffmann, U.; Helmer-Metzmann, F.; Klapper, M.; Müllen, K., Poly(ether ketone)s by Fluoride Catalyst Systems. *Macromolecules* **1994,** *27* (13), 3575-3579.
222. Huber, J.; Müllen, K.; Salbeck, J.; Schenk, H.; Scherf, U.; Stehlin, T.; Stern, R., Blue light-emitting diodes based on ladder polymers of the PPP type. *Acta Polymerica* **1994,** *45* (3), 244-247.
223. Josten, W.; Neumann, S.; Vögtle, F.; Nieger, M.; Hägele, K.; Przybylski, M.; Beer, F.; Müllen, K., Ein neues, Deltaphan und bandförmige Cyclophane. *Chemische Berichte* **1994,** *127* (10), 2089-2096.
224. Karabunarliev, S.; Baumgarten, M.; Müllen, K.; Tyutyulkov, N., Bond alternation and electronic structure of poly(perinaphthalene). *Chemical Physics* **1994,** *179* (3), 421-430.
225. Karabunarliev, S.; Baumgarten, M.; Tyutyulkov, N.; Müllen, K., Structure and optical absorption of oligo(p- and m-phenylenevinylenes) and their radical anions: A comparative theoretical study. *Journal of Physical Chemistry®* **1994,** *98* (46), 11892-11901.
226. Kistenmacher, A.; Baumgarten, M.; Enkelmann, V.; Pawlik, J.; Müllen, K., Novel Donor 1,4-Benzothiazino[2,3-b]phenothiazine. *Journal of Organic Chemistry* **1994,** *59* (10), 2743-2747.
227. Kistenmacher, A.; Soczka, T.; Baier, U.; Ueberhofen, K.; Bubeck, C.; Müllen, K., Polyphenothiazinobisthiazole: A novel polymer for third-order nonlinear optics. *Acta Polymerica* **1994,** *45* (3), 228-234.
228. Kreyenschmidt, M.; Baumgarten, M.; Tyutyulkov, N.; Müllen, K., 2,2′-Bipyrenyl and para-Terpyrenyl—A New Type of Electronically Decoupled Oligoarylene. *Angewandte Chemie International Edition in English* **1994,** *33* (19), 1957-1959.
229. Madjarova, G.; Baumgarten, M.; Müllen, K.; Tyutyulkov, N., Structure, energy spectra and magnetic properties of poly(m-aniline)s. *Macromolecular Theory and Simulations* **1994,** *3* (4), 803-815.
230. Meerholz, K.; Gregorius, H.; Müllen, K.; Heinze, J., Voltammetric studies of solution and solid-state properties of monodisperse oligo(p-phenylenevinylene)s. *Advanced Materials* **1994,** *6* (9), 671-674.
231. Müller, U.; Adam, M.; Müllen, K., Synthesis and Characterization of Soluble Oligo(9,10-anthrylene)s. *Chemische Berichte* **1994,** *127* (2), 437-444.
232. Müller, U.; Mangel, T.; Müllen, K., Polyarylenes and poly(arylenevinylene)s, 14 Synthesis of soluble poly(2,6-di-tert-butyl-9,10-anthrylene) via reductive coupling of quinones with lithioanthrylenes.

Macromolecular Rapid Communications **1994,** *15* (1), 45-53.
233. Paul, S.; Stein, S.; Knoll, W.; Müllen, K., Photostructuring of a polymer containing anthrylene-bisacrylate subunits. *Acta Polymerica* **1994,** *45* (3), 235-243.
234. Pollmann, M.; Müllen, K., Semiflexible Ribbon-type Structures via Repetitive Diels-Alder Cycloaddition. Cage Formation versus Polymerization. *Journal of the American Chemical Society* **1994,** *116* (6), 2318-2323.
235. Pressner, D.; Göltner, C.; Spieß, H. W.; Müllen, K., Liquid-crystalline perylene oligomers: Synthesis and phase behavior. *Acta Polymerica* **1994,** *45* (3), 188-195.
236. Schmidt, A.; Armstrong, N. R.; Goeltner, C.; Muellen, K., Electronic structure of oligorylenes in thin solid films. *Journal of Physical Chemistry®* **1994,** *98* (45), 11780-11785.
237. Tyutyulkov, N.; Dietz, F.; Müllen, K.; Baumgarten, M.; Karabunarliev, S., Energy spectra and magnetic properties of radialenes, dendralenes and their poly-radical ions. A new class of polaronic high-spin π-systems. *Chemical Physics* **1994,** *189* (1), 83-97.
238. Valiyaveettil, S.; Enkelmann, V.; Müllen, K., Supramolecular structures formed from hydrogen-bonded networks of 5-alkoxyisophthalic acid. *Journal of the Chemical Society, Chemical Communications* **1994,** (18), 2097-2098.
239. Anger, I.; Sundahl, M.; Wennerström, O.; Auchter-Krummel, P.; Müllen, K., Triplet-state cis-trans isomerizations of a bisstyrylcyclooctatetraene. Inefficient processes facilitating observation of the intrinsic T1-Tn absorption spectra of the Z,Z, E,Z, and E,E isomers. *Journal of Physical Chemistry* **1995,** *99* (2), 650-652.
240. Belik, P.; Gügel, A.; Kraus, A.; Walter, M.; Müllen, K., Diels-Alder Adduct of C60 and 4-Carboxy-o-quinodimethane: Synthesis and Chemical Transformations. *Journal of Organic Chemistry* **1995,** *60* (11), 3307-3310.
241. Bennati, M.; Grupp, A.; Mehring, M.; Belik, P.; Gügel, A.; Müllen, K., Triplet-EPR spectroscopy on the Diels-Alder adduct of C60 and 4,5-dimethoxy-o-quinodimethane in frozen solution. *Chemical Physics Letters* **1995,** *240* (5-6), 622-626.
242. Cornil, J.; Beljonne, D.; Shuia, Z.; Hagler, T. W.; Campbell, I.; Bradley, D. D. C.; Brédas, J. L.; Spangler, C. W.; Müllen, K., Vibronic structure in the optical absorption spectra of phenylene vinylene oligomers: a joint experimental and theoretical study. *Chemical Physics Letters* **1995,** *247* (4-6), 425-432.
243. Cuff, L.; Kertesz, M.; Scherf, U.; Müllen, K., Interpretation of the vibrational spectra of planarized poly-p-phenylene. *Synthetic Metals* **1995,** *69* (1-3), 683-684.
244. De Backer, S.; Negri, M. R.; De Feyter, S.; Bhaskar Dutt, G.; Ameloot, M.; De Schryver, F. C.; Müllen, K.; Holtrup, F., Fluorescence depolarisation from 2,5,8,11-tetra-t-butylperylene globally analysed upon excitation in S1 and Sn. *Chemical Physics Letters* **1995,** *233* (5-6), 538-544.
245. Enkelmann, V.; Valiyaveettil, S.; Möessner, G.; Müllen, K., Self-assembly of 5-alkoxyisophthalic acids: alkyl chain length dependence for the formation of channel-type and sheet-type structures. *Supramolecular Science* **1995,** *2* (1), 3-7.
246. Fanghänel, E.; Wegner, R.; Beye, N.; Peters, K.; Müllen, K., Peralkylthio-substituierte Dibenzotetrathiafulvalene (DBTTF) aus Benzolhexathiolat. *Journal für Praktische Chemie/Chemiker-Zeitung* **1995,** *337* (1), 299-306.
247. Frenzel, S.; Arndt, S.; Gregorious, R. M.; Müllen, K., Synthesis of tetrathiafulvalene polymers. *Journal of Materials Chemistry* **1995,** *5* (10), 1529-1537.
248. Freund, T.; Müllen, K.; Scherf, U., Soluble, High Molecular Weight Ladder Polymers Possessing a Poly(phenylene sulfide) Backbone. *Macromolecules* **1995,** *28* (2), 547-551.
249. Freund, T.; Scherf, U.; Müllen, K., Ladder Polymers with a Heteroacene Skeleton. *Angewandte Chemie International Edition in English* **1995,** *33* (23-24), 2424-2426.
250. Geerts, Y.; Muscat, D.; Müllen, K., Synthesis of oligo[2]catenanes. *Macromolecular Chemistry*

and Physics **1995,** *196* (10), 3425-3435.
251. Grimme, J.; Kreyenschmidt, M.; Uckert, F.; Müllen, K.; Scherf, U., On the conjugation length in poly(para-phenylene)-type polymers. *Advanced Materials* **1995,** *7* (3), 292-295.
252. Heller, C. M.; Campbell, I. H.; Laurich, B. K.; Smith, D. L.; Bradley, D. D. C.; Burn, P. L.; Ferraris, J. P.; Mullen, K., Photoluminescence lifetimes and efficiencies of PPV-type materials. *International SAMPE Technical Conference* **1995,** *27*, 1138-1142.
253. Horn, T.; Wegener, S.; Müllen, K., Poly[n]acene precursors via repetitive Diels-Alder reactions with dehydrobenzenes. *Macromolecular Chemistry and Physics* **1995,** *196* (8), 2463-2474.
254. Jonas, U.; Cardullo, F.; Belik, P.; Diederich, F.; Gügel, A.; Harth, E.; Herrmann, A.; Isaacs, L.; Müllen, K.; Ringsdorf, H.; Thilgen, C.; Uhlmann, P.; Vasella, A.; Waldraff, C. A. A.; Walter, M., Synthesis of a Fullerene[60] Cryptate and Systematic Langmuir-Blodgett and Thin-Film Investigations of Amphiphilic Fullerene Derivatives. *Chemistry – A European Journal* **1995,** *1* (4), 243-251.
255. Kiehl, A.; Eberhardt, A.; Müllen, K., α,ω-Dialkyl-substituted polyenes by palladium-catalyzed coupling reactions of vinyltin compounds with vinyl halides. *Liebigs Annalen* **1995,** *1995* (2), 223-230.
256. Kirstein, S.; Cohen, G.; Davidov, D.; Scherf, U.; Klapper, M.; Chmil, K.; Müllen, K., Transient and DC electroluminescence of some new conjugated polymers. *Synthetic Metals* **1995,** *69* (1-3), 415-418.
257. Klapper, M.; Müllen, K., New methods of C-C and C-O bond formation in the synthesis of conjugated polymers. *Macromolecular Symposia* **1995,** *98* (1), 233-246.
258. Köhler, A.; Grüner, J.; Friend, R. H.; Müllen, K.; Scherf, U., Photocurrent measurements on aggregates in ladder-type poly(p-phenylene). *Chemical Physics Letters* **1995,** *243* (5-6), 456-461.
259. Kraus, A.; Gügel, A.; Belik, P.; Walter, M.; Müllen, K., Covalent attachment of various substituents in closest proximity to the C60-core: A broad synthetic approach to stable fullerene derivatives. *Tetrahedron* **1995,** *51* (36), 9927-9940.
260. Kreyenschmidt, M.; Uckert, F.; Müllen, K., A New Soluble Poly(p-phenylene) with Tetrahydropyrene Repeating Units. *Macromolecules* **1995,** *28* (13), 4577-4582.
261. Lemmer, U.; Heun, S.; Mahrt, R. F.; Scherf, U.; Hopmeier, M.; Siegner, U.; Göbel, E. O.; Müllen, K.; Bässler, H., Aggregate fluorescence in conjugated polymers. *Chemical Physics Letters* **1995,** *240* (4), 373-378.
262. Mangel, T.; Eberhardt, A.; Scherf, U.; Bunz, U. H. F.; Müllen, K., Synthesis and optical properties of some novel arylene-alkynylene polymers. *Macromolecular Rapid Communications* **1995,** *16* (8), 571-580.
263. Müllen, K.; Baumgarten, M.; Tyutyulkov, N.; Dietz, F., Structure and properties of nonclassical polymers X. Heteroatomic polymers with degenerate half-filled band. *Molecular Engineering* **1995,** *4* (4), 353-367.
264. Müller, M.; Mauermann-Düll, H.; Wagner, M.; Enkelmann, V.; Müllen, K., A Cycloaddition–Cyclodehydrogenation Route from Stilbenoids to Extended Aromatic Hydrocarbons. *Angewandte Chemie International Edition in English* **1995,** *34* (15), 1583-1586.
265. Pauck, T.; Hennig, R.; Perner, M.; Lemmer, U.; Siegner, U.; Mahrt, R. F.; Scherf, U.; Müllen, K.; Bässler, H.; Göbel, E. O., Femtosecond dynamics of stimulated emission and photoinduced absorption in a PPP-type ladder polymer. *Chemical Physics Letters* **1995,** *244* (1-2), 171-176.
266. Pfaadt, M.; Moessner, G.; Pressner, D.; Valiyaveettil, S.; Boeffel, C.; Müllen, K.; Spiess, H. W., Molecular order and dynamics of liquid crystals formed from hydrogen-bonded networks of 5-octadecyloxyisophthalic acid. *Journal of Materials Chemistry* **1995,** *5* (12), 2265-2274.
267. Quante, H.; Müllen, K., Quaterrylenebis(dicarboximides). *Angewandte Chemie International Edition in English* **1995,** *34* (12), 1323-1325.
268. Räder, H. J.; Spickermann, J.; Müllen, K., MALDI-TOF mass spectrometry in polymer analytics, 1. Monitoring the polymer-analogous sulfonation reaction of polystyrene. *Macromolecular Chemistry*

and Physics **1995,** *196* (12), 3967-3978.
269. Scherf, U.; Müllen, K., The synthesis of ladder polymers. In *Advances in Polymer Science*, 1995; Vol. 123, pp X-40.
270. Schmidt, A.; Anderson, M. L.; Dunphy, D.; Wehrmeister, T.; Müllen, K.; Armstrong, N. R., Photoelectron and optical spectroscopic investigations of the electronic structure of oligo(p-phenylenevinylene)s in the solid state. *Advanced Materials* **1995,** *7* (8), 722-726.
271. Stabel, A.; Herwig, P.; Müllen, K.; Rabe, J. P., Diodelike Current–Voltage Curves for a Single Molecule–Tunneling Spectroscopy with Submolecular Resolution of an Alkylated, peri-Condensed Hexabenzocoronene. *Angewandte Chemie International Edition in English* **1995,** *34* (15), 1609-1611.
272. Tittel, J.; Kettner, R.; Basché, T.; Bräuchle, C.; Quante, H.; Müllen, K., Spectral diffusion in an amorphous polymer probed by single molecule spectroscopy. *Journal of Luminescence* **1995,** *64* (1-6), 1-11.
273. Tyutyulkov, N.; Dietz, F.; Baumgarten, M.; Müllen, K., Energy gap of alternant carbon nanotubes. *Macromolecular Theory and Simulations* **1995,** *4* (5), 991-1000.
274. Valiyaveettil, S.; Gans, C.; Klapper, M.; Gereke, R.; Müllen, K., Synthesis and structural study of poly(isophthalamide)s. *Polymer Bulletin* **1995,** *34* (1), 13-19.
275. Benfaremo, N.; Steenbock, M.; Klapper, M.; Müllen, K.; Enkelmann, V.; Cabrera, K., Synthesis, resolution and crystal structure of a new optically active nitroxide radical. *Liebigs Annales* **1996,** (9), 1413-1415.
276. Biasutti, M. A.; De Feyter, S.; De Backer, S.; Dutt, G. B.; De Schryver, F. C.; Ameloot, M.; Schlichting, P.; Müllen, K., Steady-state and time-resolved fluorescence anisotropy of 2,9-di-n-pentyl-5,6,11,12-tetraazo-5,6,11,12-tetrahydrocoronene-5,6,11,12-tetracarboxy-bis-n-heptadecylimide. *Chemical Physics Letters* **1996,** *248* (1-2), 13-19.
277. Choong, V.; Park, Y.; Gao, Y.; Wehrmeister, T.; Müllen, K.; Hsieh, B. R.; Tang, C. W., Dramatic photoluminescence quenching of phenylene vinylene oligomer thin films upon submonolayer Ca deposition. *Applied Physics Letters* **1996,** *69* (10), 1492-1494.
278. Choong, V.; Park, Y.; Hsieh, B. R.; Tang, C. W.; Wehrmeister, T.; Müllen, K.; Gao, Y., Severe photoluminescence quenching of 1,4-bis[4-(3,5-di-tert-butylstyryl)styryl]benzene upon deposition of submonolayer Ca. *American Chemical Society, Polymer Preprints, Division of Polymer Chemistry* **1996,** *37* (2), 583-584.
279. De Backer, S.; Dutt, G. B.; Ameloot, M.; De Schryver, F. C.; Müllen, K.; Holtrup, F., Fluorescence anisotropy of 2,5,8,11-tetra-tert-butylperylene and 2,5,10,13-tetra-tert-butylterrylene in alkanes and alcohols. *Journal of Physical Chemistry* **1996,** *100* (2), 512-518.
280. Frenzel, S.; Müllen, K., A tetrathiafulvalene-based conjugated donor-acceptor - donor system. *Synthetic Metals* **1996,** *80* (2), 175-182.
281. Gügel, A.; Belik, P.; Walter, M.; Kraus, A.; Harth, E.; Wagner, M.; Spickermann, J.; Müllen, K., The repetitive Diels-Alder reaction: A new approach to [60]fullerene main-chain polymers. *Tetrahedron* **1996,** *52* (14), 5007-5014.
282. Herwig, P.; Kayser, C. W.; Müllen, K.; Spiess, H. W., Columnar mesophases of alkylated hexa-peri-hexabenzocoronenes with remarkably large phase widths. *Advanced Materials* **1996,** *8* (6), 510-513.
283. Keegstra, M. A.; De Feyter, S.; De Schryver, F. C.; Müllen, K., Hexaterphenylyl-and Hexaquaterphenylylben-zene: The Behavior of Chromophores and Electrophores in a Restricted Space. *Angewandte Chemie (International Edition in English)* **1996,** *35* (7), 774-776.
284. Keller, U.; Müllen, K.; De Feyter, S.; De Schryver, F. C., Hydrogen-bonding and phase-forming behavior of a soluble quinacridone. *Advanced Materials* **1996,** *8* (6), 490-493.
285. Klapper, M.; Wehrmeister, T.; Müllen, K., Grafting on poly(ether ether ketone ketone)s (PEEKK) by anionic deactivation. *Macromolecules* **1996,** *29* (18), 5805-5809.

286. Klärner, G.; Former, C.; Yan, X.; Richert, R.; Müllen, K., Donor/acceptor-substituted phenylenevinylenes. *Advanced Materials* **1996,** *8* (11), 932-935.
287. Leising, G.; Ekstroem, O.; Graupner, W.; Meghdadi, F.; Moser, M.; Kranzelbinder, G.; Jost, T.; Tasch, S.; Winkler, B.; Athouel, L.; Froyer, G.; Scherf, U.; Muellen, K.; Lanzani, G.; Nisoli, M.; De Silvestri, S., Multicolor electroluminescence and stimulated emission of conjugated polymers and oligomers. *Proceedings of SPIE - The International Society for Optical Engineering* **1996,** *2852*, 189-200.
288. Martin, K.; Spickermann, J.; Räder, H. J.; Müllen, K.; Grotemeyer, J., Why does matrix-assisted laser desorption/ionization time-of-flight mass spectrometry give incorrect results for broad polymer distributions? *Rapid Communications in Mass Spectrometry* **1996,** *10* (12), 1471-1474.
289. Mathy, A.; Ueberhofen, K.; Schenk, R.; Gregorius, H.; Garay, R.; Müllen, K.; Bubeck, C., Third-harmonic-generation spectroscopy of poly(p-phenylenevinylene): A comparison with oligomers and scaling laws for conjugated polymers. *Physical Review B - Condensed Matter and Materials Physics* **1996,** *53* (8), 4367-4376.
290. Mauermann-Düll, H.; Böhm, A.; Fiesser, G.; Müllen, K., Photoreactive polyarylenevinylenes: Synthesis, characterization and photochemistry. *Macromolecular Chemistry and Physics* **1996,** *197* (2), 413-429.
291. Mindach, L.; Müllen, K., A new approach to polybenzoid networks. *Advanced Materials* **1996,** *8* (6), 504-507.
292. Moessner, G.; Gereke, R.; Valiyaveettil, S.; Enkelmann, V.; Müllen, K.; Eichhorst-Gerner, K.; Stabel, A.; Rabe, J. P., Self-assembly of 5-alkoxyisophthalic acid derivatives in two and three dimensions. *American Chemical Society, Polymer Preprints, Division of Polymer Chemistry* **1996,** *37* (2), 620-621.
293. Müllen, K., Self-assembly of a two-component hydrogen-bonded network: Comparison of the two-dimensional structure observed by scanning tunneling microscopy and the three-dimensional crystal lattice. *Angewandte Chemie (International Edition in English)* **1996,** *35* (13-14), 1492-1495.
294. Müllen, K., Poly(phenylenesulfidephenylenamine) (PPSA)-the "compound" of polyphenylenesulfide with polyanilinc. *Angewandte Chemie (International Edition in English)* **1996,** *35* (13-14), 1495-1497.
295. Müllen, K.; Müller, M.; Tyutyulkov, N.; Dietz, F., Band Structure of quasi-1-dimensional polycondensed π-systems, 4a) energy spectra of a class of 1-D ladder type polymers. *Polycyclic Aromatic Compounds* **1996,** *8* (2-3), 183-188.
296. Müller, M.; Petersen, J.; Strohmaier, R.; Günther, C.; Karl, N.; Müllen, K., Polybenzoid C54 Hydrocarbons: Synthesis and Structural Characterization in Vapor-Deposited Ordered Monolayers. *Angewandte Chemie (International Edition in English)* **1996,** *35* (8), 886-888.
297. Park, Y.; Choong, V.; Ettedgui, E.; Gao, Y.; Hsieh, B. R.; Wehrmeister, T.; Müllen, K., Energy level bending and alignment at the interface between Ca and a phenylene vinylene oligomer. *Applied Physics Letters* **1996,** *69* (8), 1080-1082.
298. Pauck, T.; Bässler, H.; Grimme, J.; Scherf, U.; Müllen, K., A comparative site-selective fluorescence study of ladder-type para-phenylene oligomers and oligo-phenylenevinylenes. *Chemical Physics* **1996,** *210* (1-2 SPEC. ISS.), 219-227.
299. Paul, S.; Halle, O.; Einsiedel, H.; Menges, B.; Müllen, K.; Knoll, W.; Mittler-Neher, S., An anthracene-containing PMMA derivative for photoresist and channel waveguide applications. *Thin Solid Films* **1996,** *288* (1-2), 150-154.
300. Paul, S.; Stein, S.; Knoll, W.; Müllen, K., Photobleaching of oligoanthrylenes in the film state. *Acta Polymerica* **1996,** *47* (2-3), 92-98.
301. Quante, H.; Schlichtung, P.; Rohr, U.; Geerts, Y.; Müllen, K., Novel perylene-containing polymers. *Macromolecular Chemistry and Physics* **1996,** *197* (12), 4029-4044.

302. Räder, H. J.; Spickermann, J.; Kreyenschmidt, M.; Müllen, K., MALDI-TOF mass spectrometry in polymer analytics, 2: Molecular weight analysis of rigid-rod polymers. *Macromolecular Chemistry and Physics* **1996,** *197* (10), 3285-3296.
303. Razafitrimo, H.; Hsieh, B. R.; Wehrmeister, T.; Mullen, K.; Gao, Y. In *Comparative topographic study of differently prepared conjugated polymer and oligomer films using scanning tunneling microscope*, American Chemical Society, Polymer Preprints, Division of Polymer Chemistry, 1996; pp 581-582.
304. Rohlfing, F.; Bradley, D. D. C.; Eberhardt, A.; Müllen, K.; Cornil, J.; Beljonne, D.; Brédas, J. L., Electroabsorption spectroscopy of β-carotene and α,ω-bis(1,1 -dimethylheptyl) -1,3,5,7,9,11,13,15-hexadecaoctaene. *Synthetic Metals* **1996,** *76* (1-3), 35-38.
305. Schweer, J.; Sarnecki, J.; Mayer-Posner, F.; Müllen, K.; Räder, H. J.; Spickermann, J., Pulsed-laser polymerization/matrix-assisted laser desorption/ionization mass spectrometry: An approach toward free-radical propagation rate coefficients of ultimate accuracy? *Macromolecules* **1996,** *29* (13), 4536-4543.
306. Spickermann, J.; Martin, K.; Räder, H. J.; Müllen, K.; Schlaad, H.; Müller, A. H. E.; Krüger, R. P., Quantitative analysis of broad molecular weight distributions obtained by matrix-assisted laser desorption ionisation-time-of-flight mass spectrometry. *European Journal of Mass Spectrometry* **1996,** *2* (2-3), 161-165.
307. Spickermann, J.; Räder, H. J.; Müllen, K.; Müller, B.; Gerle, M.; Fischer, K.; Schmidt, M., MALDI-TOF characterization of macromonomers. *Macromolecular Rapid Communications* **1996,** *17* (12), 885-896.
308. Steenbock, M.; Klapper, M.; Muellen, K.; Pinhal, N.; Hubrich, M., Synthesis of block copolymers by nitroxyl-controlled radical polymerization. *Acta Polymerica* **1996,** *47* (6), 276-279.
309. Stein, S.; Müllen, K., Synthesis of oligoanthrylenes and their photopolymerization in solution. *Acta Polymerica* **1996,** *47* (2-3), 85-91.
310. Valiyaveettil, S.; Enkelmann, V.; Moeßner, G.; Müllen, K., Approaches to supramolecular structures with various topologies in the crystal lattice. *Macromolecular Symposia* **1996,** *102*, 165-173.
311. Vanoppen, P.; Grim, P. C. M.; Rücker, M.; De Feyter, S.; Moessner, G.; Valiyaveettil, S.; Müllen, K.; De Schryver, F. C., Solvent codeposition and cis-trans isomerization of isophthalic acid derivatives studied by STM. *Journal of Physical Chemistry* **1996,** *100* (50), 19636-19641.
312. Vliyaveettil, S.; Moessner, G.; Enkelmann, V.; Meiners, C.; Pfaadt, M.; Spiess, H. W.; Müllen, K., Comparison of the self-assembly of 5-alkoxyisophthalic acid in solid state, in mesophase and in solution. *American Chemical Society, Polymer Preprints, Division of Polymer Chemistry* **1996,** *37* (2), 817-818.
313. Walter, M.; Gügel, A.; Spickermann, J.; Belik, P.; Kraus, A.; Müllen, K., Synthesis and chemical transformations of the Diels-Alder adduct of [60]fullerene and 4-amino-O-quinodimethane. *Fullerene Science and Technology* **1996,** *4* (1), 101-113.
314. Weidmann, J. L.; Kern, J. M.; Sauvage, J. P.; Geerts, Y.; Muscat, D.; Müllen, K., Poly[2]-catenanes containing alternating topological and covalent bonds. *Chemical Communications* **1996,** (10), 1243-1244.
315. Wunderlich, W.; Benfaremo, N.; Klapper, M.; Müllen, K., Effect of a π-donor on the radical bulk polymerization of methyl methacrylate. *Macromolecular Rapid Communications* **1996,** *17* (6), 433-438.
316. Zerbi, G.; Galbiati, E.; Gallazzi, M. C.; Castiglioni, C.; Del Zoppo, M.; Schenk, R.; Müllen, K., Phonon, π electron localization and size of the charge carrier in para-phenylenevinylene oligomers and polymer: A spectroscopic study. *Journal of Chemical Physics* **1996,** *105* (6), 2509-2516.
317. Barth, S.; Bässler, H.; Wehrmeister, T.; Müllen, K., Photoconduction in oligo-para-phenylenevinylene films. *Journal of Chemical Physics* **1997,** *106* (1), 321-327.

318. Beer, F.; Gügel, A.; Martin, K.; Räder, J.; Müllen, K., High-yield reactive extraction of giant fullerenes from soot. *Journal of Materials Chemistry* **1997,** *7* (8), 1327-1330.
319. Choong, V. E.; Park, Y.; Gao, Y.; Wehrmeister, T.; Müllen, K.; Hsieh, B. R.; Tang, C. W., Effects of Al, Ag, and Ca on luminescence of organic materials. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films* **1997,** *15* (3), 1745-1749.
320. Colombani, D.; Steenbock, M.; Klapper, M.; Müllen, K., Controlled radical polymerization of vinylic monomers in the presence of unusual stable radicals. *American Chemical Society, Polymer Preprints, Division of Polymer Chemistry* **1997,** *38* (1), 659-660.
321. Colombani, D.; Steenbock, M.; Klapper, M.; Müllen, K., 1,3,5,5-Tetraphenyl-Δ3-1,2,4-triazolin-2-yl radical -Properties in the controlled radical polymerization of poly(methyl methacrylate) and polystyrene. *Macromolecular Rapid Communications* **1997,** *18* (3), 243-251.
322. Cornil, J.; Beljonne, D.; Heller, C. M.; Campbell, I. H.; Laurich, B. K.; Smith, D. L.; Bradley, D. D. C.; Müllen, K.; Brédas, J. L., Photoluminescence spectra of oligo-paraphenylenevinylenes: A joint theoretical and experimental characterization. *Chemical Physics Letters* **1997,** *278* (1-3), 139-145.
323. Evsyukov, S. E.; Schert, U.; Müllen, K., Polychalcones based on carbazole-derived building blocks: Synthesis by acetylative polycondensation. *Polymer International* **1997,** *42* (1), 77-84.
324. Frenzel, S.; Kübel, C.; Müllen, K., Sulfur-containing conjugated polymers. *Phosphorus, Sulfur and Silicon and Related Elements* **1997,** *120-121*, 77-93.
325. Fritz, R.; Rettig, W.; Nishiyama, K.; Okada, T.; Müller, U.; Müllen, K., Excitonic and charge transfer states in oligomeric 9,10-anthrylene chains. *Journal of Physical Chemistry A* **1997,** *101* (15), 2796-2802.
326. Geerts, Y.; Keller, U.; Scherf, U.; Schneider, M.; Müllen, K., New organic light emitting materials. *American Chemical Society, Polymer Preprints, Division of Polymer Chemistry* **1997,** *38* (1), 315-316.
327. Graupner, W.; Guha, S.; Yang, S.; Chandrasekhar, M.; Chandrasekhar, H. R.; Leising, G.; Scherf, U.; Mullen, K. In *Electronic properties of poly(para-phenylenes) under high pressure*, Materials Research Society Symposium - Proceedings, 1997; pp 873-878.
328. Grim, P. C. M.; De Feyter, S.; Gesquière, A.; Vanoppen, P.; Rücker, M.; Valiyaveettil, S.; Moessner, G.; Müllen, K.; De Schryver, F. C., Submolecularly resolved polymerization of diacetylene molecules on the graphite surface observed with scanning tunneling microscopy. *Angewandte Chemie (International Edition in English)* **1997,** *36* (23), 2601-2603.
329. Grim, P. C. M.; Vanoppen, P.; Rücker, M.; De Feyter, S.; Valiyaveettil, S.; Moessner, G.; Müllen, K.; De Schryver, F. C., Molecular organization of azobenzene derivatives at the liquid/graphite interface observed with scanning tunneling microscopy. *Journal of Vacuum Science and Technology B: Microelectronics and Nanometer Structures* **1997,** *15* (4), 1419-1424.
330. Haugeneder, A.; Kallinger, C.; Spirkl, W.; Lemmer, U.; Feldmann, J.; Scherf, U.; Harth, E.; Gügel, A.; Müllen, K. In *Photoinduced electron transfer in conjugated polymer/fullerene heterostructures*, Proceedings of SPIE - The International Society for Optical Engineering, 1997; pp 140-147.
331. Hickl, P.; Ballauff, M.; Scherf, U.; Müllen, K.; Lindner, P., Characterization of a ladder polymer by small-angle X-ray and neutron scattering. *Macromolecules* **1997,** *30* (2), 273-279.
332. Holtrup, F. O.; Müller, G. R. J.; Quante, H.; De Feyter, S.; De Schryver, F. C.; Müllen, K., Terrylenimides: New NIR fluorescent dyes. *Chemistry - A European Journal* **1997,** *3* (2), 219-225.
333. Holtrup, F. O.; Müller, G. R. J.; Uebe, J.; Müllen, K., Benzoylperylenedicarboximides: Functional dyes with attractive optical and electronic properties. *Tetrahedron* **1997,** *53* (20), 6847-6860.
334. Iyer, V. S.; Wehmeier, M.; Brand, J. D.; Keegstra, M. A.; Müllen, K., From

Hexa-peri-hexabenzocoronene to "Superacenes". *Angewandte Chemie (International Edition in English)* **1997,** *36* (15), 1604-1607.
335. Jarrett, C. P.; Brown, A. R.; Friend, R. H.; Harrison, M. G.; De Leeuw, D. M.; Herwig, P.; Müllen, K., Field-effect transistor studies of precursor-pentacene thin films. *Synthetic Metals* **1997,** *85* (1-3), 1403-1404.
336. Klapper, M.; LeGuen, A.; Hoffmann, U.; Wehrmeister, T.; Mullins, S.; Müllen, K., Synthesis and modification of functionalized poly (arylene ether ketone)s. *American Chemical Society, Polymer Preprints, Division of Polymer Chemistry* **1997,** *38* (1), 66-67.
337. Klärner, G.; Leuninger, J.; Former, C.; Soczka-Guth, T.; Müllen, K., Conjugated Polymers Containing Heteroatoms - New Routes, New Structures. *Macromolecular Symposia* **1997,** *118*, 103-109.
338. Klärner, G.; Müller, M.; Morgenroth, F.; Wehmeier, M.; Soczka-Guth, T.; Müllen, K., Conjugated oligomers and polymers - New routes, new structures. *Synthetic Metals* **1997,** *84* (1-3), 297-301.
339. Kranzelbinder, G.; Graupner, W.; Müllen, K.; Scherf, U.; Leising, G. In *Cooperative radiation and stimulated emission at high excitation densities in poly(para-phenylene)-type ladderpolymer*, Proceedings of SPIE - The International Society for Optical Engineering, 1997; pp 48-56.
340. Kranzelbinder, G.; Nisoli, M.; Stagira, S.; De Silvestri, S.; Lanzani, G.; Müllen, K.; Scherf, U.; Graupner, W.; Leising, G., Cooperative effects in blue light emission of poly-(para-phenylene)-type ladderpolymer. *Applied Physics Letters* **1997,** *71* (19), 2725-2727.
341. Kraus, A.; Schneider, M.; Gügel, A.; Müllen, K., Covalent incorporation of an alkoxysilyl-substituted [60]fullerene derivative in sol-gel matrices. *Journal of Materials Chemistry* **1997,** *7* (5), 763-765.
342. Leising, G.; Tasch, S.; Brandstätter, C.; Graupner, W.; Hampel, S.; List, E. J. W.; Meghdadi, F.; Zenz, C.; Schlichting, P.; Rohr, U.; Geerts, Y.; Scherf, U.; Müllen, K., Efficient full-colour electroluminescence and stimulated emission with polyphenylenes. *Synthetic Metals* **1997,** *91* (1-3), 41-47.
343. Mais, S.; Tittel, J.; Basché, T.; Bräuchle, C.; Göhde, W.; Fuchs, H.; Müller, G.; Müllen, K., Terrylenediimide: A novel fluorophore for single-molecule spectroscopy and microscopy from 1.4 K to room temperature. *Journal of Physical Chemistry A* **1997,** *101* (45), 8435-8440.
344. Meiners, C.; Valiyaveettil, S.; Enkelmann, V.; Müllen, K., Supramolecular mesomorphic structures based on 2,5-dialkoxyterephthalic acid derivatives. *Journal of Materials Chemistry* **1997,** *7* (12), 2367-2374.
345. Meyer, Y. H.; Plaza, P.; Müllen, K., Ultrafast spectroscopy of soluble terrylene and quaterrylene. *Chemical Physics Letters* **1997,** *264* (6), 643-648.
346. Morgenroth, F.; Müllen, K., Dendritic and hyperbranched polyphenylenes via a simple Diels-Alder route. *Tetrahedron* **1997,** *53* (45), 15349-15366.
347. Morgenroth, F.; Reuther, E.; Müllen, K., Polyphenylene Dendrimers: From Three-Dimensional to Two-Dimensional Structures. *Angewandte Chemie (International Edition in English)* **1997,** *36* (6), 631-634.
348. Müller, M.; Iyer, V. S.; Kübel, C.; Enkelmann, V.; Müllen, K., Polycyclic Aromatic Hydrocarbons by Cyclodehydrogenation and Skeletal Rearrangement of Oligophenylenes. *Angewandte Chemie (International Edition in English)* **1997,** *36* (15), 1607-1610.
349. Müller, M.; Morgenroth, F.; Scherf, U.; Soczka-Guth, T.; Klärner, G.; Müllen, K., The benzene ring as modulus: Synthesis and supramolecular ordering of novel conjugated polymers. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* **1997,** *355* (1725), 715-726.
350. Muscat, D.; Witte, A.; Köhler, W.; Müllen, K.; Geerts, Y., Synthesis of a novel poly[2]-catenane containing rigid catenanes. *Macromolecular Rapid Communications* **1997,** *18* (3),

233-241.
351. Park, Y.; Choong, V. E.; Hsieh, B. R.; Tang, C. W.; Wehrmeister, T.; Müllen, K.; Gao, Y., Electron spectroscopy studies of interface formation between metal electrodes and luminescent organic materials. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films* **1997,** *15* (5), 2574-2578.
352. Parthiban, A.; Le Guen, A.; Yansheng, Y.; Hoffmann, U.; Klapper, M.; Müllen, K., Amino-functionalized poly(arylene ether ketone)s. *Macromolecules* **1997,** *30* (8), 2238-2243.
353. Pokhodnia, K.; Cassoux, P.; Bonvoisin, J.; Mlayah, A.; Brossard, L.; Frenzel, S.; Müllen, K., Experimental evidence of the symmetry breakdown in 4,8-diethoxy-2,7-bis(benzo-1′,3′-dithiol-2′-ylidene)-1,3,5,7- tetrathia-s-indacene compounds. *Journal of Physical Chemistry B* **1997,** *101* (19), 3665-3670.
354. Quante, H.; Geerts, Y.; Müllen, K., Synthesis of soluble perylenebisamidine derivatives. Novel long-wavelength absorbing and fluorescent dyes. *Chemistry of Materials* **1997,** *9* (2), 495-500.
355. Rumi, M.; Zerbi, G.; Müllen, K.; Müller, G.; Rehahn, M., Nonlinear optical and vibrational properties of conjugated polyaromatic molecules. *Journal of Chemical Physics* **1997,** *106* (1), 24-34.
356. Schenk, R.; Halle, O.; Müllen, K.; Ehrfeld, W.; Schmidt, M., Highly sensitive resist material for deep x-ray lithography. *Microelectronic Engineering* **1997,** *35* (1-4), 105-108.
357. Scherf, U.; Müllen, K., Novel Conjugated Polymers: Tuning Optical Properties by Synthesis and Processing. In *ACS Symposium Series*, 1997; Vol. 672, pp 358-380.
358. Schlichting, P.; Rohr, U.; Müllen, K., New synthetic routes to alkyl-substituted and functionalized perylenes. *Liebigs Annales* **1997,** (2), 395-407.
359. Skabara, P. J.; Müllen, K., The design and synthesis of a novel TTF-thiophene monomer. *Synthetic Metals* **1997,** *84* (1-3), 345-346.
360. Tasch, S.; Brandstatter, C.; Graupner, W.; Hampel, S.; Hochfilzer, C.; List, J. W. E.; Meghdadi, F.; Leising, G.; Schlichting, P.; Rohr, U.; Geerts, Y.; Scherf, U.; Muellen, K. In *Application of poly(phenylene) type polymers and oligomers in electroluminescent color displays*, Materials Research Society Symposium - Proceedings, 1997; pp 328-330.
361. Tasch, S.; List, E.; Hochfilzer, C.; Leising, G.; Schlichting, P.; Rohr, U.; Geerts, Y.; Scherf, U.; Müllen, K., Efficient red- and orange-light-emitting diodes realized by excitation energy transfer from blue-light-emitting conjugated polymers. *Physical Review B - Condensed Matter and Materials Physics* **1997,** *56* (8), 4479-4483.
362. Tasch, S.; List, E. J. W.; Ekström, O.; Graupner, W.; Leising, G.; Schlichting, P.; Rohr, U.; Geerts, Y.; Schert, U.; Müllen, K., Efficient white light-emitting diodes realized with new processable blends of conjugated polymers. *Applied Physics Letters* **1997,** *71* (20), 2883-2885.
363. Tyutyulkov, N.; Dietz, F.; Müllen, K.; Baumgarten, M., Structure and energy spectra of a two-dimensional dielectric carbon allotrope. *Chemical Physics Letters* **1997,** *272* (1-2), 111-114.
364. Tyutyulkov, N.; Dietz, F.; Müllen, K.; Kübel, C., Structure and properties of non-classical polymers. XI. Heteroatomic analogues of poly(1,3-phenylenemethylene)'s. *Bulletin of the Chemical Society of Japan* **1997,** *70* (7), 1517-1521.
365. Warman, J. M.; Gelinck, G. H.; Piet, J. J.; Suykerbuyk, J. W. A.; De Haas, M. P.; Langeveld-Voss, B. M. W.; Janssen, R. A. J.; Hwang, D. H.; Holmes, A. B.; Remmers, M.; Neher, D.; Müllen, K.; Bäuerle, P. In *Time-resolved microwave measurements of the polarizability of photoexcitations on conjugated polymer chains*, Proceedings of SPIE - The International Society for Optical Engineering, 1997; pp 142-149.
366. Weiss, K.; Michel, A.; Auth, E. M.; Bunz, U. H. F.; Mangel, T.; Müllen, K., Acyclic Diyne Metathesis (ADIMET), an Efficient Route to Poly(phenylene)ethynylenes (PPEs) and Nonconjugated Polyalkynylenes of High Molecular Weight. *Angewandte Chemie (International Edition in English)* **1997,** *36* (5), 506-509.

367. Zenz, C.; Graupner, W.; Tasch, S.; Leising, G.; Müllen, K.; Scherf, U., Blue green stimulated emission from a high gain conjugated polymer. *Applied Physics Letters* **1997,** *71* (18), 2566-2568.
368. Barth, S.; Bässler, H.; Scherf, U.; Müllen, K., Photoconduction in thin films of a ladder-type poly-para-phenylene. *Chemical Physics Letters* **1998,** *288* (1), 147-154.
369. Berresheim, A. J.; Morgenroth, F.; Wiesler, U. M.; Müllen, K., Dendritic, hyperbranched, and cross-linked polyphenylenes - From benzene to shape-persistent nanoparticles. *American Chemical Society, Polymer Preprints, Division of Polymer Chemistry* **1998,** *39* (1), 721-722.
370. Burger, B.; Kuzmany, H.; Nguyen, T. M.; Sitter, H.; Walter, M.; Martin, K.; Mullen, K., Structural analysis of phototransformed C60 by vibrational and mass spectroscopy. *Carbon* **1998,** *36* (5-6), 661-663.
371. De Feyter, S.; Grim, P. C. M.; Rücker, M.; Vanoppen, P.; Meiners, C.; Sieffert, M.; Valiyaveettil, S.; Müllen, K.; De Schryver, F. C., Expression of chirality by achiral coadsorbed molecules in chiral monolayers observed by STM. *Angewandte Chemie - International Edition* **1998,** *37* (9), 1223-1226.
372. Former, C.; Klärner, G.; Wagner, M.; Müllen, K., From Donor and Acceptor Substituted meta- and para-Xylenes to para-Quinodimethanes and Poly(meta-phenylenevinylene)s. *Advanced Synthesis and Catalysis* **1998,** *340* (4), 367-374.
373. Former, C.; Klärner, G.; Wagner, M.; Müllen, K., From donor and acceptor substituted meta- and para-xylenes to para-quinodimethanes and poly(meta-phenylenevinylene)s. *Journal fur Praktische Chemie - Chemiker - Zeitung* **1998,** *340* (4), 367-374.
374. Francke, V.; Mangel, T.; Müllen, K., Synthesis of α,ω-difunctionalized oligo- and poly(p-phenyleneethynylene)s. *Macromolecules* **1998,** *31* (8), 2447-2453.
375. Francke, V.; Räder, H. J.; Geerts, Y.; Müllen, K., Synthesis and characterization of a poly(paraphenyleneethynylene)-block-poly(ethylene oxide) rod-coil block copolymer. *Macromolecular Rapid Communications* **1998,** *19* (6), 275-281.
376. Freund, T.; Kübel, C.; Baumgarten, M.; Enkelmann, V.; Gherghel, L.; Reuter, R.; Müllen, K., Benzoyl-Substituted Tetrathia[1.1.1.1]metacyclophanes: High-Yield Synthesis, Crystal Structure, and Redox Properties. *European Journal of Organic Chemistry* **1998,** (4), 555-564.
377. Geerts, Y.; Quante, H.; Platz, H.; Mahrt, R.; Hopmeier, M.; Böhm, A.; Müllen, K., Quaterrylenebis(dicarboximide)s: Near infrared absorbing and emitting dyes. *Journal of Materials Chemistry* **1998,** *8* (11), 2357-2369.
378. Göhde Jr, W.; Fischer, U. C.; Fuchs, H.; Tittel, J.; Basché, T.; Bräuchle, C.; Herrmann, A.; Müllen, K., Fluorescence blinking and photobleaching of single terrylenediimide molecules studied with a confocal microscope. *Journal of Physical Chemistry A* **1998,** *102* (46), 9109-9116.
379. Hoffman, R. E.; Shabtai, E.; Rabinovitz, M.; Iyer, V. S.; Müllen, K.; Rai, A. K.; Bayrd, E.; Scott, L. T., Self-diffusion measurements of polycyclic aromatic hydrocarbon alkali metal salts. *Journal of the Chemical Society. Perkin Transactions 2* **1998,** (7), 1659-1664.
380. Iyer, V. S.; Yoshimura, K.; Enkelmann, V.; Epsch, R.; Rabe, J. P.; Müllen, K., A soluble C60 graphite segment. *Angewandte Chemie - International Edition* **1998,** *37* (19), 2696-2699.
381. Kallinger, C.; Hilmer, M.; Haugeneder, A.; Perner, M.; Spirkl, W.; Lemmer, U.; Feldmann, J.; Scherf, U.; Muellen, K.; Gombert, A.; Wittwer, V., Flexible conjugated polymer laser. *Advanced Materials* **1998,** *10* (12), 920-923.
382. Karahunarliev, S.; Baumgarten, M.; Müllen, K., Crossover to an even-parity lowest excited singlet in large oligorylenes: A theoretical study. *Journal of Physical Chemistry A* **1998,** *102* (35), 7029-7034.
383. Klärner, G.; Former, C.; Martin, K.; Räder, J.; Müllen, K., Connective CC double bond formation for the synthesis of donor- and acceptor-substituted poly(p-phenylenevinylene)s.

Macromolecules **1998,** *31* (11), 3571-3577.
384. Köhler, A.; Dos Santos, D. A.; Beljonne, D.; Shuai, Z.; Brédas, J. L.; Holmes, A. B.; Kraus, A.; Müllen, K.; Friend, R. H., Charge separation in localized and delocalized electronic states in polymeric semiconductors. *Nature* **1998,** *392* (6679), 903-906.
385. Kübel, C.; Chen, S. L.; Müllen, K., Poly(4'-vinylhexaphenylbenzene)s: New carbon-rich polymers. *Macromolecules* **1998,** *31* (18), 6014-6021.
386. Le Guen, A.; Klapper, M.; Müllen, K., Synthesis and properties of flexible poly(ether ketone) backbones, grafted with stiff, monodisperse side chains. *Macromolecules* **1998,** *31* (19), 6559-6565.
387. Leuninger, J.; Wang, C.; Soczka-Guth, T.; Enkelmann, V.; Pakula, T.; Müllen, K., Poly(phenylene sulfide-phenyleneamine) (PPSA): The first hybrid structure of poly(phenylene sulfide) and polyaniline. *Macromolecules* **1998,** *31* (6), 1720-1727.
388. List, E. J. W.; Graupner, W.; Wohlgenannt, M.; Leising, G.; Partee, J.; Shinar, J.; Schlichting, P.; Rohr, U.; Geerts, Y.; Scherf, U.; Müllen, K., Dynamics of photoexcitations in highly fluorescent organic guest-host-systems. *Optical Materials* **1998,** *9* (1-4), 494-497.
389. List, E. J. W.; Tasch, S.; Hochfilzer, C.; Leising, G.; Schlichting, P.; Rohr, U.; Geerts, Y.; Scherf, U.; Müllen, K., Efficient color tuning (blue, red-orange, white) of light emitting diodes by excitation energy transfer. *Optical Materials* **1998,** *9* (1-4), 183-187.
390. Mais, S.; Müller, G.; Müllen, K.; Bräuchle, C., Terrylenediimide: A promising chromophore for single-molecule spectroscopy at low temperatures. *Journal of Information Recording* **1998,** *24* (5-6), 481-489.
391. Marsitzky, D.; Brand, T.; Geerts, Y.; Klapper, M.; Müllen, K., Synthesis of rod-coil block copolymers via end-functionalized poly(p-phenylene)s. *Macromolecular Rapid Communications* **1998,** *19* (7), 385-389.
392. Morgenroth, F.; Berresheim, A. J.; Wagner, M.; Müllen, K., Spherical polyphenylene dendrimers via Diels-Alder reactions: The first example of an A4B building block in dendrimer chemistry. *Chemical Communications* **1998,** (10), 1139-1140.
393. Morgenroth, F.; Kübel, C.; Müller, M.; Wiesler, U. M.; Berresheim, A. J.; Wagner, M.; Müllen, K., From three-dimensional polyphenylene dendrimers to large graphite subunits. *Carbon* **1998,** *36* (5-6), 833-837.
394. Müllen, K.; Rabe, J. P., Macromolecular and supramolecular architectures for molecular electronics. In *Annals of the New York Academy of Sciences*, 1998; Vol. 852, pp 205-218.
395. Müllen, K.; Wegner, G., What does materials science learn from conjugated oligomers? *Advanced Materials* **1998,** *10* (6), 433-436.
396. Müller, G. R. J.; Meiners, C.; Enkelmann, V.; Geerts, Y.; Müllen, K., Liquid crystalline perylene-3,4-dicarboximide derivatives with high thermal and photochemical stability. *Journal of Materials Chemistry* **1998,** *8* (1), 61-64.
397. Müller, M.; Kübel, C.; Morgenroth, F.; Iyer, V. S.; Müllen, K., Oligophenylenes as building blocks for well-defined graphite subunits. *Carbon* **1998,** *36* (5-6), 827-831.
398. Müller, M.; Kübel, C.; Müllen, K., Giant polycyclic aromatic hydrocarbons. *Chemistry - A European Journal* **1998,** *4* (11), 2099-2109.
399. Nishiyama, K.; Honda, T.; Reis, H.; Müller, U.; Müllen, K.; Baumann, W.; Okada, T., Electronic structures of 9,10-anthrylene dimers and trimers in solution: Formation of charge separation states depending on alkyl substituent groups. *Journal of Physical Chemistry A* **1998,** *102* (17), 2934-2943.
400. Panzer, O.; Göhde, W.; Fischer, U. C.; Fuchs, H.; Müllen, K., Influence of oxygen on single molecule blinking. *Advanced Materials* **1998,** *10* (17), 1469-1472.
401. Rohr, U.; Schlichting, P.; Böhm, A.; Gross, M.; Meerholz, K.; Bräuchle, C.; Müllen, K., Liquid crystalline coronene derivatives with extraordinary fluorescence properties. *Angewandte Chemie - International Edition* **1998,** *37* (10), 1434-1437.

402. Rumi, M.; Zerbi, G.; Müllen, K., Vibrational and nonlinear optical properties of rylenes calculated by ab initio methods. *Journal of Chemical Physics* **1998,** *108* (20), 8662-8670.
403. Samorí, P.; Francke, V.; Mangel, T.; Müllen, K.; Rabe, J. P., Poly-para-phenylene-ethynylene assemblies for a potential molecular nanowire: An SFM study. *Optical Materials* **1998,** *9* (1-4), 390-393.
404. Samorí, P.; Francke, V.; Müllen, K.; Rabe, J. P., Growth of solution cast macromolecular π-conjugated nanoribbons on mica. *Thin Solid Films* **1998,** *336* (1-2), 13-15.
405. Schlichting, P.; Rohr, U.; Müllen, K., Easy synthesis of liquid crystalline perylene derivatives. *Journal of Materials Chemistry* **1998,** *8* (12), 2651-2655.
406. Schweitzer, B.; Wegmann, G.; Giessen, H.; Hertel, D.; Bässler, H.; Mahrt, R. F.; Scherf, U.; Müllen, K., The optical gain mechanism in solid conjugated polymers. *Applied Physics Letters* **1998,** *72* (23), 2933-2935.
407. Skabara, P. J.; Müllen, K.; Bryce, M. R.; Howard, J. A. K.; Batsanov, A. S., The synthesis, redox properties and X-ray crystal structures of two new tetrathiafulvalene-thiophene donors. *Journal of Materials Chemistry* **1998,** *8* (8), 1719-1724.
408. Stecnbock, M.; Klapper, M.; Müllen, K., "Self-regulation" of controlled radical polymerization. *Acta Polymerica* **1998,** *49* (7), 376-378.
409. Steenbock, M.; Klapper, M.; Müllen, K., Triazolinyl radicals - New additives for controlled radical polymerization. *Macromolecular Chemistry and Physics* **1998,** *199* (5), 763-769.
410. Steenbock, M.; Klapper, M.; Müllen, K.; Bauer, C.; Hubrich, M., Decomposition of stable free radicals as "self-regulation" in controlled radical polymerization. *Macromolecules* **1998,** *31* (16), 5223-5228.
411. Tak, Y. H.; Bässler, H.; Leuninger, J.; Müllen, K., Device performance of light-emitting diode with poly(phenylenesulfidephenyleneamine) as a promotor of hole injection. *Journal of Physical Chemistry B* **1998,** *102* (25), 4887-4891.
412. Tyutyulkov, N.; Madjarova, G.; Dietz, F.; Müllen, K., Is 2-D graphite an ultimate large hydrocarbon? 1. Energy spectra of giant polycyclic aromatic hydrocarbons. *Journal of Physical Chemistry B* **1998,** *102* (50), 10183-10189.
413. Valiyaveettil, S.; Müllen, K., Multiphase self-assembly of 5-alkoxyisophthalic acid and its applications. *New Journal of Chemistry* **1998,** *22* (2), 89-95.
414. van de Craats, A. M.; Warman, J. M.; Mullen, K.; Geerts, Y.; Brand, J. D., Rapid charge transport along self-assembling graphitic nanowires. *Advanced Materials* **1998,** *10* (1), 36-38.
415. Waldauf, C.; Graupner, W.; Tasch, S.; Leising, G.; Gügel, A.; Scherf, U.; Kraus, A.; Walter, M.; Müllen, K., Efficient charge carrier transfer from m-LPPP to C60 derivatives. *Optical Materials* **1998,** *9* (1-4), 449-453.
416. Wohlgenannt, M.; Graupner, W.; Wenzl, F. P.; Tasch, S.; List, E. J. W.; Leising, G.; Graupner, M.; Hermetter, A.; Rohr, U.; Schlichting, P.; Geerts, Y.; Scherf, U.; Müllen, K., Photophysics of excitation energy transfer in highly fluorescent polymers. *Chemical Physics* **1998,** *227* (1-2), 99-109.
417. Allgaier, J.; Martin, K.; Räder, H. J.; Müllen, K., Many-arm star polymers synthesized using chlorosilane linking agents: their structural quality concerning arm number and polydispersity. *Macromolecules* **1999,** *32* (10), 3190-3194.
418. Annan, K. O.; Scherf, U.; Müllen, K., Visible-emitting poly[(3′,4′-dialkoxycarbonyl-2′-hydroxy-1,1′:5′, 1″-terphenyl-4,4″-ylene)]. *Synthetic Metals* **1999,** *99* (1), 9-16.
419. Benshafrut, R.; Hoffman, R. E.; Rabinovitz, M.; Müllen, K., An unusual charge Umpolung: Synthesis of the bay region diketone 2,3:10,11-dibenzoperylene-1,12-dione. *Journal of Organic Chemistry* **1999,** *64* (2), 644-647.
420. Benshafrut, R.; Rabinovitz, M.; Hoffman, R. E.; Ben-Mergui, N.; Müllen, K.; Iyer, V. S.,

π-Conjugated benzoperylenes: Sequential C-S bond cleavage and charge distribution patterns of the anions. *European Journal of Organic Chemistry* **1999,** (1), 37-48.
421. Berresheim, A. J.; Müller, M.; Müllen, K., Polyphenylene Nanostructures. *Chemical Reviews* **1999,** *99* (7), 1747-1785.
422. Brocorens, P.; Zojer, E.; Cornil, J.; Shuai, Z.; Leising, G.; Müllen, K.; Brédas, J. L., Theoretical characterization of phenylene-based oligomers, polymers, and dendrimers. *Synthetic Metals* **1999,** *100* (1), 141-162.
423. Brown, S. P.; Schnell, I.; Brand, J. D.; Müllen, K.; Spiess, H. W., An investigation of π-π packing in a columnar hexabenzocoronene by fast magic-angle spinning and double-quantum 1H solid-state NMR spectroscopy. *Journal of the American Chemical Society* **1999,** *121* (28), 6712-6718.
424. De Feyter, S.; Gesquière, A.; Grim, P. C. M.; De Schryver, F. C.; Valiyaveettil, S.; Meiners, C.; Sieffert, M.; Müllen, K., Expression of chirality and visualization of stereogenic centers by scanning tunneling microscopy. *Langmuir* **1999,** *15* (8), 2817-2822.
425. Dicker, G.; Hohenau, A.; Graupner, W.; Tasch, S.; Graupner, M.; Hermetter, A.; Schlicke, B.; Schulte, N.; Schluter, A. D.; Scherf, U.; Mullen, K.; Leising, G., Emission properties of a molecularly doped highly fluorescent polymer. *Synthetic Metals* **1999,** *102* (1-3), 873-874.
426. Dietz, F.; Tyutyulkov, N.; Karabunarliev, S.; Hristov, J.; Müllen, K., Structure and energy spectra of a class of polybenzenoid Clar's hydrocarbons and 1-D polymers. *Polycyclic Aromatic Compounds* **1999,** *13* (3), 241-259.
427. Fechtenkötter, A.; Saalwächter, K.; Harbison, M. A.; Müllen, K.; Spiess, H. W., Highly ordered columnar structures from Hexa-peri-hexabenzocoronenes- synthesis, X-ray diffraction, and solid-state heteronuclear multiple-quantum NMR investigations. *Angewandte Chemie - International Edition* **1999,** *38* (20), 3039-3042.
428. Former, C.; Wagner, H.; Richert, R.; Neher, D.; Müllen, K., Orientation and dynamics of chainlike dipole arrays: Donor-acceptor-substituted oligophenylenevinylenes in a polymer matrix. *Macromolecules* **1999,** *32* (25), 8551-8559.
429. Gensch, T.; Hofkens, J.; Heirmann, A.; Tsuda, K.; Verheijen, W.; Vosch, T.; Christ, T.; Basché, T.; Müllen, K.; De Schryver, F. C., Fluorescence detection from single dendrimers with multiple chromophores. *Angewandte Chemie - International Edition* **1999,** *38* (24), 3752-3756.
430. Gerson, F.; Merstetter, P.; Barbosa, F.; Vogel, E.; König, C.; Lex, J.; Müllen, K.; Wagner, M., Dibenzohomopyracylene, a segment of methanofullerene C61H2, its radical ions and dianion. *Chemistry - A European Journal* **1999,** *5* (9), 2757-2761.
431. Gesquière, A.; Abdel-Mottaleb, M. M.; De Schryver, F. C.; Sieffert, M.; Müllen, K., Imaging of a fluorine-substituted isophthalic acid derivative on graphite with scanning tunneling microscopy. *Langmuir* **1999,** *15* (20), 6821-6824.
432. Gherghel, L.; Brand, J. D.; Baumgarten, M.; Müllen, K., Exceptional triplet and quartet states in highly charged hexabenzocoronenes [1]. *Journal of the American Chemical Society* **1999,** *121* (35), 8104-8105.
433. Herwig, P. T.; Müllen, K., Soluble pentacene precursor: Synthesis, solid-state conversion into pentacene and application in a field-effect transistor. *Advanced Materials* **1999,** *11* (6), 480-483.
434. Hofkens, J.; Latterini, L.; De Belder, G.; Gensch, T.; Maus, M.; Vosch, T.; Karni, Y.; Schweitzer, G.; De Schryver, F. C.; Hermann, A.; Müllen, K., Photophysical study of a multi-chromophoric dendrimer by time-resolved fluorescence and femtosecond transient absorption spectroscopy. *Chemical Physics Letters* **1999,** *304* (1-2), 1-9.
435. Hong, H.; Davidov, D.; Kallinger, C.; Lemmer, U.; Feldmann, J.; Harth, E.; Gügel, A.; Müllen, K., Self-assembly of functionalized fullerenes. *Synthetic Metals* **1999,** *102* (1-3), 1537.
436. Hong, H.; Davidov, D.; Kallinger, C.; Lemmer, U.; Feldmann, J.; Harth, E.; Gugel, A.; Mullen, K., Self-assembly of functionalized fullerenes. *Synthetic Metals* **1999,** *102* (1-3), 1487.

437. Kallinger, C.; Hauder, M.; Haugeneder, A.; Lemmer, U.; Spirkl, W.; Feldmann, J.; Scherf, U.; Harth, E.; Gügel, A.; Müllen, K., Control of electron transfer in conjugated polymer/fullerene heterostructures. *Synthetic Metals* **1999,** *101* (1), 285-286.
438. Karni, Y.; Jordens, S.; De Belder, G.; Hofkens, J.; Schweitzer, G.; De Schryver, F. C.; Herrmann, A.; Müllen, K., Correlation between ground state conformation and excited state dynamics in a multichromophoric dendrimer studied by excitation wavelength dependent fluorescence upconversion. *Journal of Physical Chemistry B* **1999,** *103* (43), 9378-9381.
439. Karni, Y.; Jordens, S.; De Belder, G.; Schweitzer, G.; Hofkens, J.; Gensch, T.; Maus, M.; De Schryver, F. C.; Hermann, A.; Müllen, K., Intramolecular evolution from a locally excited state to an excimer-like state in a multichromophoric dendrimer evidenced by a femtosecond fluorescence upconversion study. *Chemical Physics Letters* **1999,** *310* (1-2), 73-78.
440. Kraus, A.; Müllen, K., [60]fullerene-containing poly(dimethylsiloxane)s: easy access to soluble polymers with high fullerene content. *Macromolecules* **1999,** *32* (13), 4214-4219.
441. Lee, S. K.; Zu, Y.; Herrmann, A.; Geerts, Y.; Müllen, K.; Bard, A. J., Electrochemistry, spectroscopy and electrogenerated chemiluminescence of perylene, terrylene, and quaterrylene diimides in aprotic solution. *Journal of the American Chemical Society* **1999,** *121* (14), 3513-3520.
442. Leuninger, J.; Uebe, J.; Salbeck, J.; Gherghel, L.; Wang, C.; Müllen, K., Poly(phenylene sulfide-phenyleneamine-phenyleneamine) (PPSAA) - a soluble model for polyaniline. *Synthetic Metals* **1999,** *100* (1), 79-88.
443. Leuninger, J.; Wang, C.; Soczka-Guth, T.; Müllen, K., Novel sulfur- and nitrogen containing polymers through acid-induced condensation reactions of methylsulfmylarenes. *Synthetic Metals* **1999,** *101* (1-3), 681-684.
444. List, E. J. W.; Holzer, L.; Tasch, S.; Leising, G.; Scherf, U.; Müllen, K.; Catellani, M.; Luzzati, S., Efficient single-layer yellow-light emitting-diodes with ladder-type poly(p-phenylene)/poly(decyl-thiophene) blends. *Solid State Communications* **1999,** *109* (7), 455-459.
445. Mais, S.; Basché, T.; Müller, G.; Müllen, K.; Bräuchle, C., Probing the spectral dynamics of single terrylenediimide molecules in low-temperature solids. *Chemical Physics* **1999,** *247* (1), 41-52.
446. Marsitzky, D.; Klapper, M.; Müllen, K., End-functionalization of poly(2,7-fluorene): A key step toward novel luminescent rod-coil block copolymers. *Macromolecules* **1999,** *32* (25), 8685-8688.
447. Meiners, C.; DeFeyter, S.; Lieser, G.; Van Stam, J.; Soltermann, A.; Berghmans, H.; De Schryver, F. C.; Müllen, K., Identification and characterization of aggregates formed by a partly neutralized isophthalic acid derivative in aqueous solution. *Langmuir* **1999,** *15* (9), 3374-3380.
448. Meinhardt, G.; Graupner, W.; Feistritzer, G.; Schroder, R.; List, E. J. W.; Pogantsch, A.; Dicker, G.; Schlicke, B.; Schulte, N.; Schlueter, A. D.; Winter, G.; Hanack, M.; Scherf, U.; Muellen, K.; Leising, G., Optoelectronic devices made from multilayer and molecularly doped organic layers. *Proceedings of SPIE - The International Society for Optical Engineering* **1999,** *3623*, 46-57.
449. Moffitt, M.; Farinha, J. P. S.; Winnik, M. A.; Rohr, U.; Müllen, K., Steady-state and dynamic fluorescence measurements of a perylene-labeled triblock copolymer: evidence for ground-state dye aggregate formation. *Macromolecules* **1999,** *32* (15), 4895-4904.
450. Müllen, K.; Steenbock, M.; Klapper, M., Triazolinyl radicals - an alternative radical with a new mechanism in controlled radical polymerization. *American Chemical Society, Polymer Preprints, Division of Polymer Chemistry* **1999,** *40* (2), 321-322.
451. Muscat, D.; Köhler, W.; Räder, H. J.; Martin, K.; Mullins, S.; Müller, B.; Müllen, K.; Geerts, Y., Synthesis and characterization of poly[2]-catenanes containing rigid catenane segments. *Macromolecules* **1999,** *32* (6), 1737-1745.
452. Petekidis, G.; Fytas, G.; Scherf, U.; Müllen, K.; Fleischer, G., Dynamics of poly(p-phenylene) ladder polymers in solution. *Journal of Polymer Science, Part B: Polymer Physics* **1999,** *37* (16), 2211-2220.

453. Przybilla, L.; Räder, H. J.; Müllen, K., Post-source decay fragment ion analysis of polycarbonates by matrix-assisted laser desorption/ionization time-of-flight mass spectrometry. *European Journal of Mass Spectrometry* **1999,** *5* (2), 133-143.
454. Rauscher, H.; Jung, T. A.; Lin, J. L.; Kirakosian, A.; Himpsel, F. J.; Rohr, U.; Müllen, K., One-dimensional confinement of organic molecules via selective adsorption on CaF1 versus CaF2. *Chemical Physics Letters* **1999,** *303* (3-4), 363-367.
455. Rettig, W.; Paeplow, B.; Herbst, H.; Müllen, K.; Desvergne, J. P.; Bouas-Laurent, H., Intramolecular excimer formation in short- and long-chainlength di(9- anthryl) bichromophoric compounds and relation to ground state properties. *New Journal of Chemistry* **1999,** *23* (4), 453-460.
456. Rusanov, A. L.; Elshina, L. B.; Bulycheva, E. G.; Müllen, K., Advances in the synthesis of poly(peryleneimides) and poly(naphthylimides). *Vysokomolekularnye Soedineniya. Ser.A Ser.B Ser.C - Kratkie Soobshcheniya* **1999,** *41* (1), 25-26.
457. Rusanov, A. L.; Elshina, L. B.; Bulycheva, E. G.; Müllen, K., Advances in the synthesis of poly(perylenecarboximides) and poly(naphthalenecarboximides). *Polymer Science - Series A* **1999,** *41* (1), 2-21.
458. Rusanov, A. L.; Elshina, L. B.; Bulycheva, E. G.; Mullen, K., Advances in the synthesis of poly(peryleneimides) and poly(naphthylimides). *Khimiya Tverdogo Topliva* **1999,** (1), 7-26.
459. Rusanov, A. L.; Keshtov, M. L.; Shchegolikhin, A. N.; Petrovskii, P. V.; Belomoina, N. M.; Keshtova, S. V.; Timofeeva, G. I.; Ronova, I. A.; Müllen, K.; Morgenroth, F., 2,5-Diphenyl-3,4-bis[p-(phenylethynyl)phenyl]cyclopentadienone and product of its Diels - Alder homocondensation. *Russian Chemical Bulletin* **1999,** *48* (5), 944-948.
460. Rusanov, A. L.; Stadnik, T. A.; Müllen, K., New condensation polymers having low dielectric constants. *Russian Chemical Reviews* **1999,** *68* (8), 685-696.
461. Rusanov, A. L.; Stadnik, T. A.; Müllen, K., New condensation polymers having low dielectric constants. *Uspekhi Khimii* **1999,** *68* (8), 770-772.
462. Samorí, P.; Francke, V.; Müllen, K.; Rabe, J. P., Self-assembly of a conjugated polymer: From molecular rods to a nanoribbon architecture with molecular dimensions. *Chemistry - A European Journal* **1999,** *5* (8), 2312-2317.
463. Samorí, P.; Sikharulidze, I.; Francke, V.; Müllen, K.; Rabe, J. P., Nanoribbons from conjugated macromolecules on amorphous substrates observed by SFM and TEM. *Nanotechnology* **1999,** *10* (1), 77-80.
464. Schlichting, P.; Duchscherer, B.; Seisenberger, G.; Basché, T.; Bräuchle, C.; Müllen, K., A bichromophore Based on perylene and terrylene for energy transfer studies at the single-molecule level. *Chemistry - A European Journal* **1999,** *5* (8), 2388-2395.
465. Schubert, U. S.; Weidl, C. H.; Rapta, P.; Harth, E.; Müllen, K., Metallo-supramolecular fullerene architectures: Synthesis and characterization of bucky ligands and a non-covalent dimer. *Chemistry Letters* **1999,** (9), 949-950.
466. Sirringhaus, H.; Friend, R. H.; Wang, C.; Leuninger, J.; Müllen, K., Dibenzothienobisbenzothiophene - A novel fused-ring oligomer with high field-effect mobility. *Journal of Materials Chemistry* **1999,** *9* (9), 2095-2101.
467. Stork, M.; Koch, M.; Klapper, M.; Müllen, K.; Gregorius, H.; Rief, U., Ethylene polymerization using crosslinked polystyrene as support for zirconocene dichloride/methylaluminoxane. *Macromolecular Rapid Communications* **1999,** *20* (4), 210-213.
468. Tasch, S.; Gao, J.; Wenzl, F. P.; Holzer, L.; Leising, G.; Heeger, A. J.; Scherf, U.; Müllen, K., Blue and green light-emitting electrochemical cells with microsecond response times. *Electrochemical and Solid-State Letters* **1999,** *2* (6), 303-305.
469. Tasch, S.; Holzer, L.; Wenzl, F. P.; Gao, J.; Winkler, B.; Dai, L.; Mau, A. W. H.; Sotgiu, R.; Sampietro, M.; Scherf, U.; Mullen, K.; Heeger, A. J.; Leising, G., Light-emitting electrochemical

cells with microsecond response times based on PPPs and novel PPVs. *Synthetic Metals* **1999,** *102* (1-3), 1046-1049.
470. Thünemann, A. F.; Ruppelt, D.; Ito, S.; Müllen, K., Supramolecular architecture of a functionalized hexabenzocoronene and its complex with polyethyleneimine. *Journal of Materials Chemistry* **1999,** *9* (5), 1055-1057.
471. Tyutyulkov, N.; Dietz, F.; Ivanova, A.; Müllen, K., Structure and properties of new classes of coupled polymethine dyes. *Dyes and Pigments* **1999,** *42* (3), 215-222.
472. Uckert, F.; Setayesh, S.; Müllen, K., Precursor route to 2,7-poly(9-fluorenone). *Macromolecules* **1999,** *32* (14), 4519-4524.
473. Van De Craats, A. M.; Warman, J. M.; Fechtenkötter, A.; Brand, J. D.; Harbison, M. A.; Müllen, K., Record charge carrier mobility in a room-temperature discotic liquid-crystalline derivative of hexabenzocoronene. *Advanced Materials* **1999,** *11* (17), 1469-1472.
474. van de Craats, A. M.; Warman, J. M.; Schlichting, P.; Rohr, U.; Geerts, Y.; Mullen, K., Charge transport in mesomorphic derivatives of perylene. *Synthetic Metals* **1999,** *102* (1-3), 1550-1551.
475. Wang, L. X.; Jing, X. B.; Wang, F. S.; Zhang, J. P.; Wang, R. S.; Soczka-Guth, T.; Müllen, K., Synthesis of poly(phenylenesulfidephenylenamine) by self-polycondensation of methyl-(4-anilinophenyl) sulfide with antimony pentachloride. *Synthetic Metals* **1999,** *101* (1), 320.
476. Weiss, K.; Beernink, G.; Dötz, F.; Birkner, A.; Müllen, K.; Wöll, C. H., Template-mediated synthesis of polycyclic aromatic hydrocarbons: Cyclodehydrogenation and planarization of a hexaphenylbenzene derivative at a copper surface. *Angewandte Chemie - International Edition* **1999,** *38* (24), 3748-3752.
477. Wenzl, F. P.; Holzer, L.; Tasch, S.; Scherf, U.; Mullen, K.; Winkler, B.; Mau, A. W. H.; Dai, L.; Leising, G., Turn on behavior of light emitting electrochemical cells. *Synthetic Metals* **1999,** *102* (1-3), 1138-1139.
478. Wiesler, U. M.; Müllen, K., Polyphenylene dendrimers via Diels-Alder reactions: The convergent approach. *Chemical Communications* **1999,** (22), 2293-2294.
479. Becker, S.; Böhm, A.; Müllen, K., New Thermotropic Dyes Based on Amino-Substituted Perylendicarboximides. *Chemistry - A European Journal* **2000,** *6* (21), 3984-3990.
480. Brand, J. D.; Kübel, C.; Ito, S.; Müllen, K., Functionalized hexa-peri-hexabenzocoronenes: Stable supramolecular order by polymerization in the discotic mesophase. *Chemistry of Materials* **2000,** *12* (6), 1638-1647.
481. Brown, S. P.; Schnell, I.; Brand, J. D.; Müllen, K.; Spiess, H. W., The competing effects of π-π packing and hydrogen bonding in a hexabenzocoronene carboxylic acid derivative: A 1H solid-state MAS NMR investigation. *Physical Chemistry Chemical Physics* **2000,** *2* (8), 1735-1745.
482. Brown, S. P.; Schnell, I.; Brand, J. D.; Müllen, K.; Spiess, H. W., A 1H double-quantum magic-angle spinning solid-state NMR investigation of packing and dynamics in triphenylene and hexabenzocoronene derivatives. *Journal of Molecular Structure* **2000,** *521* (1-3), 179-195.
483. Bubeck, C.; Ueberhofen, K.; Ziegler, J.; Fitrilawati, F.; Baier, U.; Eichner, H.; Former, C.; Müllen, K.; Pfeiffer, S.; Tillmann, H.; Hörhold, H. H., Waveguides of conjugated polymers with large cubic nonlinearities. *Molecular Crystals and Liquid Crystals Science and Technology Section B: Nonlinear Optics* **2000,** *25* (1-4), 93-104.
484. De Feyter, S.; Gesquière, A.; De Schryver, F.; Meiners, C.; Sieffert, M.; Müllen, K., Chiral polymorphism: a scanning tunneling microscopy study. *Langmuir* **2000,** *16* (25), 9887-9894.
485. De Feyter, S.; Gesquire, A.; Abdel-Mottaleb, M. M.; Grim, P. C. M.; De Schryver, F. C.; Meiners, C.; Sieffert, M.; Valiyaveettil, S.; Mullen, K., Scanning tunneling microscopy: A unique tool in the study of chirality, dynamics, and reactivity in physisorbed organic monolayers. *Accounts of Chemical Research* **2000,** *33* (8), 520-531.
486. Dietz, F.; Tyutyulkov, N.; Karabunarliev, S.; Hristov, J.; Müllen, K., Structure and energy

spectra of a class of polybenzenoid Clar's hydrocarbons and 1-D polymers. *Polycyclic Aromatic Compounds* **2000,** *18* (1), 99-116.
487. Dietz, F.; Tyutyulkov, N.; Karabunarliev, S.; Hristov, J.; Müllen, K., Structure and energy spectra of a class of polybenzenoid Clar's hydrocarbons and 1-D polymers. *Polycyclic Aromatic Compounds* **2000,** *13* (4), 361-378.
488. Dietz, F.; Tyutyulkov, N.; Madjarova, G.; Müllen, K., Is 2-D Graphite an Ultimate Large Hydrocarbon? II. Structure and Energy Spectra of Polycyclic Aromatic Hydrocarbons with Defects. *Journal of Physical Chemistry B* **2000,** *104* (8), 1746-1761.
489. Dötz, F.; Brand, J. D.; Ito, S.; Gherghel, L.; Müllen, K., Synthesis of large polycyclic aromatic hydrocarbons: Variation of size and periphery. *Journal of the American Chemical Society* **2000,** *122* (32), 7707-7717.
490. Egelhaaf, H. J.; Lüer, L.; Tompert, A.; Bäuerle, P.; Müllen, K.; Oelkrug, D., Fluorescence anisotropy and rotational diffusion of polyene-like molecules in solution. *Synthetic Metals* **2000,** *115* (1), 63-68.
491. Gelinck, G. H.; Piet, J. J.; Wegewijs, B. R.; Müllen, K.; Wildeman, J.; Hadziioannou, G.; Warman, J. M., Measuring the size of excitons on isolated phenylene-vinylene chains: From dimers to polymers. *Physical Review B - Condensed Matter and Materials Physics* **2000,** *62* (3), 1489-1491.
492. Gesquière, A.; Abdel-Mottaleb, M. M.; De Feyter, S.; De Schryver, F. C.; Sieffert, M.; Müllen, K.; Calderone, A.; Lazzaroni, R.; Brédas, J. L., Dynamics in physisorbed monolayers of 5-alkoxy-isophthalic acid derivatives at the liquid/solid interface investigated by scanning tunneling microscopy. *Chemistry - A European Journal* **2000,** *6* (20), 3739-3746.
493. Herrmann, A.; Marsitzky, D.; Setayesh, S.; Müllen, K., Light-emitting 1D- and 3D-polyphenylenes. *American Chemical Society, Polymer Preprints, Division of Polymer Chemistry* **2000,** *41* (1), 768-769.
494. Herwig, P. T.; Enkelmann, V.; Schmelz, O.; Müllen, K., Synthesis and structural characterization of hexa-tert-butyl-hexa-peri-hexabenzocoronene, its radical cation salt and its tricarbonylchromium complex. *Chemistry - A European Journal* **2000,** *6* (10), 1834-1839.
495. Hofkens, J.; Maus, M.; Gensch, T.; Vosch, T.; Cotlet, M.; Köhn, F.; Herrmann, A.; Müllen, K.; De Schryver, F., Probing photophysical processes in individual multichromophoric dendrimers by single-molecule spectroscopy. *Journal of the American Chemical Society* **2000,** *122* (38), 9278-9288.
496. Holtrup, F. O.; Lieser, G.; Müllen, K., Packing behavior of benzoylterryleneimide in the solid state. *Colloid and Polymer Science* **2000,** *278* (5), 385-391.
497. Ito, S.; Herwig, P. T.; Böhme, T.; Rabe, J. P.; Rettig, W.; Müllen, K., Bishexa-peri-hexabenzocoronenyl: A 'superbiphenyl'. *Journal of the American Chemical Society* **2000,** *122* (32), 7698-7706.
498. Ito, S.; Wehmeier, M.; Brand, J. D.; Kübel, C.; Epsch, R.; Rabe, J. P.; Müllen, K., Synthesis and self-assembly of functionalized hexa-peri-hexabenzocoronenes. *Chemistry - A European Journal* **2000,** *6* (23), 4327-4342.
499. Karabunarliev, S.; Baumgarten, M.; Bittner, E. R.; Müllen, K., Rigorous Franck-Condon absorption and emission spectra of conjugated oligomers from quantum chemistry. *Journal of Chemical Physics* **2000,** *113* (24), 11372-11381.
500. Karabunarliev, S.; Baumgarten, M.; Müllen, K., Adiabatic one- and two-photon excited states in phenylene-based conjugated oligomers: A quantum-chemical study. *Journal of Physical Chemistry A* **2000,** *104* (35), 8236-8243.
501. Keil, M.; Samorí, P.; Dos Santos, D. A.; Kugler, T.; Stafström, S.; Brand, J. D.; Müllen, K.; Brédas, J. L.; Rabe, J. P.; Salaneck, W. R., Influence of the morphology on the electronic structure of Hexa-peri-hexabenzocoronene thin films. *Journal of Physical Chemistry B* **2000,** *104* (16), 3967-3975.
502. Klapper, M.; Brand, T.; Steenbock, M.; Müllen, K., Triazolinyl radicals: Toward a new

mechanism in controlled radical polymerization. In *ACS Symposium Series*, 2000; Vol. 768, pp 152-166.
503. Koch, M.; Stork, M.; Klapper, M.; Müllen, K.; Gregorius, H., Immobilization of metallocenes through noncovalent bonding via MAO to a reversibly cross-linked polystyrene. *Macromolecules* **2000,** *33* (21), 7713-7717.
504. Kubel, C.; Eckhardt, K.; Enkelmann, V.; Wegner, G.; Mullen, K., Erratum: Synthesis and crystal packing of large polycyclic aromatic hydrocarbons: Hexabenzo[bc,ef,hi,kl,no,qr]coronene and dibenzo[fg,ij]phenanthro[9,10,1,2,3-pqrst]pentaphene (Journal of Materials Chemistry (2000) 10 (879-886)). *Journal of Materials Chemistry* **2000,** *10* (6), 1469.
505. Kübel, C.; Eckhardt, K.; Enkelmann, V.; Wegner, G.; Müllen, K., Synthesis and crystal packing of large polycyclic aromatic hydrocarbons: Hexabenzo[bc,ef,hi,kl,no,qr]coronene and dibenzo[fg,ij]phenanthro[9,10,1,2,3- pqrst]pentaphene. *Journal of Materials Chemistry* **2000,** *10* (4), 879-886.
506. Ledere, P.; Calderone, A.; Marsitzky, D.; Francke, V.; Geerts, Y.; Müllen, K.; Brédas, J. L.; Lazzaroni, R., Highly regular organization of conjugated polymer chains via block copolymer self-assembly. *Advanced Materials* **2000,** *12* (14), 1042-1046.
507. Ledère, P.; Marsitzky, D.; Francke, V.; Setayesh, S.; Müllen, K.; Brédas, J. L.; Lazzaroni, R. In *Highly-regular organization of conjugated polymer chains via block copolymer self-assembly*, American Chemical Society, Polymer Preprints, Division of Polymer Chemistry, 2000; pp 1483-1484.
508. List, E. J. W.; Creely, C.; Leising, G.; Schulte, N.; Schlüter, A. D.; Scherf, U.; Müllen, K.; Graupner, W., Excitation energy migration in highly emissive semiconducting polymers. *Chemical Physics Letters* **2000,** *325* (1-3), 132-138.
509. List, E. J. W.; Partee, J.; Shinar, J.; Scherf, U.; Müllen, K.; Zojer, E.; Graupner, W.; Leising, G., Solid state effects in the electronic structure of ladder-type poly(p-phenylene)s and oligo(p-phenylene)s. *Synthetic Metals* **2000,** *111*, 509-513.
510. Loi, S.; Wiesler, U. M.; Butt, H. J.; Müllen, K., Formation of nanorods by self-assembly of alkyl-substituted polyphenylene dendrimers on graphite. *Chemical Communications* **2000,** (13), 1169-1170.
511. Meinhardt, G.; Moderegger, E.; Schröder, R.; Winter, G.; Hanack, M.; Quante, H.; Geerts, Y.; Müllen, K.; Tillmann, H.; Hörhold, H. H.; Leising, G. In *Photovoltaic effect in multilayer organic systems*, Materials Research Society Symposium - Proceedings, 2000; pp BB9.2.1-BB9.2.7.
512. Przybilla, L.; Brand, J. D.; Yoshimura, K.; Räder, H. J.; Müllen, K., MALDI-TOF mass spectrometry of insoluble giant polycyclic aromatic hydrocarbons by a new method of sample preparation. *Analytical Chemistry* **2000,** *72* (19), 4591-4597.
513. Reb, P.; Margarit-Puri, K.; Klapper, M.; Müllen, K., Polymerizable and nonpolymerizable isophthalic acid derivatives as surfactants in emulsion polymerization. *Macromolecules* **2000,** *33* (21), 7718-7723.
514. Samorí, P.; Severin, N.; Müllen, K.; Rabe, J. P., Macromolecular fractionation of rod-like polymers at atomically flat solid-liquid interfaces. *Advanced Materials* **2000,** *12* (8), 579-582.
515. Schmitz-Hübsch, T.; Sellam, F.; Staub, R.; Törker, M.; Fritz, T.; Kübel, C.; Müllen, K.; Leo, K., Direct observation of organic-organic heteroepitaxy: perylenetetracarboxylic-dianhydride on hexa-peri-benzocoronene on highly ordered pyrolytic graphite. *Surface Science* **2000,** *445* (2-3), 358-367.
516. Schneider, M.; Hagen, J.; Haarer, D.; Müllen, K., Novel electroluminescent devices based on perylene-doped sol-gel layers. *Advanced Materials* **2000,** *12* (5), 351-354.
517. Schneider, M.; Müllen, K., Hybrid materials doped with covalently bound perylene dyes through the sol-gel process. *Chemistry of Materials* **2000,** *12* (2), 352-362.
518. Schubert, U. S.; Weidl, C. H.; Cattani, A.; Eschbaumer, C.; Newkome, G. R.; He, E.; Harth, E.; Müllen, K., Metallo-supramolecular fullerene assemblies and polymers. *American Chemical Society, Polymer Preprints, Division of Polymer Chemistry* **2000,** *41* (1), 229-230.

519. Setayesh, S.; Marsitzky, D.; Müllen, K., Bridging the gap between polyfluorene and ladder-poly-p-phenylene: Synthesis and characterization of poly-2, 8-indenofluorene. *Macromolecules* **2000,** *33* (6), 2016-2020.
520. Setayesh, S.; Marsitzky, D.; Scherf, U.; Müllen, K., Step-ladder and ladder-type poly(para-phenylene)s - approaches towards efficient blue-light emitting polymers. *Comptes Rendus de l'Academie des Sciences - Series IV: Physics, Astrophysics* **2000,** *1* (4), 471-478.
521. Shifrina, Z. B.; Averina, M. S.; Rusanov, A. L.; Wagner, M.; Müllen, K., Branched polyphenylenes by repetitive Diels-Alder cycloaddition. *Macromolecules* **2000,** *33* (10), 3525-3529.
522. Silva, C.; Russell, D. M.; Stevens, M. A.; MacKenzie, J. D.; Setayesh, S.; Müllen, K.; Friend, R. H., Excited-state absorption in luminescent conjugated polymer thin films: Ultrafast studies of processable polyindenofluorene derivatives. *Chemical Physics Letters* **2000,** *319* (5-6), 494-500.
523. Sinigersky, V.; Müllen, K.; Klapper, M.; Schopov, I., Synthesis and properties of anthracene containing polyethers. *Macromolecular Chemistry and Physics* **2000,** *201* (11), 1134-1140.
524. Sinigersky, V.; Müllen, K.; Klapper, M.; Schopov, I., Photostructuring and consecutive doping of an anthracene-containing polymer: A new approach towards conductive patterns. *Advanced Materials* **2000,** *12* (14), 1058-1060.
525. Stork, M.; Herrmann, A.; Nemnich, T.; Klapper, M.; Müllen, K., Combinatorial testing of supported catalysts for the heterogeneous polymerization of olefins. *Angewandte Chemie - International Edition* **2000,** *39* (23), 4367-4369.
526. Stracke, F.; Blum, C.; Becker, S.; Müllen, K.; Meixner, A. J., Intrinsic conformer jumps observed by single molecule spectroscopy in real time. *Chemical Physics Letters* **2000,** *325* (1-3), 196-202.
527. Teraguchi, M.; Masuda, T.; Fechtenkötter, A.; Müllen, K., Synthesis and properties of copolymers from diphenylacetylene having a hexaphenylbenzene moiety. *Polymer Bulletin* **2000,** *44* (3), 255-260.
528. Thünemann, A. F.; Ruppelt, D.; Burger, C.; Müllen, K., Long-range ordered columns of a hexabenzo[bc,ef,hi,kl,no,qr]coronene - Polysiloxane complex: Towards molecular nanowires. *Journal of Materials Chemistry* **2000,** *10* (6), 1325-1329.
529. Tyutyulkov, N.; Dietz, F.; Madjarova, G.; Müllen, K., Nature of the magnetic interaction in organic radical crystals. 4. Magnetic interaction in mixed molecular radical crystal. *Journal of Physical Chemistry B* **2000,** *104* (31), 7320-7325.
530. Tyutyulkov, N.; Dietz, F.; Müllen, K., Magnetic exchange interaction between π -electron radicals adsorbed on α -boron-nitride surfaces. *Chemical Physics Letters* **2000,** *331* (5-6), 465-473.
531. Tyutyulkov, N.; Dietz, F.; Müllen, K., Magnetic exchange interaction between π-electron radicals adsorbed on graphites. *Chemical Physics* **2000,** *255* (2-3), 223-236.
532. Uckert, F.; Tak, Y. H.; Müllen, K.; Bässler, H., 2,7-Poly(9-fluorenone): A trap-free electron-injection material with a high charge carrier mobility for use in light-emitting diodes. *Advanced Materials* **2000,** *12* (12), 905-908.
533. Yatabe, T.; Harbison, M. A.; Brand, J. D.; Wagner, M.; Müllen, K.; Samorí, P.; Rabe, J. P., Extended triphenylenes: Synthesis, mesomorphic properties and molecularly resolved scanning tunneling microscopy images of hexakis(dialkoxyphenyl)triphenylenes and dodeca(alkoxy) tris(triphenylenylene)s. *Journal of Materials Chemistry* **2000,** *10* (7), 1519-1525.
534. Zhang, H.; Grim, P. C. M.; Foubert, P.; Vosch, T.; Vanoppen, P.; Wiesler, U. M.; Berresheim, A. J.; Müllen, K.; De Schryver, F. C., Properties of single dendrimer molecules studied by atomic force microscopy. *Langmuir* **2000,** *16* (23), 9009-9014.
535. Zhang, H.; Grim, P. C. M.; Vosch, T.; Wiesler, U. M.; Berresheim, A. J.; Müllen, K.; De Schryver, F. C., Discrimination of dendrimer aggregates on mica based on adhesion force: A pulsed force mode atomic force microscopy study. *Langmuir* **2000,** *16* (24), 9294-9298.

536. Zhu, W.; Tian, H.; Gao, E.; Yang, M.; Müllen, K., Novel triad dyes with wide spectral response for SnO2 nanoporous electrode. *Chemistry Letters* **2000,** (7), 778-779.
537. Abdel-Mottaleb, M. M. S.; De Feyter, S.; Gesquière, A.; Sieffert, M.; Klapper, M.; Mullen, K.; De Schryver, F. C., Photodimerization of Cinnamate Derivatives Studied by STM. *Nano Letters* **2001,** *1* (7), 353-359.
538. Becker, S.; Ego, C.; Grimsdale, A. C.; List, E. J. W.; Marsitzky, D.; Pogantsch, A.; Setayesh, S.; Leising, G.; Müllen, K., Optimisation of polyfluorenes for light emitting applications. *Synthetic Metals* **2001,** *125* (1), 73-80.
539. Beernink, G.; Gunia, M.; Dötz, F.; Öström, H.; Weiss, K.; Müllen, K.; Wöll, C., Synthesis of polycyclic aromatic hydrocarbons and graphite islands via surface-induced reaction of small molecules. *ChemPhysChem* **2001,** *2* (5), 317-320.
540. Blum, C.; Stracke, F.; Becker, S.; Müllen, K.; Meixner, A. J., Discrimination and interpretation of spectral phenomena by room-temperature single-molecule spectroscopy. *Journal of Physical Chemistry A* **2001,** *105* (29), 6983-6990.
541. Bratschkov, C.; Karpuzova, P.; Müllen, K.; Klapper, M.; Schopov, I., Synthesis and photochemical transformations of an anthracene containing methacrylic copolymer. *Polymer Bulletin* **2001,** *46* (5), 345-349.
542. Candeias, L. P.; Gelinck, G. H.; Piet, J. J.; Piris, J.; Wegewijs, B.; Peeters, E.; Wildeman, J.; Hadziioannou, G.; Müllen, K., Substituent effects on the excited states of phenyl-capped phenylene vinylene tetramers. *Synthetic Metals* **2001,** *119* (1-3), 339-340.
543. Dasgupta, A.; Brand, T.; Klapper, M.; Müllen, K., Triazolinyl-controlled radical polymerization as innovative route to poly(hydroxyethyl methacrylate). *Polymer Bulletin* **2001,** *46* (2-3), 131-138.
544. De Belder, G.; Jordens, S.; Lor, M.; Schweitzer, G.; De, R.; Weil, T.; Herrmann, A.; Wiesler, U. K.; Müllen, K.; De Schryver, F. C., Femtosecond fluorescence upconversion study of rigid dendrimers containing peryleneimide chromophores at the rim. *Journal of Photochemistry and Photobiology A: Chemistry* **2001,** *145* (1-2), 61-70.
545. De Belder, G.; Schweitzer, G.; Jordens, S.; Lor, M.; Mitra, S.; Hofkens, J.; De Feyter, S.; Van Der Auweraer, M.; Herrmann, A.; Weil, T.; Müllen, K.; De Schryver, F. C., Singlet-singlet annihilation in multichromophoric peryleneimide dendrimers, determined by fluorescence upconversion. *ChemPhysChem* **2001,** *2* (1), 49-55.
546. De Feyter, S.; Hofkens, J.; Van der Auweraer, M.; Nolte, R. J. M.; Müllen, K.; De Schryver, F. C., Nanometer space resolved photochemistry. *Chemical Communications* **2001,** (7), 585-592.
547. Dietz, F.; Tyutyulkov, N.; Staneva, M.; Baumgarten, M.; Müllen, K., Nature of the magnetic interaction in organic radical crystals. 5. Magnetic interaction in mixed radical ion crystals. *Journal of Physical Chemistry B* **2001,** *105* (33), 7972-7978.
548. Fechtenkötter, A.; Tchebotareva, N.; Watson, M.; Müllen, K., Discotic liquid crystalline hexabenzocoronenes carrying chiral and racemic branched alkyl chains: Supramolecular engineering and improved synthetic methods. *Tetrahedron* **2001,** *57* (17), 3769-3783.
549. Frenzel, S.; Baumgarten, M.; Müllen, K., Rod-like tetrathiafulvalene polymers with extended π-conjugation. *Synthetic Metals* **2001,** *118* (1-3), 97-103.
550. Fyles, T. M.; Knoy, R.; Müllen, K.; Sieffert, M., Membrane activity of isophthalic acid derivatives: Ion channel formation by a low molecular weight compound. *Langmuir* **2001,** *17* (21), 6669-6674.
551. Geng, Y.; Fechtenkötter, A.; Müllen, K., Star-like substituted hexaarylbenzenes: Synthesis and mesomorphic properties. *Journal of Materials Chemistry* **2001,** *11* (6), 1634-1641.
552. Gensch, T.; Hofkens, J.; Köhn, F.; Vosch, T.; Herrmann, A.; Müllen, K.; De Schryver, F. C., Polarisation sensitive single molecule fluorescence detection with linear polarised excitation light and modulated polarisation direction applied to multichromophoric entities. *Single Molecules* **2001,** *2* (1),

35-44.
553. Grimsdale, A. C.; Müllen, K., L-, 2-, and 3-dimensional polyphenylenes -from molecular wires to functionalised nanoparticles. *Chemical Records* **2001,** *1* (3), 243-257.
554. Herrmann, A.; Weil, T.; Sinigersky, V.; Wiesler, U. M.; Vosch, T.; Hofkens, J.; De Schryver, F. C.; Müllen, K., Polyphenylene dendrimers with perylene diimide as a luminescent core. *Chemistry - A European Journal* **2001,** *7* (22), 4844-4853.
555. Hertel, D.; Setayesh, S.; Nothofer, H. G.; Scherf, U.; Müllen, K.; Bässler, H., Phosphorescence in conjugated poly(para-phenylene)-derivatives. *Advanced Materials* **2001,** *13* (1), 65-70.
556. Herz, L. M.; Silva, C.; Friend, R. H.; Phillips, R. T.; Setayesh, S.; Becker, S.; Marsitsky, D.; Müllen, K., Effects of aggregation on the excitation transfer in perylene-end-capped polyindenofluorene studied by time-resolved photoluminescence spectroscopy. *Physical Review B - Condensed Matter and Materials Physics* **2001,** *64* (19), 1952031-1952039.
557. Herz, L. M.; Silva, C.; Friend, R. H.; Phillips, R. T.; Setayesh, S.; Müllen, K. In *Influence of chain packing on the excitation transfer in perylene-end-capped polyindenofluorene*, Conference on Lasers and Electro-Optics Europe - Technical Digest, 2001; p 62.
558. Herz, L. M.; Silva, C.; Phillips, R. T.; Setayesh, S.; Müllen, K., Exciton migration to chain aggregates in conjugated polymers: Influence of side-chain substitution. *Chemical Physics Letters* **2001,** *347* (4-6), 318-324.
559. Hofkens, J.; Schroeyers, W.; Loos, D.; Cotlet, M.; Köhn, F.; Vosch, T.; Maus, M.; Herrmann, A.; Müllen, K.; Gensch, T.; De Schryver, F. C., Triplet states as non-radiative traps in multichromophoric entities: Single molecule spectroscopy of an artificial and natural antenna system. *Spectrochimica Acta - Part A Molecular and Biomolecular Spectroscopy* **2001,** *57* (11), 2093-2107.
560. Hofkens, J.; Vosch, T.; Maus, M.; Köhn, F.; Cotlet, M.; Weil, T.; Herrmann, A.; Müllen, K.; De Schryver, F. C., Conformational rearrangements in and twisting of a single molecule. *Chemical Physics Letters* **2001,** *333* (3-4), 255-263.
561. Klapper, M.; Müllen, K., Controlled polymer synthesis in homogeneous and heterogeneous processes. *Macromolecular Symposia* **2001,** *163*, 1-24.
562. Klok, H. A.; Hernández, J. R.; Becker, S.; Müllen, K., Star-shaped fluorescent polypeptides. *Journal of Polymer Science, Part A: Polymer Chemistry* **2001,** *39* (10), 1572-1583.
563. Koch, M.; Falcou, A.; Nenov, N.; Klapper, M.; Müllen, K., Reversibly crosslinked networks of nanoparticles in metallocene-catalyzed olefin polymerization. *Macromolecular Rapid Communications* **2001,** *22* (17), 1455-1462.
564. Köhn, F.; Hofkens, J.; Wiesler, U. M.; Cotlet, M.; Van Der Auweraer, M.; Müllen, K.; De Schryver, F. C., Single-molecule spectroscopy of a dendrimer-based host-guest system. *Chemistry - A European Journal* **2001,** *7* (19), 4126-4133.
565. Leclère, P.; Calderone, A.; Marsitzky, D.; Francke, V.; Müllen, K.; Brédas, J. L.; Lazzaroni, R., Organization of conjugated polymer materials via block copolymer self-assembly. *Synthetic Metals* **2001,** *121* (1-3), 1295-1296.
566. Leuninger, J.; Trimpin, S.; Räder, H. J.; Müllen, K., Novel approach to ladder-type polymers: Polydithiathianthrene via the intramolecular acid-induced cyclization of methylsulfinyl-substituted poly(meta-phenylene sulfide). *Macromolecular Chemistry and Physics* **2001,** *202* (14), 2832-2842.
567. Li, G.; Josowicz, M.; Janata, J.; Müllen, K., Structural, electronic, and morphological changes in poly(phenylenesulfide phenyleneamine) upon electrochemical doping. *Journal of Physical Chemistry B* **2001,** *105* (11), 2191-2196.
568. List, E. J. W.; Creely, C.; Leising, G.; Schulte, N.; Schlüter, A. D.; Scherf, U.; Müllen, K.; Graupner, W., Excitation energy migration in π-conjugated polymers. *Synthetic Metals* **2001,** *119* (1-3), 659-660.

569. List, E. J. W.; Creely, C.; Leising, G.; Schulte, N.; Schlüter, A. D.; Scherf, U.; Müllen, K.; Graupner, W. In *Excitation energy migration in highly emissive semiconducting polymers*, Proceedings of SPIE - The International Society for Optical Engineering, 2001; pp 419-430.
570. List, E. J. W.; Pogantsch, A.; Wenzl, F. P.; Kim, C. H.; Shinar, J.; Loi, M. A.; Bongiovanni, G.; Mura, A.; Setayesh, S.; Grimsdale, A. C.; Nothofer, H. G.; Müllen, K.; Scherf, U.; Leising, G. In *A comparative study of the photophysics in polyfluorenes and polyfluorenes with polyphenylene dendron sidechains*, Materials Research Society Symposium - Proceedings, 2001; pp 213-218.
571. List, E. J. W.; Pogantsch, A.; Wenzl, F. P.; Kim, C. H.; Shinar, J.; Loi, M. A.; Bongiovanni, G.; Mura, A.; Setayesh, S.; Grimsdale, A. C.; Nothofer, H. G.; Müllen, K.; Scherf, U.; Leising, G., A comparative study of the photophysics in polyfluorenes and polyfluorenes with polyphenylene dendron sidechains. *Materials Research Society Symposium - Proceedings* **2001,** *665*, C5.47.1-C5.47.6.
572. Loi, S.; Wiesler, U. M.; Bùtt, H. J.; Müllen, K., Self-assembly of alkyl-substituted polyphenylene dendrimers on graphite. *Macromolecules* **2001,** *34* (11), 3661-3671.
573. Marsitzky, D.; Scott, J. C.; Chen, J. P.; Lee, V. Y.; Miller, R. D.; Setayesh, S.; Müllen, K., Poly-2, 8-(indenofluorene-co-anthracene)- a colorfast blue-light-emitting random copolymer. *Advanced Materials* **2001,** *13* (14), 1096-1099.
574. Marsitzky, D.; Scott, J. C.; Chen, J. P.; Lee, V. Y.; Miller, R. D.; Setayesh, S.; Müllen, K., Poly-2,8-(indenofluorene-co-anthracene)- a colorfast blue-light-emitting random copolymer. *Advanced Materials* **2001,** *13* (14), 1096-1099.
575. Maus, M.; De, R.; Lor, M.; Weil, T.; Mitra, S.; Wiesler, U. M.; Herrmann, A.; Hofkens, J.; Vosch, T.; Müllen, K.; De Schryver, F. C., Intramolecular energy hopping and energy trapping in polyphenylene dendrimers with multiple peryleneimide donor chromophores and a terryleneimide acceptor trap chromophore. *Journal of the American Chemical Society* **2001,** *123* (31), 7668-7676.
576. Maus, M.; Mitra, S.; Lor, M.; Hofkens, J.; Weil, T.; Herrmann, A.; Müllen, K.; De Schryver, F. C., Intramolecular Energy Hopping in Polyphenylene Dendrimers with an Increasing Number of Peryleneimide Chromophores. *Journal of Physical Chemistry A* **2001,** *105* (16), 3961-3966.
577. Oelkrug, D.; Gierschner, J.; Egelhaaf, H. J.; Lüer, L.; Tompert, A.; Müllen, K.; Stalmach, U.; Meier, H., Evolution of optical absorption from small oligomers to ideally conjugated PPV and MEH-PPV polymers. *Synthetic Metals* **2001,** *121* (1-3), 1693-1694.
578. Proehl, H.; Toerker, M.; Sellam, F.; Fritz, T.; Leo, K.; Simpson, C.; Müllen, K., Comparison of ultraviolet photoelectron spectroscopy and scanning tunneling spectroscopy measurements on highly ordered ultrathin films of hexa-peri-hexabenzocoronene on Au(111). *Physical Review B - Condensed Matter and Materials Physics* **2001,** *63* (20).
579. Przybilla, L.; Francke, V.; Joachim Räder, H.; Müllen, K., Bock length determination of a poly(ethylene oxide)-b-poly(p-phenylene ethynylene) diblock copolymer by means of MALDI-TOF mass spectrometry combined with fragment-ion analysis. *Macromolecules* **2001,** *34* (13), 4401-4405.
580. Reitzel, N.; Hassenkam, T.; Balashev, K.; Jensen, T. R.; Howes, P. B.; Kjaer, K.; Fechtenkötter, A.; Tchebotareva, N.; Ito, S.; Müllen, K.; Bjørnholm, T., Langmuir and Langmuir-Blodgett films of amphiphilic hexa-peri-hexabenzocoronene: New phase transitions and electronic properties controlled by pressure. *Chemistry - A European Journal* **2001,** *7* (22), 4894-4901.
581. Rohr, U.; Kohl, C.; Müllen, K.; Van De Craats, A.; Warman, J., Liquid crystalline coronene derivatives. *Journal of Materials Chemistry* **2001,** *11* (7), 1789-1799.
582. Samorí, P.; Fechtenkötter, A.; Jäckel, F.; Böhme, T.; Müllen, K.; Rabe, J. P., Supramolecular staircase via self-assembly of disklike molecules at the solid-liquid interface. *Journal of the American Chemical Society* **2001,** *123* (46), 11462-11467.

583. Samorí, P.; Keil, M.; Friedlein, R.; Birgerson, J.; Watson, M.; Müllen, K.; Salaneck, W. R.; Rabe, J. P., Growth of ordered hexakis-dodecyl-hexabenzocoronene layers from solution: A SFM and ARUPS study. *Journal of Physical Chemistry B* **2001,** *105* (45), 11114-11119.
584. Schlupp, M.; Weil, T.; Berresheim, A. J.; Wiesler, U. M.; Bargon, J.; Mllen, K., Polyphenylene dendrimers as sensitive and selective sensor layers. *Angewandte Chemie - International Edition* **2001,** *40* (21), 4011-4015.
585. Schmelz, O.; Mews, A.; Basché, T.; Herrmann, A.; Müllen, K., Supramolecular complexes from CdSe nanocrystals and organic fluorophors. *Langmuir* **2001,** *17* (9), 2861-2865.
586. Schmidt-Mende, L.; Fechtenkötter, A.; Müllen, K.; Moons, E.; Friend, R. H.; MacKenzie, J. D., Self-organized discotic liquid crystals for high-efficiency organic photovoltaics. *Science* **2001,** *293* (5532), 1119-1122.
587. Sellam, F.; Schmitz-Hübsch, T.; Toerker, M.; Mannsfeld, S.; Proehl, H.; Fritz, T.; Leo, K.; Simpson, C.; Müllen, K., LEED and STM investigations of organic-organic heterostructures grown by molecular beam epitaxy. *Surface Science* **2001,** *478* (1-2), 113-121.
588. Setayesh, S.; Grimsdale, A. C.; Weil, T.; Enkelmann, V.; Müllen, K.; Meghdadi, F.; List, E. J. W.; Leising, G., Polyfluorenes with polyphenylene dendron side chains: Toward non-aggregating, light-emitting polymers. *Journal of the American Chemical Society* **2001,** *123* (5), 946-953.
589. Silva, C.; Dhoot, A. S.; Russell, D. M.; Stevens, M. A.; Arias, A. C.; MacKenzie, J. D.; Greenham, N. C.; Friend, R. H.; Setayesh, S.; Müllen, K., Efficient exciton dissociation via two-step photoexcitation in polymeric semiconductors. *Physical Review B - Condensed Matter and Materials Physics* **2001,** *64* (12).
590. Silva, C.; Stevens, M. A.; Russell, D. M.; Setayesh, S.; Müllen, K.; Friend, R. H., Ultrafast charge photogeneration in conjugated polymer thin films. *Synthetic Metals* **2001,** *116* (1-3), 9-13.
591. Skabara, P. J.; Roberts, D. M.; Ray, A. K.; Umare, S. S.; Hassan, A. K.; Nabok, A. V.; Müllen, K., The first example of a polythiophene bearing fused tetrathiafulvalene units. *Materials Research Society Symposium - Proceedings* **2001,** *665*, 45-52.
592. Trimpin, S.; Eichhorn, P.; Räder, H. J.; Müllen, K.; Knepper, T. P., Recalcitrance of poly(vinylpyrrolidone): Evidence through matrix-assisted laser desorption-ionization time-of-flight mass spectrometry. *Journal of Chromatography A* **2001,** *938* (1-2), 67-77.
593. Trimpin, S.; Rouhanipour, A.; Az, R.; Räder, H. J.; Müllen, K., New aspects in matrix-assisted laser desorption/ionization time-of-flight mass spectrometry: A universal solvent-free sample preparation. *Rapid Communications in Mass Spectrometry* **2001,** *15* (15), 1364-1373.
594. Vosch, T.; Hofkens, J.; Cotlet, M.; Köhn, F.; Fujiwara, H.; Gronheid, R.; Van Der Biest, K.; Weil, T.; Herrmann, A.; Müllen, K.; Mukamel, S.; Van Der Auweraer, M.; De Schryver, F. C., Influence of structural and rotational isomerism on the triplet blinking of individual dendrimer molecules. *Angewandte Chemie - International Edition* **2001,** *40* (24), 4643-4648.
595. Watson, M. D.; Fechtenkötter, A.; Müllen, K., Big is beautiful - "Aromaticity" revisited from the viewpoint of macromolecular and supramolecular benzene chemistry. *Chemical Reviews* **2001,** *101* (5), 1267-1300.
596. Wehmeier, M.; Wagner, M.; Müllen, K., Novel perylene chromophores obtained by a facile oxidative cyclodehydrogenation route. *Chemistry - A European Journal* **2001,** *7* (10), 2197-2205.
597. Weil, T.; Wiesler, U. M.; Herrmann, A.; Bauer, R.; Hofkens, J.; de Schryver, F. C.; Müllen, K., Polyphenylene dendrimers with different fluorescent chromophores asymmetrically distributed at the periphery. *Journal of the American Chemical Society* **2001,** *123* (33), 8101-8108.
598. Wiesler, U. M.; Berresheim, A. J.; Morgenroth, F.; Lieser, G.; Müllen, K., Divergent synthesis of polyphenylene dendrimers: The role of core and branching reagents upon size and shape. *Macromolecules* **2001,** *34* (2), 187-199.
599. Yoshimura, K.; Przybilla, L.; Ito, S.; Brand, J. D.; Wehmeir, M.; Räder, H. J.; Müllen, K.,

Characterization of large synthetic polycyclic aromatic hydrocarbons by MALDI- and LD-TOF mass spectrometry. *Macromolecular Chemistry and Physics* **2001,** *202* (2), 215-222.
600. Bauer, R. E.; Enkelmann, V.; Wiesler, U. M.; Berresheim, A. J.; Müllen, K., Single-crystal structures of polyphenylene dendrimers. *Chemistry - A European Journal* **2002,** *8* (17), 3858-3864.
601. Beljonne, D.; Pourtois, G.; Silva, C.; Hennebicq, E.; Herz, L. M.; Friend, R. H.; Scholes, G. D.; Setayesh, S.; Müllen, K.; Brédas, J. L., Interchain vs. intrachain energy transfer in acceptor-capped conjugated polymers. *Proceedings of the National Academy of Sciences of the United States of America* **2002,** *99* (17), 10982-10987.
602. Christ, T.; Petzke, F.; Bordat, P.; Herrmann, A.; Reuther, E.; Müllen, K.; Basché, T., Investigation of molecular dimers by ensemble and single molecule spectroscopy. *Journal of Luminescence* **2002,** *98* (1-4), 23-33.
603. De Feyter, S.; Gesquière, A.; De Schryver, F. C.; Keller, U.; Müllen, K., Aggregation properties of soluble quinacridones in two and three dimensions. *Chemistry of Materials* **2002,** *14* (3), 989-997.
604. Ego, C.; Grimsdale, A. C.; Uckert, F.; Yu, G.; Srdanov, G.; Müllen, K., Triphenylamine-substituted polyfluorene-A stable blue-emitter with improved charge injection for light-emitting diodes. *Advanced Materials* **2002,** *14* (11), 809-811.
605. Fischbach, I.; Pakula, T.; Minkin, P.; Fechtenkötter, A.; Müllen, K.; Spiess, H. W.; Saalwächter, K., Structure and dynamics in columnar discotic materials: A combined X-ray and solid-state NMR study of hexabenzocoronene derivatives. *Journal of Physical Chemistry B* **2002,** *106* (25), 6408-6418.
606. Fleming, A. J.; Coleman, J. N.; Dalton, A. B.; Fechtenkötter, A.; Watson, M. D.; Müllen, K.; Byrne, H. J.; Blau, W. J. In *Optical spectroscopy of single molecule and aggregate hexabenzocoronene derivatives*, Proceedings of SPIE - The International Society for Optical Engineering, 2002; pp 685-695.
607. Former, C.; Becker, S.; Grimsdale, A. C.; Müllen, K., Cyclodehydrogenation of poly(perylene) to poly(quaterrylene): Toward poly(peri-naphthalene). *Macromolecules* **2002,** *35* (5), 1576-1582.
608. Gherghel, L.; Kübel, C.; Lieser, G.; Räder, H. J.; Müllen, K., Pyrolysis in the mesophase: A chemist's approach toward preparing carbon nano- and microparticles. *Journal of the American Chemical Society* **2002,** *124* (44), 13130-13138.
609. Grimsdale, A. C.; Bauer, R.; Weil, T.; Tchebotareva, N.; Wu, J.; Watson, M.; Müllen, K., The chemical desymmetrisation of two- and three-dimensional polyphenylenes as a key step to functional nanoparticles. *Synthesis* **2002,** (9), 1229-1238.
610. Grimsdale, A. C.; Leclère, P.; Lazzaroni, R.; MacKenzie, J. D.; Murphy, C.; Setayesh, S.; Silva, C.; Friend, R. H.; Müllen, K., Correlation between molecular structure, microscopic morphology, and optical properties of poly(tetraalkylindenofluorene)s. *Advanced Functional Materials* **2002,** *12* (10), 729-733.
611. Gronheid, R.; Hofkens, J.; Köhn, F.; Weil, T.; Reuther, E.; Müllen, K.; De Schryver, F. C., Intramolecular Förster energy transfer in a dendritic system at the single molecule level. *Journal of the American Chemical Society* **2002,** *124* (11), 2418-2419.
612. Jäckel, F.; De Feyter, S.; Hofkens, J.; Köhn, F.; De Schryver, F. C.; Ego, C.; Grimsdale, A.; Müllen, K., Conformational characterization from modulated single molecule fluorescence intensity traces. *Chemical Physics Letters* **2002,** *362* (5-6), 534-540.
613. Keil, M.; Samorí, P.; Dos Santos, D. A.; Birgerson, J.; Friedlein, R.; Dkhissi, A.; Watson, M.; Müllen, K.; Brédas, J. L.; Rabe, J. P.; Salaneck, W. R., High levels of alkali-metal storage in thin films of hexa-peri-hexabenzocoronene. *Journal of Chemical Physics* **2002,** *116* (24), 10854-10860.
614. Klok, H. A.; Becker, S.; Schuch, F.; Pakula, T.; Müllen, K., Fluorescent star-shaped polystyrenes: "Core-first" synthesis from perylene-based ATRP initiators and dynamic mechanical

solid-state properties. *Macromolecular Chemistry and Physics* **2002,** *203* (8), 1106-1113.
615. Kohl, C.; Becker, S.; Müllen, K., Bis(rylenedicarboximide)-a, d-1,5-diaminoanthraquinones as unique infrared absorbing dyes. *Chemical Communications* **2002,** *2* (23), 2778-2779.
616. Köhn, F.; Hofkens, J.; Gronheid, R.; Cotlet, M.; Müllen, K.; Der Auweraer, M. V.; De Schryver, F. C., Excitation energy transfer in dendritic host - Guest donor - Acceptor systems. *ChemPhysChem* **2002,** *3* (12), 1005-1013.
617. Krasteva, N.; Besnard, I.; Guse, B.; Bauer, R. E.; Müllen, K.; Yasuda, A.; Vossmeyer, T., Self-Assembled Gold Nanoparticle/Dendrimer Composite Films for Vapor Sensing Applications. *Nano Letters* **2002,** *2* (5), 551-555.
618. Leclère, P.; Calderone, A.; Müllen, K.; Brédas, J. L.; Lazzaroni, R., Conjugated polymer chains self-assembly: A new method to generate (semi)-conducting nanowires? *Materials Science and Technology* **2002,** *18* (7), 749-754.
619. List, E. J. W.; Scherf, U.; Müllen, K.; Graupner, W.; Kim, C. H.; Shinar, J., Direct evidence for singlet-triplet exciton annihilation in π-conjugated polymers. *Physical Review B - Condensed Matter and Materials Physics* **2002,** *66* (23), 2352031-2352035.
620. List, E. J. W.; Scherf, U.; Müllen, K.; Graupner, W.; Kim, C. H.; Shinar, J., Direct evidence for singlet-triplet exciton annihilation in π-conjugated polymers. *Physical Review B - Condensed Matter and Materials Physics* **2002,** *66* (23), 1-5.
621. Liu, D.; De Feyter, S.; Grim, P. C. M.; Vosch, T.; Grebel-Koehler, D.; Wiesler, U. M.; Berresheim, A. J.; Müllen, K.; De Schryver, F. C., Self-assembled polyphenylene dendrimer nanofibers on highly oriented pyrolytic graphite studied by atomic force microscopy. *Langmuir* **2002,** *18* (21), 8223-8230.
622. Liu, D.; Zhang, H.; Grim, P. C. M.; De Feyter, S.; Wiesler, U. M.; Berresheim, A. J.; Müllen, K.; De Schryver, F. C., Self-assembly of polyphenylene dendrimers into micrometer long nanofibers: An atomic force microscopy study. *Langmuir* **2002,** *18* (6), 2385-2391.
623. Loi, S.; Butt, H. J.; Hampel, C.; Bauer, R.; Wiesler, U. M.; Müllen, K., Two-dimensional structure of self-assembled alkyl-substituted polyphenylene dendrimers on graphite. *Langmuir* **2002,** *18* (6), 2398-2405.
624. Lor, M.; De, R.; Jordens, S.; De Belder, G.; Schweitzer, G.; Cotlet, M.; Hofkens, J.; Weil, T.; Herrmann, A.; Müllen, K.; Van Der Auweraer, M.; De Schryver, F. C., Generation-dependent energy dissipation in rigid dendrimers studied by femtosecond to nanosecond time-resolved fluorescence spectroscopy. *Journal of Physical Chemistry A* **2002,** *106* (10), 2083-2090.
625. Lor, M.; Thielemans, J.; Viaene, L.; Cotlet, M.; Hofkens, J.; Weil, T.; Hampel, C.; Müllen, K.; Verhoeven, J. W.; Van der Auweraer, M.; De Schryver, F. C., Photoinduced electron transfer in a rigid first generation triphenylamine core dendrimer substituted with a peryleneimide acceptor. *Journal of the American Chemical Society* **2002,** *124* (33), 9918-9925.
626. Piet, J. J.; Warman, J. M.; Baumgarten, M.; Müllen, K., Dipolar excitonic states of oligo-anthrylenes. *Journal of Physical Chemistry A* **2002,** *106* (10), 2318-2321.
627. Pogantsch, A.; Wenzl, F. P.; List, E. J. W.; Leising, G.; Grimsdale, A. C.; Müllen, K., Polyfluorenes with dendron side chains as the active materials for polymer light-emitting devices. *Advanced Materials* **2002,** *14* (15), 1061-1064.
628. Ruffieux, P.; Gröning, O.; Gröning, O.; Bielmann, M.; Simpson, C.; Müllen, K.; Schlapbach, L.; Schlapbach, L.; Gröning, P., Supramolecular columns of hexabenzocoronenes on copper and gold (111) surfaces. *Physical Review B - Condensed Matter and Materials Physics* **2002,** *66* (7), 734091-734094.
629. Rusanov, A. L.; Likhachev, D. Y.; Müllen, K., Electrolytic proton-conducting membranes based on aromatic condensation polymers. *Uspekhi Khimii* **2002,** *71* (9), 875-877.
630. Rusanov, A. L.; Likhatchev, D. Y.; Müllen, K., Proton-conducting electrolyte membranes based

on aromatic condensation polymers. *Russian Chemical Reviews* **2002,** *71* (9), 761-774.
631. Russell, D. M.; Arias, A. C.; Friend, R. H.; Silva, C.; Ego, C.; Grimsdale, A. C.; Müllen, K., Efficient light harvesting in a photovoltaic diode composed of a semiconductor conjugated copolymer blend. *Applied Physics Letters* **2002,** *80* (12), 2204-2206.
632. Samor, P.; Severin, N.; Simpson, C. D.; Müllen, K.; Rabe, J. P., Epitaxial composite layers of electron donors and acceptors from very large polycyclic aromatic hydrocarbons. *Journal of the American Chemical Society* **2002,** *124* (32), 9454-9457.
633. Samorí, P.; Simpson, C. D.; Müllen, K.; Rabe, J. P., Ordered monolayers of nanographitic sheets processed from solutions via oxidative cyclodehydrogenation. *Langmuir* **2002,** *18* (11), 4183-4185.
634. Schmidt-Mende, L.; Fechtenkötter, A.; Müllen, K.; Friend, R. H.; MacKenzie, J. D., Efficient organic photovoltaics from soluble discotic liquid crystalline materials. *Physica E: Low-Dimensional Systems and Nanostructures* **2002,** *14* (1-2), 263-267.
635. Seebacher, C.; Hellriegel, C.; Deeg, F. W.; Bräuchle, C.; Altmaier, S.; Behrens, P.; Müllen, K., Observation of translational diffusion of single terrylenediimide molecules in a mesostructured molecular sieve. *Journal of Physical Chemistry B* **2002,** *106* (22), 5591-5595.
636. Silva, C.; Russell, D. M.; Dhoot, A. S.; Herz, L. M.; Daniel, C.; Greenham, N. C.; Arias, A. C.; Setayesh, S.; Müllen, K.; Friend, R. H., Exciton and polaron dynamics in a step-ladder polymeric semiconductor: The influence of interchain order. *Journal of Physics Condensed Matter* **2002,** *14* (42), 9803-9824.
637. Simpson, C. D.; Brand, J. D.; Berresheim, A. J.; Przybilla, L.; Räder, H. J.; Müllen, K., Synthesis of a giant 222 carbon graphite sheet. *Chemistry - A European Journal* **2002,** *8* (6), 1424-1429.
638. Stallinga, P.; Gomes, H. L.; Murgia, M.; Müllen, K., Interface state mapping in a Schottky barrier of the organic semiconductor terrylene. *Organic Electronics* **2002,** *3* (1), 43-51.
639. Tian, H.; Chen, B.; Tu, H. Y.; Müllen, K., Novel bisthienylethene-based photochromic tetraazaporphyrin with photoregulating luminescence. *Advanced Materials* **2002,** *14* (12), 918-923.
640. Tinnefeld, P.; Weston, K. D.; Vosch, T.; Cotlet, M.; Weil, T.; Hofkens, J.; Müllen, K.; De Schryver, F. C.; Sauer, M., Antibunching in the emission of a single tetrachromophoric dendritic system. *Journal of the American Chemical Society* **2002,** *124* (48), 14310-14311.
641. Trimpin, S.; Grimsdale, A. C.; Räder, H. J.; Müllen, K., Characterization of an insoluble poly(9,9-diphenyl-2,7-fluorene) by solvent-free sample preparation for MALDI-TOF mass spectrometry. *Analytical Chemistry* **2002,** *74* (15), 3777-3782.
642. Trimpin, S.; Räder, H. J.; Müllen, K. In *Experiments on theoretical principles of solvent-free sample preparation for MALDI-MS*, Proceedings 50th ASMS Conference on Mass Spectrometry and Allied Topics, 2002; pp 615-616.
643. Tyutyulkov, N.; Staykov, A.; Müllen, K.; Dietz, F., Magnetic properties of Langmuir-Blodgett films: A theoretical study. 1. Photoswitching of the magnetic properties of Langmuir films. *Langmuir* **2002,** *18* (25), 10030-10034.
644. Vossmeyer, T.; Guse, B.; Besnard, I.; Bauer, R. E.; Müllen, K.; Yasuda, A., Gold nanoparticle/polyphenylene dendrimer composite films: Preparation and vapor-sensing properties. *Advanced Materials* **2002,** *14* (3), 238-242.
645. Weil, T.; Reuther, E.; Müllen, K., Shape-persistent, fluorescent polyphenylene dyads and a triad for efficient vectorial transduction of excitation energy. *Angewandte Chemie - International Edition* **2002,** *41* (11), 1900-1904.
646. Wind, M.; Saalwächter, K.; Wiesler, U. M.; Müllen, K.; Spiess, H. W., Solid-state NMR investigations of molecular dynamics in polyphenylene dendrimers: Evidence of dense-shell packing. *Macromolecules* **2002,** *35* (27), 10071-10086.
647. Wolf-Klein, H.; Kohl, C.; Müllen, K.; Paulsen, H., Biomimetic model of a plant photosystem

consisting of a recombinant light-harvesting complex and a terrylene dye. *Angewandte Chemie - International Edition* **2002,** *41* (18), 3378-3380.
648. Zhang, H.; Grim, P. C. M.; Liu, D.; Vosch, T.; De Feyter, S.; Wiesler, U. M.; Berresheim, A. J.; Müllen, K.; Van Haesendonck, C.; Vandamme, N.; De Schryver, F. C., Probing carboxylic acid groups in replaced and mixed self-assembled monolayers by individual ionized dendrimer molecules: An atomic force microscopy study. *Langmuir* **2002,** *18* (5), 1801-1810.
649. Abdalla, M. A.; Bayer, J.; Rädler, J.; Müllen, K., Nanoparticles and DNA probes based on DNA-fluorophore conjugates. *Nucleosides, Nucleotides and Nucleic Acids* **2003,** *22* (5-8), 1399-1401.
650. Abdel-Mottaleb, M. M. S.; De Feyter, S.; Sieffert, M.; Klapper, M.; Müllen, K.; De Schryver, F. C., In situ investigation of dynamical nanophase separation. *Langmuir* **2003,** *19* (20), 8256-8261.
651. Basché, T.; Christ, T.; Kulzer, F.; Herrmann, A.; Reuther, E.; Müllen, K. In *Single molecule spectroscopy of multichromophoric assemblies*, Conference on Quantum Electronics and Laser Science (QELS) - Technical Digest Series, 2003; pp QTUA3/1-QTUA3/4.
652. Boehm, A. J.; Glaser, A.; Muellen, K. In *The Quaterrylimides - Highly efficient NIR absorbers for plastics*, Annual Technical Conference - ANTEC, Conference Proceedings, 2003; pp 3687-3691.
653. Christ, T.; Kulzer, F.; Weil, T.; Müllen, K.; Basché, T., Frequency selective excitation of single chromophores within shape-persistent multichromophoric dendrimers. *Chemical Physics Letters* **2003,** *372* (5-6), 878-885.
654. Cotlet, M.; Gronheid, R.; Habuchi, S.; Stefan, A.; Barbafina, A.; Müllen, K.; Hofkens, J.; De Schryver, F. C., Intramolecular Directional Förster Resonance Energy Transfer at the Single-Molecule Level in a Dendritic System. *Journal of the American Chemical Society* **2003,** *125* (44), 13609-13617.
655. De Feyter, S.; Gesquière, A.; Klapper, M.; Müllen, K.; De Schryver, F. C., Toward Two-Dimensional Supramolecular Control of Hydrogen-Bonded Arrays: The Case of Isophthalic Acids. *Nano Letters* **2003,** *3* (11), 1485-1488.
656. Dierschke, F.; Grimsdale, A. C.; Müllen, K., Efficient Synthesis of 2,7-Dibromocarbazoles as Components for Electroactive Materials. *Synthesis* **2003,** (16), 2470-2472.
657. Ego, C.; Marsitzky, D.; Becker, S.; Zhang, J.; Grimsdale, A. C.; Müllen, K.; MacKenzie, J. D.; Silva, C.; Friend, R. H., Attaching perylene dyes to polyfluorene: Three simple, efficient methods for facile color tuning of light-emitting polymers. *Journal of the American Chemical Society* **2003,** *125* (2), 437-443.
658. Eshdat, L.; Hoffman, R. E.; Fechtenkötter, A.; Müllen, K.; Rabinovitz, M., Stereodynamics and characterization of the hexa(4-n-dodecylbiphenylyl)-benzene hexaanion that includes a twisted benzene core. *Chemistry - A European Journal* **2003,** *9* (8), 1844-1851.
659. Fleming, A. J.; Coleman, J. N.; Dalton, A. B.; Fechtenkötter, A.; Watson, M. D.; Müllen, K.; Byrne, H. J.; Blau, W. J., Optical spectroscopy of isolated and aggregate hexabenzocoronene derivatives: A study of self-assembling molecular nanowires. *Journal of Physical Chemistry B* **2003,** *107* (1), 37-43.
660. Fleming, A. J.; Coleman, J. N.; Fechtenkötter, A.; Müllen, K.; Blau, W. J. In *Intermolecular Vibronic Coupling in Self-Assembling Molecular Nanowires of Hexabenzocoronene Derivatives*, Proceedings of SPIE - The International Society for Optical Engineering, 2003; pp 460-466.
661. Friedlein, R.; Crispin, X.; Osikowicz, W.; Marciniak, S.; De Jong, P.; Jönsson, M.; Fahlman, M.; Salaneck, R.; Simpson, D.; Watson, D.; Müllen, K.; Jäckel, F.; Samorí, P.; Rabe, P.; Jönsson, M.; Fahlman, M., Electronic structure of highly ordered films of self-assembled graphitic nanocolumns. *Physical Review B - Condensed Matter and Materials Physics* **2003,** *68* (19).
662. Grebel-Koehler, D.; Liu, D.; De Feyter, S.; Enkelmann, V.; Weil, T.; Engels, C.; Samyn, C.; Müllen, K.; De Schryver, F. C., Synthesis and photomodulation of rigid polyphenylene dendrimers

with an azobenzene core. *Macromolecules* **2003,** *36* (3), 578-590.
663. Gronheid, R.; Stefan, A.; Cotlet, M.; Hofkens, J.; Qu, J.; Müllen, K.; Der Auweraer, M. V.; Verhoeven, J. W.; De Schryver, F. C., Reversible intramolecular electron transfer at the single-molecule level. *Angewandte Chemie - International Edition* **2003,** *42* (35), 4209-4214.
664. Haßheider, T.; Benning, S. A.; Lauhof, M. W.; Oesterhaus, R.; Alibert-Fouet, S.; Bock, H.; Goodby, J. W.; Watson, M.; Müllen, K.; Kitzerow, H. S. In *Electroluminescence and photovoltaic effects using columnar mesogenic compounds*, Proceedings of SPIE - The International Society for Optical Engineering, 2003; pp 167-174.
665. Herrmann, A.; Mihov, G.; Vandermeulen, G. W. M.; Klok, H. A.; Müllen, K., Peptide-functionalized polyphenylene dendrimers. *Tetrahedron* **2003,** *59* (22), 3925-3935.
666. Hofkens, J.; Cotlet, M.; Vosch, T.; Tinnefeld, P.; Weston, K. D.; Ego, C.; Grimsdale, A.; Müllen, K.; Beljonne, D.; Brédas, J. L.; Jordens, S.; Schweitzer, G.; Sauer, M.; De Schryver, F., Revealing competitive Förster-type resonance energy-transfer pathways in single bichromophoric molecules. *Proceedings of the National Academy of Sciences of the United States of America* **2003,** *100* (23), 13146-13151.
667. Hofkens, J.; Vosch, T.; Cotlet, M.; Habuchi, S.; Van Der Biest, K.; Müllen, K.; Dirix, G.; Michiels, J.; Vanderleyden, J.; Sauer, M.; De Schryver, F. C. In *Excited state processes in individual multichromophoric systems*, Proceedings of SPIE - The International Society for Optical Engineering, 2003; pp 1-10.
668. Hübner, C. G.; Zumofen, G.; Renn, A.; Herrmann, A.; Müllen, K.; Basché, T., Photon Antibunching and Collective Effects in the Fluorescence of Single Bichromophoric Molecules. *Physical Review Letters* **2003,** *91* (9).
669. Im, C.; Tian, W.; Bässler, H.; Fechtenkötter, A.; Watson, M. D.; Müllen, K., Exciton dissociation in poly-phenylene-vinylene derivative:perylenediimide and hexabenzocoronene derivative:perylenediimide blend systems. *Synthetic Metals* **2003,** *139* (3), 683-686.
670. Im, C.; Tian, W.; Bässler, H.; Fechtenkötter, A.; Watson, M. D.; Müllen, K., Photoconduction in organic donor-acceptor systems. *Journal of Chemical Physics* **2003,** *119* (7), 3952-3957.
671. Jacob, J.; Zhang, J.; Grimsdale, A. C.; Müllen, K.; Gaal, M.; List, E. J. W., Poly(tetraarylindenofluorene)s: New stable blue-emitting polymers. *Macromolecules* **2003,** *36* (22), 8240-8245.
672. Jang, Y. J.; Nenov, N.; Klapper, M.; Müllen, K., Organic nanoparticles with polypropyleneoxide chains as support for metallocene catalysts: Influence of the concentration of PPO chains on the surface of nanoparticles on the catalyst activity in ethylene polymerization. *Polymer Bulletin* **2003,** *50* (5-6), 351-358.
673. Jang, Y. J.; Nenov, N.; Klapper, M.; Müllen, K., Organic nanoparticles with polypropyleneoxide chains as support for metallocene catalysts: Ethylene homopolymerization and ethylene/α-olefin copolymerization. *Polymer Bulletin* **2003,** *50* (5-6), 343-350.
674. Jordens, S.; De Beider, G.; Lor, M.; Schweitzer, G.; Van Der Auweraer, M.; Weil, T.; Reuther, E.; Müllen, K.; De Schryver, F. C., Energy transfer within perylene-terrylene dendrimers evidenced by polychromatic transient absorption measurements. *Photochemical and Photobiological Sciences* **2003,** *2* (3), 177-186.
675. Jordens, S.; De Belder, G.; Lor, M.; Schweitzer, G.; Van Der Auweraer, M.; Weil, T.; Herrmann, A.; Wiesler, U. M.; Müllen, K.; De Schryver, F. C., Generation dependent singlet-singlet annihilation within multichromophoric dendrimers studied by polychromatic transient absorption. *Photochemical and Photobiological Sciences* **2003,** *2* (11), 1118-1124.
676. Klapper, M.; Hamciuc, C.; Dyllick-Brenzinger, R.; Müllen, K., Poly(methylene amine): A polymer with the maximum possible number of amino groups on a polymer backbone. *Angewandte*

Chemie - International Edition **2003,** *42* (38), 4687-4690.
677. Klok, H. A.; Becker, S.; Schuch, F.; Pakula, T.; Müllen, K., Synthesis and Solid State Properties of Novel Fluorescent Polyester Star Polymers. *Macromolecular Bioscience* **2003,** *3* (12), 729-741.
678. Kubowicz, S.; Pietsch, U.; Watson, M. D.; Tchebotareva, N.; Müllen, K.; Thünemann, A. F., Thin layers of columns of an amphiphilic hexa-peri-hexabenzocoronene at silicon wafer surfaces. *Langmuir* **2003,** *19* (12), 5036-5041.
679. Kubowicz, S.; Thünemann, A. F.; Geue, T. M.; Pietsch, U.; Watson, M. D.; Tchebotareva, N.; Müllen, K., X-ray reflectivity study of an amphiphilic hexa-peri-hexabenzocoronene at a structured silicon wafer surface. *Langmuir* **2003,** *19* (26), 10997-10999.
680. Laine, O.; Trimpin, S.; Räder, H. J.; Müllen, K., Changes in post-source decay fragmentation behavior of poly(methyl methacrylate) polymers with increasing molecular weight studied by matrix-assisted laser desorption/ionization time-of-flight mass spectrometry. *European Journal of Mass Spectrometry* **2003,** *9* (3), 195-201.
681. Leclère, P.; Hennebicq, E.; Calderone, A.; Brocorens, P.; Grimsdale, A. C.; Müllen, K.; Brédas, J. L.; Lazzaroni, R., Supramolecular organization in block copolymers containing a conjugated segment: A joint AFM/molecular modeling study. *Progress in Polymer Science (Oxford)* **2003,** *28* (1), 55-81.
682. Leclère, P.; Surin, M.; Jonkheijm, P.; Henze, O.; Schenning, A. P. H. J.; Biscarini, F.; Grimsdale, A. C.; Feast, W. J.; Meijer, E. W.; Müllen, K.; Brédas, J. L.; Lazzaroni, R. In *One and two-dimensional semiconducting nanostructures self-assembly of conjugated oligomers*, Materials Research Society Symposium - Proceedings, 2003; pp 225-230.
683. Lee, J. O.; Lientschnig, G.; Wiertz, F. G. H.; Struijk, M.; Janssen, R. A. J.; Egberink, R.; Reinhoudt, D. N.; Grimsdale, A. C.; Müllen, K.; Hadley, P.; Dekker, C., Electrical Transport Study of Phenylene-Based π-Conjugated Molecules in a Three-Terminal Geometry. In *Annals of the New York Academy of Sciences*, 2003; Vol. 1006, pp 122-132.
684. Liu, C. Y.; Fechtenkötter, A.; Watson, M. D.; Müllen, K.; Bard, A. J., Room temperature discotic liquid crystalline thin films of hexa-peri-hexabenzocoronene: Synthesis and optoelectronic properties. *Chemistry of Materials* **2003,** *15* (1), 124-130.
685. Liu, D.; De Feyter, S.; Cotlet, M.; Stefan, A.; Wiesler, U. M.; Herrmann, A.; Grebel-Koehler, D.; Qu, J.; Müllen, K.; De Schryver, F. C., Fluorescence and intramolecular energy transfer in polyphenylene dendrimers. *Macromolecules* **2003,** *36* (16), 5918-5925.
686. Liu, D.; De Feyter, S.; Cotlet, M.; Wiesler, U. M.; Weil, T.; Herrmann, A.; Müllen, K.; De Schryver, F. C., Fluorescent self-assembled polyphenylene dendrimer nanofibers. *Macromolecules* **2003,** *36* (22), 8489-8498.
687. Lor, M.; Jordens, S.; De Belder, G.; Schweitzer, G.; Fron, E.; Viaene, L.; Cotlet, M.; Weil, T.; Müllen, K.; Verhoeven, J. W.; Van Der Auweraer, M.; De Schryver, F. C., Direct proof of electron transfer in a rigid first generation triphenyl amine core dendrimer substituted with a peryleneimide acceptor. *Photochemical and Photobiological Sciences* **2003,** *2* (5), 501-510.
688. Lupton, J. M.; Schouwink, P.; Keivanidis, P. E.; Grimsdale, A. C.; Müllen, K., Influence of dendronization on spectral diffusion and aggregation in conjugated polymers. *Advanced Functional Materials* **2003,** *13* (2), 154-158.
689. Marek, T.; Süvegh, K.; Vértes, A.; Ernst, A.; Bauer, R.; Weil, T.; Wiesler, U.; Klapper, M.; Müllen, K., Positron annihilation study of polyphenylene dendrimers. *Radiation Physics and Chemistry* **2003,** *67* (3-4), 325-330.
690. Minard-Basquin, C.; Weil, T.; Hohner, A.; Rädler, J. O.; Müllen, K., A polyphenylene dendrimer-detergent complex as a highly fluorescent probe for bioassays. *Journal of the American Chemical Society* **2003,** *125* (19), 5832-5838.

691. Miskiewicz, P.; Rybak, A.; Jung, J.; Glowaoki, I.; Ulanski, J.; Geerts, Y.; Watson, M.; Mullen, K., Photogeneration and transport in thin films of p- and n-type discotic liquid crystals. *Synthetic Metals* **2003,** *137* (1-3), 905-906.
692. Miura, A.; De Feyter, S.; Abdel-Mottaleb, M. M. S.; Gesquière, A.; Grim, P. C. M.; Moessner, G.; Sieffert, M.; Klapper, M.; Müllen, K.; De Schryver, F. C., Light- and STM-tip-induced formation of one-dimensional and two-dimensional organic nanostructures. *Langmuir* **2003,** *19* (16), 6474-6482.
693. Piris, J.; De Haas, M. P.; Warman, J. M.; Müllen, K.; Fechtenkötter, A.; Van de Craats, A. M.; Schmidt-Mende, L.; Friend, R. H., Photo-induced charge separation in a blend of perylenediimide and hexabenzocoronene derivatives studied by FP-TRMC. *Synthetic Metals* **2003,** *137* (1-3), 1375-1376.
694. Piris, J.; Debije, M. G.; Stutzmann, N.; Van de Craats, A. M.; Watson, M. D.; Müllen, K.; Warmam, J. M., Anisotropy in the Mobility and Photogeneration of Charge Carriers in Thin Films of Discotic Hexabenzocoronenes, Columnarly Self-Assembled on Friction-Deposited Poly(tetrafluoroethylene). *Advanced Materials* **2003,** *15* (20), 1736-1740.
695. Pogantsch, A.; Gadermaier, C.; Cerullo, G.; Lanzani, G.; Scherf, U.; Grimsdale, A. C.; Müllen, K.; List, E. J. W., Photophysics of poly(fluorenes) with dendronic side chains. *Synthetic Metals* **2003,** *139* (3), 847-849.
696. Pogantsch, A.; Wenzl, F. P.; Scherf, U.; Grimsdale, A. C.; Müllen, K.; List, E. J. W., Long lived photoexcitation dynamics in a dendronically substituted poly(fluorene). *Journal of Chemical Physics* **2003,** *119* (13), 6904-6910.
697. Qu, J.; Liu, D.; De Feyter, S.; Zhang, J.; De Schryver, F. C.; Müllen, K., Synthesis and Optical Properties of Polyphenylene Dendrimers Based on Perylenes. *Journal of Organic Chemistry* **2003,** *68* (25), 9802-9808.
698. Rusanov, A. L.; Shifrina, Z. B.; Bulycheva, E. G.; Keshtov, M. L.; Averina, M. S.; Fogel, Y. I.; Muellen, K.; Harris, F. W., New Monomers and Polymers via Diels-Alder Cycloaddition. *Macromolecular Symposia* **2003,** *199*, 97-108.
699. Russell, D. M.; Essex, R. J.; Friend, R. H.; Setayesh, S.; Müllen, K.; Silva, C., Ultrafast investigation of exciton dissociation processes in polymeric semiconductors at high pump fluence. In *Springer Series in Chemical Physics*, 2003; Vol. 71, pp 377-379.
700. Samorí, P.; Francke, V.; Enkelmann, V.; Müllen, K.; Rabe, J. P., Synthesis and solid state structures of functionalized phenyleneethynylene trimers in 2D and 3D. *Chemistry of Materials* **2003,** *15* (5), 1032-1039.
701. Schmidt-Mende, L.; Watson, M.; Müllen, K.; Friend, R. H., Organic thin film photovoltaic devices from discotic materials. *Molecular Crystals and Liquid Crystals* **2003,** *396*, 73-90.
702. Schweitzer, G.; Gronheid, R.; Jordens, S.; Lor, M.; De Belder, G.; Weil, T.; Reuther, E.; Müllen, K.; De Schryver, F. C., Intramolecular directional energy transfer processes in dendrimers containing perylene and terrylene chromophores. *Journal of Physical Chemistry A* **2003,** *107* (18), 3199-3207.
703. Sonar, P.; Sharma, A. L.; Chandra, A.; Muellen, K.; Srivastava, A., Synthesis and study of conductivity behaviour of blended conducting polymer films irradiated with swift heavy ions of silicon. *Current Applied Physics* **2003,** *3* (2-3), 247-250.
704. Taubert, A.; Wiesler, U. M.; Müllen, K., Dendrimer-controlled one-pot synthesis of gold nanoparticles with a bimodal size distribution and their self-assembly in the solid state. *Journal of Materials Chemistry* **2003,** *13* (5), 1090-1093.
705. Tchebotareva, N.; Yin, X.; Watson, M. D.; Samorì, P.; Rabe, J. P.; Müllen, K., Ordered architectures of a soluble hexa-peri-hexabenzocoronene-pyrene dyad: Thermotropic bulk properties and nanoscale phase segregation at surfaces. *Journal of the American Chemical Society* **2003,** *125* (32), 9734-9739.

706. Thünemann, A. F.; Kubowicz, S.; Burger, C.; Watson, M. D.; Tchebotareva, N.; Müllen, K., α-helical-within-discotic columnar structures of a complex between poly(ethylene oxide)-block-poly(L-lysine) and a hexa-peri-hexabenzocoronene. *Journal of the American Chemical Society* **2003,** *125* (2), 352-356.
707. Tracz, A.; Jeszka, J. K.; Watson, M. D.; Pisula, W.; Müllen, K.; Pakula, T., Uniaxial alignment of the columnar super-structure of a hexa (alkyl) hexa-peri-hexabenzocoronene on untreated glass by simple solution processing. *Journal of the American Chemical Society* **2003,** *125* (7), 1682-1683.
708. Tyutyulkov, N.; Müllen, K.; Baumgarten, M.; Ivanova, A.; Tadjer, A., Is 2D graphite an ultimate large hydrocarbon? III. Structure and energy spectra of large polybenzenoid hydrocarbons with different edge structures. *Synthetic Metals* **2003,** *139* (1), 99-107.
709. Tyutyulkov, N.; Staykov, A.; Müllen, K.; Dietz, F., Symmetry breaking of full face-to-face arrangement of homonuclear π-electron molecules in 1-D stacks. *Chemical Physics Letters* **2003,** *373* (3-4), 314-318.
710. Vallée, R. A. L.; Cotlet, M.; Hofkens, J.; De Schryver, F. C.; Müllen, K., Spatially heterogeneous dynamics in polymer glasses at room temperature probed by single molecule lifetime fluctuations. *Macromolecules* **2003,** *36* (20), 7752-7758.
711. Van De Craats, A. M.; Stutzmann, N.; Bunk, O.; Nielsen, M. M.; Watson, M.; Müllen, K.; Chanzy, H. D.; Sirringhaus, H.; Friend, R. H., Meso-epitaxial solution-growth of self-organizing discotic liquid-crystalline semiconductors. *Advanced Materials* **2003,** *15* (6), 495-499.
712. Vosch, T.; Cotlet, M.; Hofkens, J.; Van Der Biest, K.; Lor, M.; Weston, K.; Tinnefeld, P.; Sauer, M.; Latterini, L.; Müllen, K.; De Schryver, F. C., Probing Förster Type Energy Pathways in a First Generation Rigid Dendrimer Bearing Two Perylene Imide Chromophores. *Journal of Physical Chemistry A* **2003,** *107* (36), 6920-6931.
713. Wu, J.; Gherghel, L.; Watson, M. D.; Li, J.; Wang, Z.; Simpson, C. D.; Kolb, U.; Müllen, K., From branched polyphenylenes to graphite ribbons. *Macromolecules* **2003,** *36* (19), 7082-7089.
714. Wu, J.; Watson, M. D.; Müllen, K., The Versatile Synthesis and Self-Assembly of Star-Type Hexabenzocoronenes. *Angewandte Chemie - International Edition* **2003,** *42* (43), 5329-5333.
715. Wu, W.; Grimsdale, A. C.; Müllen, K., Cyclodehydrogenation of di- and tetra(benzimidazol-2-yl)benzenes to give model heteroaromatic discotic systems. *Chemical Communications* **2003,** *3* (9), 1044-1045.
716. Abdalla, M. A.; Bayer, J.; Rädler, J. O.; Müllen, K., Synthesis and self-assembly of perylenediimide-oligonucleotide conjugates. *Angewandte Chemie - International Edition* **2004,** *43* (30), 3967-3970.
717. Al-Hussaini, A. S.; Klapper, M.; Pakula, T.; Müllen, K., Poly(imino ketone)s as new high-performance polymers. *Macromolecules* **2004,** *37* (22), 8269-8277.
718. Bell, T. D. M.; Habuchi, S.; Masuo, S.; Österling, I.; Müllen, K.; Tinnefeld, P.; Sauer, M.; Van Der Auweraer, M.; Hofkens, J.; De Schryver, F. C., Single Photon Emission from a Dendrimer Containing Eight Perylene Diimide Chromophores. *Australian Journal of Chemistry* **2004,** *57* (12), 1169-1173.
719. Christ, T.; Kulzer, F.; Weil, T.; Müllen, K.; Basché, T., Chapter 2 Single molecule spectroscopy of multichromophoric dendrimers at room and liquid helium temperatures. In *Handai Nanophotonics*, 2004; Vol. 1, pp 23-40.
720. Cotlet, M.; Masuo, S.; Lor, M.; Fron, E.; Van Der Auweraer, M.; Müllen, K.; Hofkens, J.; De Schryver, F., Probing the influence of O2 on photoinduced reversible electron transfer in perylenediimide-triphenylamine-based dendrimers by single-molecule spectroscopy. *Angewandte Chemie - International Edition* **2004,** *43* (45), 6116-6120.
721. Cotlet, M.; Masuo, S.; Luo, G.; Hofkens, J.; Van Der Auweraer, M.; Verhoeven, J.; Müllen, K.; Xiaoliang, S. X.; De Schryver, F., Probing conformational dynamics in single donor-acceptor

synthetic molecules by means of photoinduced reversible electron transfer. *Proceedings of the National Academy of Sciences of the United States of America* **2004,** *101* (40), 14343-14348.
722. Cotlet, M.; Vosch, T.; Masuo, S.; Sauer, M.; Mullen, K.; Hofkens, J.; De Schryver, F. In *Single molecule spectroscopy to probe competitive fluorescence resonance energy transfer pathways in bichromophoric synthetic systems*, Proceedings of SPIE - The International Society for Optical Engineering, 2004; pp 20-28.
723. Debije, M. G.; Piris, J.; De Haas, M. P.; Warman, J. M.; Tomović, Ž.; Simpson, C. D.; Watson, M. D.; Müllen, K., The Optical and Charge Transport Properties of Discotic Materials with Large Aromatic Hydrocarbon Cores. *Journal of the American Chemical Society* **2004,** *126* (14), 4641-4645.
724. Di Donato, E.; Tommasini, M.; Fustella, G.; Brambilla, L.; Castiglioni, C.; Zerbi, G.; Simpson, C. D.; Müllen, K.; Negri, F., Wavelength-dependent Raman activity of D2h symmetry polycyclic aromatic hydrocarbons in the D-band and acoustic phonon regions. *Chemical Physics* **2004,** *301* (1), 81-93.
725. Dierschke, F.; Grimsdale, A. C.; Müllen, K., Novel carbazole-based ladder-type polymers for electronic applications. *Macromolecular Chemistry and Physics* **2004,** *205* (9), 1147-1154.
726. Dietz, F.; Müllen, K.; Baumgarten, M.; Georgiev, V.; Tyutyulkov, N., Structure and properties of non-classical polymers. XIV. Heteronuclear 1-D polymers with 2-azaphenalenyl radicals. *Chemical Physics Letters* **2004,** *389* (1-3), 135-139.
727. Friedlein, R.; Crispin, X.; Osikowicz, W.; Braun, S.; De Jong, M. P.; Simpson, C. D.; Watson, M. D.; Von Kieseritzky, F.; Samori, P.; Jönsson, S. K. M.; Fahlman, M.; Jäckel, F.; Rabe, J. P.; Hellberg, J.; Müllen, K.; Salaneck, W. R., Surface-induced vertical alignment of self-assembled supramolecular columns of large polycyclic aromatic hydrocarbons and porphyrins. *Synthetic Metals* **2004,** *147* (1-3), 79-83.
728. Gutman, I.; Tomović, Ž.; Mü; llen, K.; Rabe, J. P., On the distribution of π-electrons in large polycyclic aromatic hydrocarbons. *Chemical Physics Letters* **2004,** *397* (4-6), 412-416.
729. Haase, M.; Hübner, C. G.; Reuther, E.; Herrmann, A.; Müllen, K.; Basché, T., Exponential and power-law kinetics in single-molecule fluorescence intermittency. *Journal of Physical Chemistry B* **2004,** *108* (29), 10445-10450.
730. Haßheider, T.; Benning, S. A.; Lauhof, M. W.; Kitzerow, H. S.; Bock, H.; Watson, M. D.; Müllen, K., Organic heterojunction photovoltaic cells made of discotic, mesogenic materials. *Molecular Crystals and Liquid Crystals* **2004,** *413,* 461/[2597]-472/[2608].
731. Hertel, M.; Chujo, Y.; Faust, R.; Müllen, K., Editorial - New features. *Polymer Bulletin* **2004,** *52* (2), 91-92.
732. Herz, L. M.; Silva, C.; Grimsdale, A. C.; Müllen, K.; Phillips, R. T., Time-dependent energy transfer rates in a conjugated polymer guest-host system [47]. *Physical Review B - Condensed Matter and Materials Physics* **2004,** *70* (16), 1-9.
733. Hübner, C. G.; Ksenofontov, V.; Nolde, F.; Müllen, K.; Basché, T., Three-dimensional orientational colocalization of individual donor-acceptor pairs. *Journal of Chemical Physics* **2004,** *120* (23), 10867-10870.
734. Jäckel, F.; Wang, Z.; Watson, M. D.; Müllen, K.; Rabe, J. P., Prototypical single-molecule transistors with supramolecular gates: Varying dipole orientation. *Synthetic Metals* **2004,** *146* (3), 269-272.
735. Jäckel, F.; Wang, Z.; Watson, M. D.; Müllen, K.; Rabe, J. P., Nanoscale array of inversely biased molecular rectifiers. *Chemical Physics Letters* **2004,** *387* (4-6), 372-376.
736. Jäckel, F.; Watson, M. D.; Müllen, K.; Rabe, J. P., Prototypical single-molecule chemical-field-effect transistor with nanometer-sized gates. *Physical Review Letters* **2004,** *92* (18), 188303-1-188303-4.
737. Jäckel, F.; Yin, X.; Samorì, P.; Tchebotareva, N.; Watson, M. D.; Venturini, A.; Müllen,

K.; Rabe, J. P., Nanophase segregation and rectification in monolayers of functionalized hexa-peri-hexabenzocoronenes. *Synthetic Metals* **2004,** *147* (1-3), 5-9.
738. Jacob, J.; Oldridge, L.; Zhang, J.; Gaal, M.; List, E. J. W.; Grimsdale, A. C.; Müllen, K., Progress towards stable blue light-emitting polymers. *Current Applied Physics* **2004,** *4* (2-4), 339-342.
739. Jacob, J.; Sax, S.; Piok, T.; List, E. J. W.; Grimsdale, A. C.; Múllen, K., Ladder-type pentaphenylenes and their polymers: Efficient blue-light emitters and electron-accepting materials via a commmon intermediate. *Journal of the American Chemical Society* **2004,** *126* (22), 6987-6995.
740. Klapper, M.; Jang, Y. J.; Bieber, K.; Nemnich, T.; Nenov, N.; Müllen, K., New organic supports for metallocene catalysts applied in olefin polymerizations. *Macromolecular Symposia* **2004,** *213*, 131-146.
741. Knoll, W.; Han, M. Y.; Li, X.; Hernandez-Lopez, J. L.; Manna, A.; Müllen, K.; Nakamura, F.; Niu, L.; Robelek, R.; Schmid, E. L.; Tamada, K.; Zhong, X., Nanoscopic building blocks from polymers, metals, and semiconductors for hybrid architectures. *Journal of Nonlinear Optical Physics and Materials* **2004,** *13* (2), 229-241.
742. Kohl, C.; Weil, T.; Qu, J.; Müllen, K., Towards highly fluorescent and water-soluble perylene dyes. *Chemistry - A European Journal* **2004,** *10* (21), 5297-5310.
743. Laursen, B. W.; Nørgaard, K.; Reitzel, N.; Simonsen, J. B.; Nielsen, C. B.; Als-Nielsen, J.; Bjørnholm, T.; Sølling, T. I.; Nielsen, M. M.; Bunk, O.; Kjaer, K.; Tchebotareva, N.; Watson, M. D.; Müllen, K.; Piris, J., Macroscopic alignment of graphene stacks by langmuir-blodgett deposition of amphiphilic hexabenzocoronenes. *Langmuir* **2004,** *20* (10), 4139-4146.
744. Leclère, P.; Surin, M.; Jonkheijm, P.; Henze, O.; Schenning, A. P. H. J.; Biscarini, F.; Grimsdale, A. C.; Feast, W. J.; Meijer, E. W.; Müllen, K.; Brédas, J. L.; Lazzaroni, R., Organic semi-conducting architectures for supramolecular electronics. *European Polymer Journal* **2004,** *40* (5), 885-892.
745. Lippitz, M.; Hübner, C. G.; Christ, T.; Eichner, H.; Bordat, P.; Herrmann, A.; Müllen, K.; Basché, T., Coherent Electronic Coupling versus Localization in Individual Molecular Dimers. *Physical Review Letters* **2004,** *92* (10), 103001-1-103001-4.
746. Lor, M.; Viaene, L.; Pilot, R.; Fron, E.; Jordens, S.; Schweitzer, G.; Weil, T.; Müllen, K.; Verhoeven, J. W.; Van Der Auweraer, M.; De Schryver, F. C., Photophysical study of electron-transfer and energy-hopping processes in first-generation mono- and multichromophoric triphenylamine core dendrimers. *Journal of Physical Chemistry B* **2004,** *108* (30), 10721-10731.
747. Margineanu, A.; Hofkens, J.; Cotlet, M.; Habuchi, S.; Stefan, A.; Qu, J.; Kohl, C.; Müllen, K.; Vercammen, J.; Engelborghs, Y.; Gensch, T.; De Schryver, F. C., Photophysics of a water-soluble rylene dye: Comparison with other fluorescent molecules for biological applications. *Journal of Physical Chemistry B* **2004,** *108* (32), 12242-12251.
748. Masuo, S.; Vosch, T.; Cotlet, M.; Tinnefeld, P.; Habuchi, S.; Bell, T. D. M.; Oesterling, I.; Beljonne, D.; Champagne, B.; Müllen, K.; Sauer, M.; Hofkens, J.; De Schryver, F. C., Multichromophoric dendrimers as single-photon sources: A single-molecule study. *Journal of Physical Chemistry B* **2004,** *108* (43), 16686-16696.
749. Métivier, R.; Christ, T.; Kulzer, F.; Weil, T.; Müllen, K.; Basché, T., Single-molecule spectroscopy of molecular aggregates at low temperature. *Journal of Luminescence* **2004,** *110* (4 SPEC. ISS.), 217-224.
750. Métivier, R.; Kulzer, F.; Weil, T.; Müllen, K.; Basché, T., Energy transfer rates and pathways of single donor chromophores in a multichromophoric dendrimer built around a central acceptor core. *Journal of the American Chemical Society* **2004,** *126* (44), 14364-14365.
751. Mihov, G.; Scheppelmann, I.; Müllen, K., Toward nanoamphiphiles: Efficient synthesis of desymmetrized polyphenylene dendrimers. *Journal of Organic Chemistry* **2004,** *69* (23), 8029-8037.
752. Negri, F.; Di Donato, E.; Tommasini, M.; Castiglioni, C.; Zerbi, G.; Müllen, K., Resonance

Raman contribution to the D band of carbon materials: Modeling defects with quantum chemistry. *Journal of Chemical Physics* **2004,** *120* (24), 11889-11900.
753. Palermo, V.; Palma, M.; Tomovic, Z.; Watson, M. D.; Müllen, K.; Samori, P., Self-assembly of π-conjugated discs on heterogeneous surfaces: Effect of the micro- and nano-scale dewetting. *Synthetic Metals* **2004,** *147* (1-3), 117-121.
754. Piris, J.; Debije, M. G.; Stutzmann, N.; Laursen, B. W.; Pisula, W.; Watson, M. D.; Bjørnholm, T.; Müllen, K.; Warman, J. M., Aligned thin films of discotic hexabenzocoronenes: Anisotropy in the optical and charge transport properties. *Advanced Functional Materials* **2004,** *14* (11), 1053-1061.
755. Piris, J.; Debije, M. G.; Watson, M. D.; Müllen, K.; Warman, J. M., The mobility and decay kinetics of charge carriers in discotic hexabenzocoronenes. *Advanced Functional Materials* **2004,** *14* (11), 1047-1052.
756. Piris, J.; Pisula, W.; Tracz, A.; Pakula, T.; Müllen, K.; Warman, J. M., Thermal switching of the optical anisotropy of a macroscopically aligned film of a discotic liquid crystal. *Liquid Crystals* **2004,** *31* (7), 993-996.
757. Pisula, W.; Kastler, M.; Wasserfallen, D.; Pakula, T.; Müllen, K., Exceptionally long-range self-assembly of Hexa-peri-hexabenzocoronene with dove-tailed alkyl substituents. *Journal of the American Chemical Society* **2004,** *126* (26), 8074-8075.
758. Qu, J.; Kohl, C.; Pottek, M.; Müllen, K., Ionic perylenetetracarboxdiimides: Highly fluorescent and water-soluble dyes for biolabeling. *Angewandte Chemie - International Edition* **2004,** *43* (12), 1528-1531.
759. Qu, J.; Pschirer, N. G.; Liu, D.; Stefan, A.; De Schryver, F. C.; Müllen, K., Dendronized Perylenetetracarboxdiimides with Peripheral Triphenylamines for Intramolecular Energy and Electron Transfer. *Chemistry - A European Journal* **2004,** *10* (2), 528-537.
760. Qu, J.; Zhang, J.; Grimsdale, A. C.; Müllen, K.; Jaiser, F.; Yang, X.; Neher, D., Dendronized perylene diimide emitters: Synthesis, luminescence, and electron and energy transfer studies. *Macromolecules* **2004,** *37* (22), 8297-8306.
761. Rodríguez-Hernández, J.; Qu, J.; Reuther, E.; Klok, H. A.; Müllen, K., Synthesis and optical properties of water-soluble NIR absorbing star polypeptides based on functional rylene dyes. *Polymer Bulletin* **2004,** *52* (1), 57-64.
762. Rosenfeldt, S.; Dingenouts, N.; Pötschke, D.; Ballauff, M.; Berresheim, A. J.; Müllen, K.; Lindner, P., Analysis of the Spatial Dimensions of Fully Aromatic Dendrimers. *Angewandte Chemie - International Edition* **2004,** *43* (1), 109-112.
763. Sakamoto, J.; Müllen, K., Sugars within a hydrophobic scaffold: Glycodendrimers from polyphenylenes. *Organic Letters* **2004,** *6* (23), 4277-4280.
764. Samorí, P.; Müllen, K.; Rabe, J. P., Molecular-scale tracking of the self-healing of polycrystalline monolayers at the solid-liquid interface. *Advanced Materials* **2004,** *16* (19), 1761-1765.
765. Samorì, P.; Yin, X.; Tchebotareva, N.; Wang, Z.; Pakula, T.; Jäckel, F.; Watson, M. D.; Venturini, A.; Müllen, K.; Rabe, J. P., Self-Assembly of Electron Donor-Acceptor Dyads into Ordered Architectures in Two and Three Dimensions: Surface Patterning and Columnar "Double Cables". *Journal of the American Chemical Society* **2004,** *126* (11), 3567-3575.
766. Schroeyers, W.; Vallée, R.; Patra, D.; Hofkens, J.; Habuchi, S.; Vosch, T.; Cotlet, M.; Müllen, K.; Enderlein, J.; De Schryver, F. C., Fluorescence lifetimes and emission patterns probe the 3D orientation of the emitting chromophore in a multichromophoric system. *Journal of the American Chemical Society* **2004,** *126* (44), 14310-14311.
767. Schweitzer, G.; Jordens, S.; De Belder, G.; Lor, M.; Fron, E.; Müllen, K.; De Schryver, F. C., Energy transfer process in dendrimers containing a peryleneterrylene donor-acceptor system investigated by femtosecond multicolor transient absorption spectroscopy. In *Femtochemistry and*

Femtobiology: Ultrafast Events in Molecular Science, 2004; pp 503-506.
768. Simpson, C. D.; Mattersteig, G.; Martin, K.; Gherghel, L.; Bauer, R. E.; Räder, H. J.; Müllen, K., Nanosized Molecular Propellers by Cyclodehydrogenation of Polyphenylene Dendrimers. *Journal of the American Chemical Society* **2004,** *126* (10), 3139-3147.
769. Simpson, C. D.; Wu, J.; Watson, M. D.; Müllen, K., From graphite molecules to columnar superstructures -an exercise in nanoscience. *Journal of Materials Chemistry* **2004**, 494-504.
770. Skabara, P. J.; Berridge, R.; McInnes, E. J. L.; West, D. P.; Coles, S. J.; Hursthouse, M. B.; Müllen, K., The electroactivity of tetrathiafulvalene vs. polythiophene: Synthesis and characterisation of a fused thieno-TTF polymer. *Journal of Materials Chemistry* **2004,** *14* (13), 1964-1969.
771. Somma, E.; Loppinet, B.; Fytas, G.; Setayesh, S.; Jacob, J.; Grimsdale, A. C.; Müllen, K., Collective orientation dynamics in semi-rigid polymers. *Colloid and Polymer Science* **2004,** *282* (8), 867-873.
772. Sonar, P.; Zhang, J.; Grimsdale, A. C.; Müllen, K.; Surin, M.; Lazzaroni, R.; Leclère, P.; Tierney, S.; Heeney, M.; McCulloch, I., 4-hexylbithieno[3,2-b:2'3'-e]pyridine: An efficient electron-accepting unit in fluorene and indenofluorene copolymers for light-emitting devices. *Macromolecules* **2004,** *37* (3), 709-715.
773. Stracke, F.; Blum, C.; Becker, S.; Müllen, K.; Meixner, A. J., Two and multilevel spectral switching of single molecules in polystyrene at room temperature. *Chemical Physics* **2004,** *300* (1-3), 153-164.
774. Su, D. S.; Jentoft, R. E.; Müller, J. O.; Rothe, D.; Jacob, E.; Simpson, C. D.; Tomović, Ž.; Müllen, K.; Messerer, A.; Pöschl, U.; Niessner, R.; Schlögl, R., Microstructure and oxidation behaviour of Euro IV diesel engine soot: A comparative study with synthetic model soot substances. *Catalysis Today* **2004,** *90* (1-2), 127-132.
775. Surin, M.; Hennebicq, E.; Ego, C.; Marsitzky, D.; Grimsdale, A. C.; Müllen, K.; Brédas, J. L.; Lazzaroni, R.; Leclère, P., Correlation between the Microscopic Morphology and the Solid-State Photoluminescence Properties in Fluorene-Based Polymers and Copolymers. *Chemistry of Materials* **2004,** *16* (6), 994-1001.
776. Surin, M.; Marsitzky, D.; Grimsdale, A. C.; Müllen, K.; Lazzaroni, R.; Leclère, P., Microscopic morphology of polyfluorene-poly(ethylene oxide) block copolymers: Influence of the block ratio. *Advanced Functional Materials* **2004,** *14* (7), 708-715.
777. Tinnefeld, P.; Hofkens, J.; Herten, D. P.; Masuo, S.; Vosch, T.; Cotlet, M.; Habuchi, S.; Müllen, K.; De Schryver, F. C.; Sauer, M., Higher-excited-state photophysical pathways in multichromophoric systems revealed by single-molecule fluorescence spectroscopy. *ChemPhysChem* **2004,** *5* (11), 1786-1790.
778. Tomović, Ž.; Watson, M. D.; Müllen, K., Superphenalene-Based Columnar Liquid Crystals. *Angewandte Chemie - International Edition* **2004,** *43* (6), 755-758.
779. Tyutyulkov, N.; Ivanov, N.; Müllen, K.; Staykov, A.; Dietz, F., Energy Spectra of One-Dimensional Stacks of Polycyclic Aromatic Hydrocarbons without Defects. *Journal of Physical Chemistry B* **2004,** *108* (14), 4275-4282.
780. Vallée, R. A. L.; Cotlet, M.; Van Der Auweraer, M.; Hofkens, J.; Müllen, K.; De Schryver, F. C., Single-Molecule Conformations Probe Free Volume in Polymers. *Journal of the American Chemical Society* **2004,** *126* (8), 2296-2297.
781. Vosch, T.; Cotlet, M.; Hofkens, J.; Lor, M.; Schweitzer, G.; Laterini, L.; Müllen, K.; De Schryver, F. C., Chapter 1 Photophysical processes in multichromophoric systems at the ensemble and single molecule level. In *Handai Nanophotonics*, 2004; Vol. 1, pp 3-21.
782. Wang, Z.; Enkelmann, V.; Negri, F.; Müllen, K., Rational design of helical, columnar packing in single crystals. *Angewandte Chemie - International Edition* **2004,** *43* (15), 1972-1975.
783. Wang, Z.; Tomović, Ž.; Kastler, M.; Pretsch, R.; Negri, F.; Enkelmann, V.; Müllen, K.,

Graphitic molecules with partial "Zig/Zag" periphery. *Journal of the American Chemical Society* **2004,** *126* (25), 7794-7795.
784. Wang, Z.; Watson, M. D.; Wu, J.; Müllen, K., Partially stripped insulated nanowires: A lightly substituted hexa-peri-hexabenzocoronene-based columnar liquid crystal. *Chemical Communications* **2004,** *4* (3), 336-337.
785. Watson, M. D.; Debije, M. G.; Warman, J. M.; Müllen, K., Peralkylated Coronenes via Regiospecific Hydrogenation of Hexa-peri-hexabenzocoronenes. *Journal of the American Chemical Society* **2004,** *126* (3), 766-771.
786. Watson, M. D.; Jäckel, F.; Severin, N.; Rabe, J. P.; Müllen, K., A Hexa-peri-hexabenzocoronene Cyclophane: An Addition to the Toolbox for Molecular Electronics. *Journal of the American Chemical Society* **2004,** *126* (5), 1402-1407.
787. Weil, T.; Reuther, E.; Beer, C.; Müllen, K., Synthesis and Characterization of Dendritic Multichromophores Based on Rylene Dyes for Vectorial Transduction of Excitation Energy. *Chemistry - A European Journal* **2004,** *10* (6), 1398-1414.
788. Wu, J.; Baumgarten, M.; Debije, M. G.; Warman, J. M.; Müllen, K., Arylamine-substituted hexa-peri-hexabenzocoronenes: Facile synthesis and their potential applications as "coaxial" hole-transport materials. *Angewandte Chemie - International Edition* **2004,** *43* (40), 5331-5335.
789. Wu, J.; Fechtenkötter, A.; Gauss, J.; Watson, M. D.; Kastler, M.; Fechtenkötter, C.; Wagner, M.; Müllen, K., Controlled self-assembly of hexa-peri-hexabenzocoronenes in solution. *Journal of the American Chemical Society* **2004,** *126* (36), 11311-11321.
790. Wu, J.; Tomović, Ž.; Enkelmann, V.; Müllen, K., Erratum: From branched hydrocarbon propellers to C3-symmetric graphite disks (Journal of Organic Chemistry (2004) 69 (5179)). *Journal of Organic Chemistry* **2004,** *69* (23), 8176.
791. Wu, J.; Tomović, Ž.; Enkelmann, V.; Müllen, K., From branched hydrocarbon propellers to C3-symmetric graphite disks. *Journal of Organic Chemistry* **2004,** *69* (16), 5179-5186.
792. Wu, J.; Watson, M. D.; Tchebotareva, N.; Wang, Z.; Müllen, K., Oligomers of hexa-peri-hexabenzocoronenes as "super- oligophenylenes": Synthesis, electronic properties, and self-assembly. *Journal of Organic Chemistry* **2004,** *69* (24), 8194-8204.
793. Wu, J.; Watson, M. D.; Zhang, L.; Wang, Z.; Müllen, K., Hexakis(4-iodophenyl)-peri-hexabenzocoronene - A Versatile Building Block for Highly Ordered Discotic Liquid Crystalline Materials. *Journal of the American Chemical Society* **2004,** *126* (1), 177-186.
794. Addicott, C.; Oesterling, I.; Yamamoto, T.; Müllen, K.; Stang, P. J., Synthesis of a Bis(pyridyl)-substituted perylene diimide ligand and incorporation into a supramolecular rhomboid and rectangle via coordination driven self-assembly. *Journal of Organic Chemistry* **2005,** *70* (3), 797-801.
795. Andreitchenko, E. V.; Clark Jr, C. G.; Bauer, R. E.; Lieser, G.; Müllen, K., Pushing the synthetic limit: Polyphenylene dendrimers with "exploded" branching units - 22-nm-diameter, monodisperse, stiff macromolecules. *Angewandte Chemie - International Edition* **2005,** *44* (39), 6348-6354.
796. Angeles Izquierdo, M.; Bell, T. D. M.; Habuchi, S.; Fron, E.; Pilot, R.; Vosch, T.; De Feyter, S.; Verhoeven, J.; Jacob, J.; Müllen, K.; Hofkens, J.; De Schryver, F. C., Switching of the fluorescence emission of single molecules between the locally excited and charge transfer states. *Chemical Physics Letters* **2005,** *401* (4-6), 503-508.
797. Atanasov, V.; Sinigersky, V.; Klapper, M.; Müllen, K., Core-shell macromolecules with rigid dendritic polyphenylene cores and polymer shells. *Macromolecules* **2005,** *38* (5), 1672-1683.
798. Baluschev, S.; Jacob, J.; Avlasevich, Y. S.; Keivanidis, P. E.; Miteva, T.; Yasuda, A.; Nelles, G.; Grimsdale, A. C.; Müllen, K.; Wegner, G., Enhanced operational stability of the up-conversion fluorescence in films of palladium-porphyrin end-capped poly(pentaphenylene). *ChemPhysChem* **2005,** *6* (7), 1250-1253.

799. Baluschev, S.; Keivanidis, P. E.; Wegner, G.; Jacob, J.; Grimsdale, A. C.; Müllen, K.; Miteva, T.; Yasuda, A.; Nelles, G., Upconversion photoluminescence in poly(ladder-type-pentaphenylene) doped with metal (II)-octaethyl porphyrins. *Applied Physics Letters* **2005,** *86* (6), 1-3.
800. Bauer, R. E.; Grimsdale, A. C.; Müllen, K., Functionalised polyphenylene dendrimers and their applications. In *Topics in Current Chemistry*, 2005; Vol. 245, pp 253-286.
801. Becker, S.; Müllen, K., Nanochemistry-Architecture at the Mesoscale. In *Stimulating Concepts in Chemistry*, 2005; pp 317-337.
802. Bell, T. D. M.; Jacob, J.; Angeles-Izquierdo, M.; Fron, E.; Nolde, F.; Hofkens, J.; Müllen, K.; De Schryver, F. C., Charge transfer enhanced annihilation leading to deterministic single photon emission in rigid perylene end-capped polyphenylenes. *Chemical Communications* **2005,** (39), 4973-4975.
803. Bell, T. D. M.; Stefan, A.; Masuo, S.; Vosch, T.; Lor, M.; Cotlet, M.; Hofkens, J.; Bernhardt, S.; Müllen, K.; Van Der Auweraer, M.; Verhoeven, J. W.; De Schryver, F. C., Electron transfer at the single-molecule level in a triphenylamine-perylene imide molecule. *ChemPhysChem* **2005,** *6* (5), 942-948.
804. Bernhardt, S.; Baumgarten, M.; Wagner, M.; Müllen, K., Multiple functionalization of benzophenones inside polyphenylene dendrimers - Toward entrapped ions and radicals. *Journal of the American Chemical Society* **2005,** *127* (35), 12392-12399.
805. Bonino, F.; Brutti, S.; Reale, P.; Scrosati, B.; Gherghel, L.; Wu, J.; Müllen, K., A disordered carbon as a novel anode material in lithium-ion cells. *Advanced Materials* **2005,** *17* (6), 743-746.
806. Breiby, D. W.; Bunk, O.; Pisula, W.; Sølling, T. I.; Tracz, A.; Pakula, T.; Müllen, K.; Nielsen, M. M., Structure of zone-cast HBC-C12H25 films. *Journal of the American Chemical Society* **2005,** *127* (32), 11288-11293.
807. Breiby, D. W.; Hansteen, F.; Pisula, W.; Bunk, O.; Kolb, U.; Andreasen, J. W.; Müllen, K.; Nielsen, M. M., In situ studies of phase transitions in thin discotic films. *Journal of Physical Chemistry B* **2005,** *109* (47), 22319-22325.
808. Carminati, M.; Brambilla, L.; Zerbi, G.; Muellen, K.; Wu, J., Nanoscale architectures for molecular electronics: Vibrational spectroscopy and structure of solid hexa-n-dodecyl-hexa-peri-hexabenzocoronene. *Journal of Chemical Physics* **2005,** *123* (14).
809. Castiglioni, C.; Tommasini, M.; Zamboni, M.; Brambilla, L.; Zerbi, G.; Müllen, K. In *Experimental symmetry assignment of the D band: Evidence from the Raman spectra of soluble "molecular graphite"*, AIP Conference Proceedings, 2005; pp 174-177.
810. Cavallini, M.; Stoliar, P.; Moulin, J. F.; Surin, M.; Leclère, P.; Lazzaroni, R.; Breiby, D. W.; Andreasen, J. W.; Nielsen, M. M.; Sonar, P.; Grimsdale, A. C.; Mullen, K.; Biscarini, F., Field-effect transistors based on self-organized molecular nanostripes. *Nano Letters* **2005,** *5* (12), 2422-2425.
811. Centrone, A.; Brambilla, L.; Renouard, T.; Gherghel, L.; Mathis, C.; Müllen, K.; Zerbi, G., Structure of new carbonaceous materials: The role of vibrational spectroscopy. *Carbon* **2005,** *43* (8), 1593-1609.
812. Chaltin, P.; Margineanu, A.; Marchand, D.; Van Aerschot, A.; Rozenski, J.; De Schryver, F.; Herrmann, A.; Müllen, K.; Juliano, R.; Fisher, M. H.; Kang, H.; De Feyter, S.; Herdewijn, P., Delivery of antisense oligonucleotides using cholesterol-modified sense dendrimers and cationic lipids. *Bioconjugate Chemistry* **2005,** *16* (4), 827-836.
813. Cotlet, M.; Vosch, T.; Habuchi, S.; Weil, T.; Müllen, K.; Hofkens, J.; De Schryver, F., Probing intramolecular förster resonance energy transfer in a naphthaleneimide-peryleneimide-terrylenediimide-based dendrimer by ensemble and single-molecule

fluorescence spectroscopy. *Journal of the American Chemical Society* **2005,** *127* (27), 9760-9768.
814. Cremer, J.; Mena-Osteritz, E.; Pschierer, N. G.; Müllen, K.; Bäuerle, P., Dye-functionalized head-to-tail coupled oligo(3-hexylthiophenes) - Perylene-oligothiophene dyads for photovoltaic applications. *Organic and Biomolecular Chemistry* **2005,** *3* (6), 985-995.
815. De Schryver, F. C.; Vosch, T.; Cotlet, M.; Van Der Auweraer, M.; Müllen, K.; Hofkens, J., Energy dissipation in multichromophoric single dendrimers. *Accounts of Chemical Research* **2005,** *38* (7), 514-522.
816. Debije, M. G.; Chen, Z.; Piris, J.; Neder, R. B.; Watson, M. M.; Müllen, K.; Würthner, F., Dramatic increase in charge carrier lifetime in a liquid crystalline perylene bisimide derivative upon bay substitution with chlorine. *Journal of Materials Chemistry* **2005,** *15* (12), 1270-1276.
817. Di Stefano, M.; Negri, F.; Carbone, P.; Müllen, K., Oxidative cyclodehydrogenation reaction for the design of extended 2D and 3D carbon nanostructures: A theoretical study. *Chemical Physics* **2005,** *314* (1-3), 85-99.
818. Ding, K.; Grebel-Koehler, D.; Berger, R.; Müllen, K.; Butt, H. J., Structure of self-assembled n-dodecyl substituted azobenzene poly(phenylene) dendrimers on graphite. *Journal of Materials Chemistry* **2005,** *15* (33), 3431-3436.
819. Dong, H. K.; Hernandez-Lopez, J. L.; Liu, J.; Mihov, G.; Zhi, L.; Bauer, R. E.; Grebel-Köhler, D.; Klapper, M.; Weil, T.; Müllen, K.; Mittler, S.; Knoll, W., Multilayer films fabricated from oppositely charged polyphenylene dendrimers by electrostatic layer-by-layer assembly. *Macromolecular Chemistry and Physics* **2005,** *206* (1), 52-58.
820. El Hamaoui, B.; Zhi, L.; Wu, J.; Kolb, U.; Müllen, K., Uniform carbon and carbon/cobalt nanostructures by solid-state thermolysis of polyphenylene dendrimer/cobalt complexes. *Advanced Materials* **2005,** *17* (24), 2957-2960.
821. Fron, E.; Lor, M.; Pilot, R.; Schweitzer, G.; Dincalp, H.; De Feyter, S.; Cremer, J.; Bäuerle, P.; Müllen, K.; Van der Auweraer, M.; De Schryver, F. C., Photophysical study of photoinduced electron transfer in a bis-thiophene substituted peryleneimide. *Photochemical and Photobiological Sciences* **2005,** *4* (1), 61-68.
822. Gomes, H. L.; Stallinga, P.; Dinelli, F.; Murgia, M.; Biscarini, F.; de Leeuw, D. M.; Muccini, M.; Müllen, K., Electrical characterization of organic based transistors: Stability issues. *Polymers for Advanced Technologies* **2005,** *16* (2-3), 227-231.
823. Grimsdale, A. C.; Müllen, K., The chemistry of organic nanomaterials. *Angewandte Chemie - International Edition* **2005,** *44* (35), 5592-5629.
824. Grimsdale, A. C.; Vosch, T.; Lor, M.; Cotlet, M.; Habuchi, S.; Hofkens, J.; De Schryver, F. C.; Müllen, K., Synthesis of and excited state processes in multichromophoric dendritic systems. *Journal of Luminescence* **2005,** *111* (4 SPEC. ISS.), 239-253.
825. Grimsdale, A. C.; Wu, J.; Müllen, K., New carbon-rich materials for electronics, lithium battery, and hydrogen storage applications. *Chemical Communications* **2005,** (17), 2197-2204.
826. Günther, C.; Karl, N.; Pflaum, J.; Strohmaier, R.; Gompf, B.; Eisenmenger, W.; Müller, M.; Müllen, K., LEED, STM, and TDS studies of ordered thin films of the rhombus-shaped polycondensed aromatic hydrocarbon C54H22, on MoS 2, GeS, and graphite. *Langmuir* **2005,** *21* (2), 656-665.
827. Heimel, G.; Daghofer, M.; Gierschner, J.; List, E. J. W.; Grimsdale, A. C.; Müllen, K.; Beljonne, D.; Brédas, J. L.; Zojer, E., Breakdown of the mirror image symmetry in the optical absorption/emission spectra of oligo(para-phenylene)s. *Journal of Chemical Physics* **2005,** *122* (5).
828. Hennebicq, E.; Pourtois, G.; Scholes, G. D.; Herz, L. M.; Russell, D. M.; Silva, C.; Setayesh, S.; Grimsdale, A. C.; Müllen, K.; Brédas, J. L.; Beljonne, D., Exciton migration in rigid-rod conjugated polymers: An improved Förster model. *Journal of the American Chemical Society* **2005,** *127* (13), 4744-4762.
829. Hinze, G.; Haase, M.; Nolde, F.; Müllen, K.; Basché, T., Time-resolved measurements of

intramolecular energy transfer in single donor/acceptor dyads. *Journal of Physical Chemistry A* **2005,** *109* (30), 6725-6729.
830. Jäckel, F.; Ai, M.; Wu, J.; Müllen, K.; Rabe, J. P., Solvent molecules in an epitaxially grown scaffold of star-shaped nanographenes. *Journal of the American Chemical Society* **2005,** *127* (42), 14580-14581.
831. Jacob, J.; Sax, S.; Gaal, M.; List, E. J. W.; Grimsdale, A. C.; Müllen, K., A fully aryl-substituted poly(ladder-type pentaphenylene): A remarkably stable blue-light-emitting polymer. *Macromolecules* **2005,** *38* (24), 9933-9938.
832. Jang, Y. J.; Bieber, K.; Naundorf, C.; Nenov, N.; Klapper, M.; Müllen, K.; Ferrari, D.; Knoke, S.; Fink, G., Optical methods to study the behaviour of supported metallocene catalysts during olefin polymerisation. *E-Polymers* **2005**.
833. Jang, Y. J.; Naundorf, C.; Klapper, M.; Müllen, K., Study of the fragmentation process of different supports for metallocenes by laser scanning confocal fluorescence microscopy (LSCFM). *Macromolecular Chemistry and Physics* **2005,** *206* (20), 2027-2037.
834. John, H.; Bauer, R.; Espindola, P.; Sonar, P.; Heinze, J.; Müllen, K., 3D-hybrid networks with controllable electrical conductivity from the electrochemical deposition of terthiophene-functionalized polyphenylene dendrimers. *Angewandte Chemie - International Edition* **2005,** *44* (16), 2447-2451.
835. Jung, J.; Rybak, A.; Slazak, A.; Bialecki, S.; Miskiewicz, P.; Glowacki, I.; Ulanski, J.; Rosselli, S.; Yasuda, A.; Nelles, G.; Tomović, Z.; Watson, M. D.; Müllen, K., Photogeneration and photovoltaic effect in blends of derivatives of hexabenzocoronene and perylene. *Synthetic Metals* **2005,** *155* (1), 150-156.
836. Kastler, M.; Pisula, W.; Wasserfallen, D.; Pakula, T.; Müllen, K., Influence of alkyl substituents on the solution- and surface-organization of hexa-peri-hexabenzocoronenes. *Journal of the American Chemical Society* **2005,** *127* (12), 4286-4296.
837. Keivanidis, P. E.; Jacob, J.; Oldridge, L.; Sonar, P.; Carbonnier, B.; Baluschev, S.; Grimsdale, A. C.; Müllen, K.; Wegner, G., Photophysical characterization of light-emitting poly(indenofluorene)s. *ChemPhysChem* **2005,** *6* (8), 1650-1660.
838. Khelfallah, N. S.; Peretolchin, M.; Klapper, M.; Müllen, K., Controlled radical polymerization of N,N-dimethylaminoethyl methacrylate using triazolinyl as counter radical. *Polymer Bulletin* **2005,** *53* (5-6), 295-304.
839. Khrenov, V.; Klapper, M.; Koch, M.; Müllen, K., Surface functionalized ZnO particles designed for the use in transparent nanocomposites. *Macromolecular Chemistry and Physics* **2005,** *206* (1), 95-101.
840. Koch, N.; Heimel, G.; Wu, J.; Zojer, E.; Johnson, R. L.; Brédas, J. L.; Müllen, K.; Rabe, J. P., Influence of molecular conformation on organic/metal interface energetics. *Chemical Physics Letters* **2005,** *413* (4-6), 390-395.
841. Laquai, F.; Keivanidis, P. E.; Baluschev, S.; Jacob, J.; Müllen, K.; Wegner, G., Low-threshold amplified spontaneous emission in thin films of poly(tetraarylindenofluorene). *Applied Physics Letters* **2005,** *87* (26), 1-3.
842. Liaw, D. J.; Chang, F. C.; Leung, M. K.; Chou, M. Y.; Muellen, K., High thermal stability and rigid rod of novel organosoluble polyimides and polyamides based on bulky and noncoplanar naphthalene-biphenyldiamine. *Macromolecules* **2005,** *38* (9), 4024-4029.
843. Masuo, S.; Yoshikawa, H.; Nothofer, H. G.; Grimsdale, A. C.; Scherf, U.; Müllen, K.; Masuhara, H., Assembling and orientation of polyfluorenes in solution controlled by a focused near-infrared laser beam. *Journal of Physical Chemistry B* **2005,** *109* (15), 6917-6921.
844. Mihov, G.; Grebel-Koehler, D.; Lübbert, A.; Vandermeulen, G. W. M.; Herrmann, A.; Klok, H. A.; Müllen, K., Polyphenylene dendrimers as scaffolds for shape-persistent multiple peptide

conjugates. *Bioconjugate Chemistry* **2005,** *16* (2), 283-293.
845. Miyasaka, A.; Tabata, M.; Mullen, K. In *Structural analyses of monosubstituted polyacetylenes using electron spin resonance*, Polymer Preprints, Japan, 2005; p 261.
846. Müller, S.; Müllen, K., Facile synthetic approach to novel core-extended perylene carboximide dyes. *Chemical Communications* **2005,** (32), 4045-4046.
847. Muls, B.; Uji-i, H.; Melnikov, S.; Moussa, A.; Verheijen, W.; Soumillion, J. P.; Josemon, J.; Müllen, K.; Hofkens, J., Direct measurement of the end-to-end distance of individual polyfluorene polymer chains. *ChemPhysChem* **2005,** *6* (11), 2286-2294.
848. Nolde, F.; Qu, J.; Kohl, C.; Pschirer, N. G.; Reuther, E.; Müllen, K., Synthesis and modification of terrylenediimides as high-performance fluorescent dyes. *Chemistry - A European Journal* **2005,** *11* (13), 3959-3967.
849. Palermo, V.; Palma, M.; Tomović, Ž.; Watson, M. D.; Friedlein, R.; Müllen, K.; Samorì, P., Influence of molecular order on the local work function of nanographene architectures: A Kelvin-probe force microscopy study. *ChemPhysChem* **2005,** *6* (11), 2371-2375.
850. Piot, L.; Marchenko, A.; Wu, J.; Müllen, K.; Fichou, D., Structural evolution of hexa-peri-hexabenzocoronene adlayers in heteroepitaxy on n-pentacontane template monolayers. *Journal of the American Chemical Society* **2005,** *127* (46), 16245-16250.
851. Pisula, W.; Menon, A.; Stepputat, M.; Lieberwirth, I.; Kolb, U.; Tracz, A.; Sirringhaus, H.; Pakula, T.; Müllen, K., A zone-casting technique for device fabrication of field-effect transistors based on discotic hexa-perihexabenzocoronene. *Advanced Materials* **2005,** *17* (6), 684-689.
852. Pisula, W.; Tomović, Ž.; El Hamaoui, B.; Watson, M. D.; Pakula, T.; Müllen, K., Control of the homeotropic order of discotic hexa-peri-hexabenzocoronenes. *Advanced Functional Materials* **2005,** *15* (6), 893-904.
853. Pisula, W.; Tomović, Ž.; Simpson, C.; Kastler, M.; Pakula, T.; Müllen, K., Relationship between core size, side chain length, and the supramolecular organization of polycyclic aromatic hydrocarbons. *Chemistry of Materials* **2005,** *17* (17), 4296-4303.
854. Pisula, W.; Tomović, Z.; Stepputat, M.; Kolb, U.; Pakula, T.; Müllen, K., Uniaxial alignment of poly cyclic aromatic hydrocarbons by solution processing. *Chemistry of Materials* **2005,** *17* (10), 2641-2647.
855. Renouard, T.; Gherghel, L.; Wachtier, M.; Bonino, F.; Scrosati, B.; Nuffer, R.; Mathis, C.; Müllen, K., Pyrolysis of hexa(phenyl)benzene derivatives: A molecular approach toward carbonaceous materials for Li-ion storage. *Journal of Power Sources* **2005,** *139* (1-2), 242-249.
856. Roeffaers, M. B. J.; Sels, B. F.; Loos, D.; Kohl, C.; Müllen, K.; Jacobs, P. A.; Hofkens, J.; De Vos, D. E., In situ space- and time-resolved sorption kinetics of anionic dyes on individual LDH crystals. *ChemPhysChem* **2005,** *6* (11), 2295-2299.
857. Rosenfeldt, S.; Dingenouts, N.; Pötschke, D.; Ballauff, M.; Berresheim, A. J.; Müllen, K.; Lindner, P.; Saalwächter, K., Analysis of the spatial structure of rigid polyphenylene dendrimers by small-angle neutron scattering. *Journal of Luminescence* **2005,** *111* (4 SPEC. ISS.), 225-238.
858. Rusanov, A. L.; Likhatchev, D.; Kostoglodov, P. V.; Müllen, K.; Klapper, M., Proton-exchanging electrolyte membranes based on aromatic condensation polymers. In *Advances in Polymer Science*, 2005; Vol. 179, pp 83-134.
859. Schindler, F.; Jacob, J.; Grimsdale, A. C.; Scherf, U.; Müllen, K.; Lupton, J. M.; Feldmann, J., Counting chromophores in conjugated polymers. *Angewandte Chemie - International Edition* **2005,** *44* (10), 1520-1525.
860. Schmidtke, J. P.; Müllen, K.; Friend, R. H. In *Controlling organization in photovoltaic diodes from discotic liquid crystals via anode surface energy alteration*, Materials Research Society Symposium Proceedings, 2005; pp 93-98.
861. Shifrina, Z. B.; Averina, M. S.; Firsova, N. V.; Rusanov, A. L.; Muellen, K., Polyphenylene

dendrimers with pyridine embeds. *Doklady Akademii Nauk* **2005,** *400* (6), 774-778.
862. Shifrina, Z. B.; Averina, M. S.; Firsova, N. V.; Rusanov, A. L.; Muellen, K., Polyphenylene dendrimers with pyridine fragments. *Doklady Chemistry* **2005,** *400* (4-6), 34-38.
863. Shifrina, Z. B.; Rajadurai, M. S.; Firsova, N. V.; Bronstein, L. M.; Huang, X.; Rusanov, A. L.; Muellen, K., Poly(phenylene-pyridyl) dendrimers: Synthesis and templating of metal nanoparticles. *Macromolecules* **2005,** *38* (24), 9920-9932.
864. Shklyarevskiy, I. O.; Jonkheijm, P.; Stutzmann, N.; Wasserberg, D.; Wondergem, H. J.; Christianen, P. C. M.; Schenning, A. P. H. J.; De Leeuw, D. M.; Tomović, Ž.; Wu, J.; Müllen, K.; Maan, J. C., High anisotropy of the field-effect transistor mobility in magnetically aligned discotic liquid-crystalline semiconductors. *Journal of the American Chemical Society* **2005,** *127* (46), 16233-16237.
865. Stracke, F.; Blum, C.; Becker, S.; Müllen, K.; Meixner, A. J., Correlation of emission intensity and spectral diffusion in room temperature single-molecule spectroscopy. *ChemPhysChem* **2005,** *6* (7), 1242-1246.
866. Surin, M.; Sonar, P.; Grimsdale, A. C.; Müllen, K.; Lazzaroni, R.; Leclère, P., Supramolecular organization in fluorene/indenofluorene-oligothiophene alternating conjugated copolymers. *Advanced Functional Materials* **2005,** *15* (9), 1426-1434.
867. Wang, Z.; Dötz, F.; Enkelmann, V.; Müllen, K., "Double-concave" graphene: Permethoxylated hexa-peri- hexabenzocoronene and its cocrystals with hexafluorobenzene and fullerene. *Angewandte Chemie - International Edition* **2005,** *44* (8), 1247-1250.
868. Warman, J. M.; Piris, J.; Pisula, W.; Kastler, M.; Wasserfallen, D.; Müllen, K., Charge recombination via intercolumnar electron tunneling through the lipid-like mantle of discotic hexa-alkyl-hexa-peri-hexabenzocoronenes. *Journal of the American Chemical Society* **2005,** *127* (41), 14257-14262.
869. Wasserfallen, D.; Fischbach, I.; Chebotareva, N.; Kastler, M.; Pisula, W.; Jäckel, F.; Watson, M. D.; Schnell, I.; Rabe, J. P.; Spiess, H. W.; Müllen, K., Influence of hydrogen bonds on the supramolecular order of hexa-peri-hexabenzocoronenes. *Advanced Functional Materials* **2005,** *15* (10), 1585-1594.
870. Weil, T.; Abdalla, M. A.; Jatzke, C.; Hengstler, J.; Müllen, K., Water-soluble rylene dyes as high-performance colorants for the staining of cells. *Biomacromolecules* **2005,** *6* (1), 68-79.
871. Welter, S.; Salluce, N.; Benetti, A.; Rot, N.; Belser, P.; Sonar, P.; Grimsdale, A. C.; Mullen, K.; Lutz, M.; Spek, A. L.; De Cola, L., Rodlike bimetallic ruthenium and osmium complexes bridged by phenylene spacers. Synthesis, electrochemistry, and photophysics. *Inorganic Chemistry* **2005,** *44* (13), 4706-4718.
872. Wu, J.; El Hamaoui, B.; Li, J.; Zhi, L.; Kolb, U.; Müllen, K., Solid-state synthesis of "bamboo-like" and straight carbon nanotubes by thermolysis of hexa-peri-hexabenzocoronene-cobalt complexes. *Small* **2005,** *1* (2), 210-212.
873. Wu, J.; Grimsdale, A. C.; Müllen, K., Combining one-, two- and three-dimensional polyphenylene nanostructures. *Journal of Materials Chemistry* **2005,** *15* (1), 41-52.
874. Wu, J.; Qu, J.; Tchebotareva, N.; Müllen, K., Hexa-peri-hexabenzocoronene/perylenedicarboxymonoimide and diimide dyads as models to study intramolecular energy transfer. *Tetrahedron Letters* **2005,** *46* (9), 1565-1568.
875. Yang, X.; Räder, H. J.; Rouhanipour, A.; Müllen, K., Soft deposition of organic macromolecules with fast atom bombardment mass spectrometry. *European Journal of Mass Spectrometry* **2005,** *11* (3), 287-293.
876. Zhang, J.; Gesquière, A.; Sieffert, M.; Klapper, M.; Mullen, K.; De Schryver, F. C.; De Feyter, S., Losing the expression of molecular chirality in self-assembled physisorbed monolayers. *Nano Letters* **2005,** *5* (7), 1395-1398.

877. Zhi, L.; Gorelik, T.; Friedlein, R.; Wu, J.; Kolb, U.; Salaneck, W. R.; Müllen, K., Solid-state pyrolyses of metal phthalocyanines: A simple approach towards nitrogen-doped CNTs and metal/carbon nanocables. *Small* **2005,** *1* (8-9), 798-801.
878. Zhi, L.; Gorelik, T.; Wu, J.; Kolb, U.; Müllen, K., Nanotubes fabricated from Ni-naphthalocyanine by a template method. *Journal of the American Chemical Society* **2005,** *127* (37), 12792-12793.
879. Zhi, L.; Wu, J.; Li, J.; Kolb, U.; Müllen, K., Carbonization of disclike molecules in porous alumina membranes: Toward carbon nanotubes with controlled graphene-layer orientation. *Angewandte Chemie - International Edition* **2005,** *44* (14), 2120-2123.
880. Zhi, L.; Wu, J.; Li, J.; Stepputat, M.; Kolb, U.; Müllen, K., Diels-Alder reactions of tetraphenylcyclopentadienones in nanochannels: Fabrication of nanotubes from hyperbranched polyphenylenes. *Advanced Materials* **2005,** *17* (12), 1492-1496.
881. Zhi, L.; Wu, J.; Müllen, K., Star-shaped hexa-peri-hexabenzocoronene "heptamer": Synthesis and self-assembly. *Organic Letters* **2005,** *7* (26), 5761-5764.
882. Avlasevich, Y.; Kohl, C.; Müllen, K., Facile synthesis of terrylene and its isomer benzoindenoperylene. *Journal of Materials Chemistry* **2006,** *16* (11), 1053-1057.
883. Avlasevich, Y.; Müllen, K., Dibenzopentarylenebis(dicarboximide)s: Novel near-infrared absorbing dyes. *Chemical Communications* **2006,** (42), 4440-4442.
884. Becker, K.; Lupton, J. M.; Feldmann, J.; Setayesh, S.; Grimsdale, A. C.; Müllen, K., Efficient intramolecular energy transfer in single endcapped conjugated polymer molecules in the absence of appreciable spectral overlap. *Journal of the American Chemical Society* **2006,** *128* (3), 680-681.
885. Bernhardt, S.; Baumgarten, M.; Müllen, K., Dendritic encapsulation - "postsynthetic" functionalizations of a single benzophenone shielded by shape-persistent polyphenylene dendrons. *European Journal of Organic Chemistry* **2006,** (11), 2523-2529.
886. Bernhardt, S.; Kastler, M.; Enkelmann, V.; Baumgarten, M.; Müllen, K., Pyrene as chromophore and electrophore: Encapsulation in a rigid polyphenylene shell. *Chemistry - A European Journal* **2006,** *12* (23), 6117-6128.
887. Bonino, F.; Brutti, S.; Piana, M.; Natale, S.; Scrosati, B.; Gherghel, L.; Müllen, K., Structural and electrochemical studies of a hexaphenylbenzene pyrolysed soft carbon as anode material in lithium batteries. *Electrochimica Acta* **2006,** *51* (17), 3407-3412.
888. Carbone, P.; Calabretta, A.; Stefano, M. D.; Negri, F.; Müllen, K., Shape persistence and bistability of planar three-fold core polyphenylene dendrimers: A molecular dynamics study. *Journal of Physical Chemistry A* **2006,** *110* (6), 2214-2224.
889. Dierschke, F.; Jacob, J.; Müllen, K., A hybrid polymer of polyaniline and phthalimide dyes. *Synthetic Metals* **2006,** *156* (5-6), 433-443.
890. Duati, M.; Grave, C.; Tcbeborateva, N.; Wu, J.; Müllen, K.; Shaporenko, A.; Zharnikov, M.; Kriebel, J. K.; Whitesides, G. M.; Rampi, M. A., Electron transport across hexa-peri-hexabenzocoronene units in a metal-self-assembled monolayer-metal junction. *Advanced Materials* **2006,** *18* (3), 329-333.
891. El Hamaoui, B.; Laquai, F.; Baluschev, S.; Wu, J.; Müllen, K., A phosphorescent hexa-peri-hexabenzocoronene platinum complex and its time-resolved spectroscopy. *Synthetic Metals* **2006,** *156* (18-20), 1182-1186.
892. Elmahdy, M. M.; Floudas, G.; Oldridge, L.; Grimsdale, A. C.; Müllen, K., Self-assembly and molecular dynamics of oligoindenofluorenes. *ChemPhysChem* **2006,** *7* (7), 1431-1441.
893. Ergen, E.; Weber, M.; Jacob, J.; Herrmann, A.; Müllen, K., Twin probes as a novel tool for the detection of single-nucleotide polymorphisms. *Chemistry - A European Journal* **2006,** *12* (14), 3707-3713.
894. Feng, X.; Wu, J.; Enkelmann, V.; Müllen, K., Hexa-peri-hexabenzocoronenes by efficient

oxidative cyclodehydrogenation: The role of the oligophenylene precursors. *Organic Letters* **2006,** *8* (6), 1145-1148.
895. Forker, R.; Dienel, T.; Fritz, T.; Müllen, K., Optical evidence for substrate-induced growth of ultrathin hexa-peri-hexabenzocoronene films on highly oriented pyrolytic graphite. *Physical Review B - Condensed Matter and Materials Physics* **2006,** *74* (16).
896. Fückel, B.; Hinze, G.; Diezemann, G.; Nolde, F.; Müllen, K.; Gauss, J.; Basché, T., Flexibility of phenylene oligomers revealed by single molecule spectroscopy. *Journal of Chemical Physics* **2006,** *125* (14).
897. Grimsdale, A. C.; Müllen, K., Polyphenylene-type emissive materials: Poly(para-phenylene)s, polyfluorenes, and ladder polymers. In *Advances in Polymer Science*, 2006; Vol. 199, pp 1-82.
898. Herrmann, A.; Müllen, K., From industrial colorants to single photon sources and biolabels: The fascination and function of rylene dyes. *Chemistry Letters* **2006,** *35* (9), 978-985.
899. Hofkens, J.; Bell, T. D. M.; Stefan, A.; Fron, E.; Müllen, K.; De Schryver, F. C., Probing molecular properties and the role of the environment at the single-molecule level. *Pure and Applied Chemistry* **2006,** *78* (12), 2261-2266.
900. Hölzl, C.; Kuzmany, H.; Hulman, M.; Wu, J.; Müllen, K.; Boroviak-Palen, E.; Kalenczuk, R. J.; Kukovecz, A., Surface enhanced Raman spectroscopy of flat and curved carbon cluster. *Physica Status Solidi (B) Basic Research* **2006,** *243* (13), 3142-3145.
901. Jäckel, F.; Watson, M. D.; Müllen, K.; Rabe, J. P., Tunneling through nanographene stacks. *Physical Review B - Condensed Matter and Materials Physics* **2006,** *73* (4).
902. Jung, C.; Müller, B. K.; Lamb, D. C.; Nolde, F.; Müllen, K.; Bräuchle, C., A new photostable terrylene diimide dye for applications in single molecule studies and membrane labeling. *Journal of the American Chemical Society* **2006,** *128* (15), 5283-5291.
903. Jung, S. H.; Pisula, W.; Rouhanipour, A.; Räder, H. J.; Jacob, J.; Müllen, K., A conjugated polycarbazole ring around a porphyrin. *Angewandte Chemie - International Edition* **2006,** *45* (28), 4685-4690.
904. Kastler, M.; Laquai, F.; Müllen, K.; Wegner, G., Room-temperature nondispersive hole transport in a discotic liquid crystal. *Applied Physics Letters* **2006,** *89* (25).
905. Kastler, M.; Pisula, W.; Laquai, F.; Kumar, A.; Davies, R. J.; Baluschev, S.; Garcia-Gutiérrez, M. C.; Wasserfallen, D.; Butt, H. J.; Riekel, C.; Wegner, G.; Müllen, K., Organization of charge-carrier pathways for organic electronics. *Advanced Materials* **2006,** *18* (17), 2255-2259.
906. Kastler, M.; Schmidt, J.; Pisula, W.; Sebastiani, D.; Müllen, K., From armchair to zigzag peripheries in nanographenes. *Journal of the American Chemical Society* **2006,** *128* (29), 9526-9534.
907. Khrenov, V.; Schwager, F.; Klapper, M.; Koch, M.; Müllen, K., The formation of hydrophobic inorganic nanoparticles in the presence of amphiphilic copolymers. *Colloid and Polymer Science* **2006,** *284* (8), 927-934.
908. Li, J.; Dierschke, F.; Wu, J.; Grimsdale, A. C.; Müllen, K., Poly(2,7-carbazole) and perylene tetracarboxydiimide: A promising donor/acceptor pair for polymer solar cells. *Journal of Materials Chemistry* **2006,** *16* (1), 96-100.
909. Liscio, A.; Palermo, V.; Gentilini, D.; Nolde, F.; Müllen, K.; Samorì, P., Quantitative measurement of the local surface potential of π-conjugated nanostructures: A Kelvin probe force microscopy study. *Advanced Functional Materials* **2006,** *16* (11), 1407-1416.
910. Markova, D.; Kumar, A.; Müllen, K.; Klapper, M. In *Poly(vinylbenzyl phosphonic acid) homo- And BAB block copolymers as polymer electrolyte membranes for fuel cells*, ACS National Meeting Book of Abstracts, 2006.
911. Markova, D.; Kumar, A.; Mullen, K.; Klapper, M. In *Homo- and BAB block copolymers based on vinylbenzyl phosphonic acid as proton-exchanging polymer electrolyte membranes for fuel cells*

applications, ACS National Meeting Book of Abstracts, 2006.
912. Mishra, A. K.; Graf, M.; Grasse, F.; Jacob, J.; List, E. J. W.; Můllen, K., Blue-emitting carbon- And nitrogen-bridged poly (ladder-type tetraphenylene)s. *Chemistry of Materials* **2006,** *18* (12), 2879-2885.
913. Miyasaka, A.; Sone, T.; Mawatari, Y.; Setayesh, S.; Müllen, K.; Tabata, M., Poly[(para-halogenated)phenylacetylene]s prepared with a [Rh(norbornadiene)Cl]2 catalyst: Syntheses and structure elucidation. *Macromolecular Chemistry and Physics* **2006,** *207* (21), 1938-1944.
914. Mondeshki, M.; Mihov, G.; Graf, R.; Spiess, H. W.; Müllen, K.; Papadopoulos, P.; Gitsas, A.; Floudas, G., Self-assembly and molecular dynamics of peptide-functionalized polyphenylene dendrimers. *Macromolecules* **2006,** *39* (26), 9605-9613.
915. Müllen, K.; Scherf, U., Preface. *Organic Light Emitting Devices: Synthesis, Properties and Applications* **2006**, xi-xiv.
916. Müllen, K.; Scherf, U., *Organic Light Emitting Devices: Synthesis, Properties and Applications*. 2006; p 1-410.
917. Müller, A. M.; Avlasevich, Y. S.; Müllen, K.; Bardeen, C. J., Evidence for exciton fission and fusion in a covalently linked tetracene dimer. *Chemical Physics Letters* **2006,** *421* (4-6), 518-522.
918. Müller, K.; Klapper, M.; Müllen, K., Synthesis of conjugated polymer nanoparticles in non-aqueous emulsions. *Macromolecular Rapid Communications* **2006,** *27* (8), 586-593.
919. Naundorf, C.; Matsui, S.; Saito, J.; Fujita, T.; Klapper, M.; Müllen, K., Ultrahigh molecular weight polyethylene produced by a bis(phenoxy-imine) titanium complex supported on latex particles. *Journal of Polymer Science, Part A: Polymer Chemistry* **2006,** *44* (9), 3103-3113.
920. Nolde, F.; Pisula, W.; Müller, S.; Kohl, C.; Müllen, K., Synthesis and self-organization of core-extended perylene tetracarboxdiimides with branched alkyl substituents. *Chemistry of Materials* **2006,** *18* (16), 3715-3725.
921. Oldridge, L.; Kastler, M.; Müllen, K., Synthesis of a soluble poly(fluorenone). *Chemical Communications* **2006,** (8), 885-887.
922. Palermo, V.; Morelli, S.; Palma, M.; Simpson, C.; Nolde, F.; Herrmann, A.; Müllen, K.; Samorì, P., Nanoscale structural and electronic properties of ultrathin blends of two polyaromatic molecules: A Kelvin Probe Force Microscopy investigation. *ChemPhysChem* **2006,** *7* (4), 847-853.
923. Palermo, V.; Morelli, S.; Simpson, C.; Müllen, K.; Samorì, P., Self-organized nanofibers from a giant nanographene: Effect of solvent and deposition method. *Journal of Materials Chemistry* **2006,** *16* (3), 266-271.
924. Piot, L.; Marchenko, A.; Wu, J.; Müllen, K.; Fichou, D. In *Long n-alkane adlayers as templates for tailoring supramolecular self-assemblies on surfaces*, Materials Research Society Symposium Proceedings, 2006; pp 143-148.
925. Pisula, W.; Dierschke, F.; Müllen, K., Long-range self-assembly of bis(imidazole)-annulated terphenyls. *Journal of Materials Chemistry* **2006,** *16* (41), 4058-4064.
926. Pisula, W.; Kastler, M.; Wasserfallen, D.; Davies, R. J.; García-Gutiérrez, M. C.; Müllen, K., From macro- to nanoscopic templating with nanographenes. *Journal of the American Chemical Society* **2006,** *128* (45), 14424-14425.
927. Pisula, W.; Kastler, M.; Wasserfallen, D.; Mondeshki, M.; Piris, J.; Schnell, I.; Müllen, K., Relation between supramolecular order and charge carrier mobility of branched alkyl hexa-peri-hexabenzocoronenes. *Chemistry of Materials* **2006,** *18* (16), 3634-3640.
928. Pisula, W.; Kastler, M.; Wasserfallen, D.; Robertson, J. W. F.; Nolde, F.; Kohl, C.; Müllen, K., Pronounced supramolecular order in discotic donor-acceptor mixtures. *Angewandte Chemie - International Edition* **2006,** *45* (5), 819-823.
929. Pschirer, N. G.; Kohl, C.; Nolde, F.; Qu, J.; Müllen, K., Pentarylene- and hexarylenebis(dicarboximide)s: Near-infrared-absorbing polyaromatic dyes. *Angewandte Chemie -*

International Edition **2006,** *45* (9), 1401-1404.
930. Räder, H. J.; Müllen, K., Soft landing of fast ions. *Nachrichten aus der Chemie* **2006,** *54* (7-8), 746-750.
931. Räder, H. J.; Rouhanipour, A.; Talarico, A. M.; Palermo, V.; Samorì, P.; Müllen, K., Processing of giant graphene molecules by soft-landing mass spectrometry. *Nature Materials* **2006,** *5* (4), 276-280.
932. Ruffieux, P.; Gröning, O.; Fasel, R.; Kastler, M.; Wasserfallen, D.; Müllen, K.; Gröning, P., Self-assembly of extended polycyclic aromatic hydrocarbons on Cu(111). *Journal of Physical Chemistry B* **2006,** *110* (23), 11253-11258.
933. Rybak, A.; Pfleger, J.; Jung, J.; Pavlik, M.; Glowacki, I.; Ulanski, J.; Tomovic, Z.; Müllen, K.; Geerts, Y., Charge carrier transport in layers of discotic liquid crystals as studied by transient photocurrents. *Synthetic Metals* **2006,** *156* (2-4), 302-309.
934. Samorì, P.; Fechtenkötter, A.; Reuther, E.; Watson, M. D.; Severin, N.; Müllen, K.; Rabe, J. P., Self-assembly of perylene monoimide substituted hexa-peri- hexabenzocoronenes: Dyads and triads at surfaces. *Advanced Materials* **2006,** *18* (10), 1317-1321.
935. Schmidtke, J. P.; Friend, R. H.; Kastler, M.; Müllen, K., Control of morphology in efficient photovoltaic diodes from discotic liquid crystals. *Journal of Chemical Physics* **2006,** *124* (17).
936. Stefani, F. D.; Kohl, C.; Avlasevich, Y. S.; Horn, N.; Vogt, A. K.; Müllen, K.; Kreiter, M., Thermochromic fluorophores and their NIR laser induced transformation. *Chemistry of Materials* **2006,** *18* (26), 6115-6120.
937. Tang, T.; Qu, J.; Müllen, K.; Webber, S. E., Water-soluble perylene diimides: Solution photophysics and layer-by-layer incorporation into polyelectrolyte films. *Langmuir* **2006,** *22* (18), 7610-7616.
938. Tang, T.; Qu, J.; Müllen, K.; Webber, S. E., Molecular layer-by-layer self-assembly of water-soluble perylene diimides through π-π and electrostatic interactions. *Langmuir* **2006,** *22* (1), 26-28.
939. Tran, E.; Duati, M.; Ferri, V.; Müllen, K.; Zharnikov, M.; Whitesides, G. M.; Rampi, M. A., Experimental approaches for controlling current flowing through metal-molecules-metal junctions. *Advanced Materials* **2006,** *18* (10), 1323-1328.
940. Trimpin, S.; Keune, S.; Räder, H. J.; Müllen, K., Solvent-Free MALDI-MS: Developmental Improvements in the Reliability and the Potential of MALDI in the Analysis of Synthetic Polymers and Giant Organic Molecules. *Journal of the American Society for Mass Spectrometry* **2006,** *17* (5), 661-671.
941. Trimpin, S.; Räder, H. J.; Müllen, K., Investigations of theoretical principles for MALDI-MS derived from solvent-free sample preparation. Part I. Preorganization. *International Journal of Mass Spectrometry* **2006,** *253* (1-2), 13-21.
942. Tyutyulkov, N.; Drebov, N.; Müllen, K.; Dietz, F., A new type of non-Kekulé diradicals with triplet ground states. I. Polymethine systems. *Zeitschrift fur Naturforschung - Section B Journal of Chemical Sciences* **2006,** *61* (2), 182-188.
943. Uji-I, H.; Melnikov, S. M.; Deres, A.; Bergamini, G.; De Schryver, F.; Herrmann, A.; Müllen, K.; Enderlein, J.; Hofkens, J., Visualizing spatial and temporal heterogeneity of single molecule rotational diffusion in a glassy polymer by defocused wide-field imaging. *Polymer* **2006,** *47* (7), 2511-2518.
944. Wasserfallen, D.; Kastler, M.; Pisula, W.; Hofer, W. A.; Fogel, Y.; Wang, Z.; Müllen, K., Suppressing aggregation in a large polycyclic aromatic hydrocarbon. *Journal of the American Chemical Society* **2006,** *128* (4), 1334-1339.
945. Wasserfallen, D.; Mattersteig, G.; Enkelmann, V.; Müllen, K., Synthesis and crystal structures of extremely crowded oligophenylenes as model precursors to 'cubic graphite'. *Tetrahedron* **2006,** *62* (23), 5417-5420.

946. Wu, J.; Li, J.; Kolb, U.; Müllen, K., A water-soluble hexa-peri-hexabenzocoronene: Synthesis, self-assembly and role as template for porous silica with aligned nanochannels. *Chemical Communications* **2006,** (1), 48-50.
947. Wu, J.; Müllen, K., All-benzenoid Polycyclic Aromatic Hydrocarbons: Synthesis, Self-assembly and Applications in Organic Electronics. In *Carbon-Rich Compounds: From Molecules to Materials*, 2006; pp 90-139.
948. Yang, C.; Jacob, J.; Müllen, K., Synthesis and photochromic properties of ladderized poly (p-phenylene-alt-9,10-anthrylene)s. *Macromolecules* **2006,** *39* (17), 5696-5704.
949. Yang, C.; Jacob, J.; Müllen, K., Polyphenylenes and poly(phenyleneethynylene)s with 9,10-anthrylene subunits. *Macromolecular Chemistry and Physics* **2006,** *207* (13), 1107-1115.
950. Yang, C.; Scheiber, H.; List, E. J. W.; Jacob, J.; Müllen, K., Poly(2,7-phenanthrylene)s and poly(3,6-phenanthrylene)s as polyphenylene and poly(phenylenevinylene) analogues. *Macromolecules* **2006,** *39* (16), 5213-5221.
951. Zhi, L. J.; Kolb, U.; Müllen, K., Novel carbon nanostructures prepared by solid-state pyrolysis of iron phthalocyanine. *Xinxing Tan Cailiao/New Carbon Materials* **2006,** *21* (2), 109-113.
952. Avlasevich, Y.; Müllen, K., An efficient synthesis of quaterrylenedicarboximide NIR dyes. *Journal of Organic Chemistry* **2007,** *72* (26), 10243-10246.
953. Avlasevich, Y.; Müller, S.; Erk, P.; Müllen, K., Novel core-expanded rylenebis(dicarboximide) dyes bearing pentacene units: Facile synthesis and photophysical properties. *Chemistry - A European Journal* **2007,** *13* (23), 6555-6561.
954. Baluschev, S.; Yakutkin, V.; Miteva, T.; Avlasevich, Y.; Chernov, S.; Aleshchenkov, S.; Nelles, G.; Cheprakov, A.; Yasuda, A.; Müllen, K.; Wegner, G., Blue-green up-conversion: Noncoherent excitation by NIR light. *Angewandte Chemie - International Edition* **2007,** *46* (40), 7693-7696.
955. Bauer, R.; Liu, D.; Heyen, A. V.; De Schryver, F.; De Feyter, S.; Müllen, K., Polyphenylene dendrimers with pentafluorophenyl units: Synthesis and self-assembly. *Macromolecules* **2007,** *40* (14), 4753-4761.
956. Bauer, R. E.; Clark Jr, C. G.; Müllen, K., Precision host-guest chemistry of polyphenylene dendrimers. *New Journal of Chemistry* **2007,** *31* (7), 1275-1282.
957. Bell, T. D. M.; Stefan, A.; Lemaur, V.; Bernhardt, S.; Müllen, K.; Cornil, J.; Beljonne, D.; Hofkens, J.; Van der Auweraer, M.; De Schryver, F. C., Non-conjugated, phenyl assisted coupling in through bond electron transfer in a perylenemonoimide–triphenylamine system. *Photochemical and Photobiological Sciences* **2007,** *6* (4), 406-415.
958. Böhme, T.; Simpson, C. D.; Müllen, K.; Rabe, J. P., Current - Voltage characteristics of a homologous series of polycyclic aromatic hydrocarbons. *Chemistry - A European Journal* **2007,** *13* (26), 7349-7357.
959. Cañas-Ventura, M.; Xiao, W.; Aït-Mansour, K.; Ruffieux, P.; Fasel, R.; Müllen, K., Nanostructured template surfaces and specific endgroup functionalities for the guided self-assembly of supramolecular architectures. *EMPA Activities* **2007,** (2007), 7.
960. Cañas-Ventura, M. E.; Xiao, W.; Wasserfallen, D.; Müllen, K.; Brune, H.; Barth, J. V.; Fasel, R., Self-assembly of periodic bicomponent wires and ribbons. *Angewandte Chemie - International Edition* **2007,** *46* (11), 1814-1818.
961. Clark Jr, C. G.; Wenzel, R. J.; Andreitchenko, E. V.; Steffen, W.; Zenobi, R.; Müllen, K., Controlled MegaDalton assembly with locally stiff but globally flexible polyphenylene dendrimers. *Journal of the American Chemical Society* **2007,** *129* (11), 3292-3301.
962. Clark Jr, C. G.; Wenzel, R. J.; Andreitchenko, E. V.; Steffen, W.; Zenobi, R.; Müllen, K., Solvophobically-driven 3-D self-assembly of "exploded"-type polyphenylene dendrimers. *New Journal of Chemistry* **2007,** *31* (7), 1300-1306.

963. Cristadoro, A.; Lieser, G.; Räder, H. J.; Müllen, K., Field-force alignment of disc-type π systems. *ChemPhysChem* **2007,** *8* (4), 586-591.
964. Cristadoro, A.; Räder, H. J.; Müllen, K., Clustering of polycyclic aromatic hydrocarbons in matrix-assisted laser desorption/ionization and laser desorption mass spectrometry. *Rapid Communications in Mass Spectrometry* **2007,** *21* (16), 2621-2628.
965. Cui, G.; Hu, Y. S.; Zhi, L.; Wu, D.; Lieberwirth, I.; Maier, J.; Müllen, K., A one-step approach towards carbon-encapsulated hollow tin nanoparticles and their application in lithium batteries. *Small* **2007,** *3* (12), 2066-2069.
966. Cui, G.; Zhi, L.; Thomas, A.; Kolb, U.; Lieberwirth, I.; Müllen, K., One-dimensional porous carbon/platinum composites for nanoscale electrodes. *Angewandte Chemie - International Edition* **2007,** *46* (19), 3464-3467.
967. Cui, G.; Zhi, L.; Thomas, A.; Lieberwirth, I.; Kolb, U.; Müllen, K., A novel approach towards carbon-Ru electrodes with mesoporosity for supercapacitors. *ChemPhysChem* **2007,** *8* (7), 1013-1015.
968. Cui, G. L.; Zhou, X. H.; Zhi, L. J.; Thomas, A.; Mullen, K., Carbon/nanostructured Ru composites as electrodes for supercapacitors. *Xinxing Tan Cailiao/ New Carbon Materials* **2007,** *22* (4), 302-306.
969. De Luca, G.; Liscio, A.; Maccagnani, P.; Nolde, F.; Palermo, V.; Müllen, K.; Samori, P., Nucleation-governed reversible self-assembly of an organic semiconductor at surfaces: Long-range mass transport forming giant functional fibers. *Advanced Functional Materials* **2007,** *17* (18), 3791-3798.
970. Dierschke, F.; Müllen, K., Blue emission of a soluble poly(p-phenylene) with a cross-conjugated bisimidazole-based chromophore. *Macromolecular Chemistry and Physics* **2007,** *208* (1), 37-43.
971. Dou, X.; Yang, X.; Bodwell, G. J.; Wagner, M.; Enkelmann, V.; Mullen, K., Unexpected phenyl group rearrangement during an intramolecular scholl reaction leading to an alkoxy-substituted hexa-peri-hexabenzocoronene. *Organic Letters* **2007,** *9* (13), 2485-2488.
972. Edvinsson, T.; Li, C.; Pschirer, N.; Schöneboom, J.; Eickemeyer, F.; Sens, R.; Boschloo, G.; Herrmann, A.; Müllen, K.; Hagfeldt, A., Intramolecular charge-transfer tuning of perylenes: Spectroscopic features and performance in dye-sensitized solar cells. *Journal of Physical Chemistry C* **2007,** *111* (42), 15137-15140.
973. El Hamaoui, B.; Zhi, L.; Pisula, W.; Kolb, U.; Wu, J.; Müllen, K., Self-assembly of amphiphilic imidazolium-based hexa-peri-hexabenzo- coronenes into fibreous aggregates. *Chemical Communications* **2007,** (23), 2384-2386.
974. El Hamaoui, B.; Zhi, L.; Wu, J.; Li, J.; Lucas, N. T.; Tomović, Ž.; Kolb, U.; Müllen, K., Solid-state pyrolysis of polyphenylene-metal complexes: A facile approach toward carbon nanoparticles. *Advanced Functional Materials* **2007,** *17* (7), 1179-1187.
975. Feng, X.; Pisula, W.; Müllen, K., From helical to staggered stacking of zigzag nanographenes. *Journal of the American Chemical Society* **2007,** *129* (46), 14116-14117.
976. Feng, X.; Wu, J.; Ai, M.; Pisula, W.; Zhi, L.; Rabe, J. P.; Müllen, K., Triangle-shaped polycyclic aromatic hydrocarbons. *Angewandte Chemie - International Edition* **2007,** *46* (17), 3033-3036.
977. Fischer, D.; Klapper, M.; Dyllick Brenzinger, R.; Müllen, K., Self-crosslinking dispersions based on core-shell nanoparticles. *Journal of Macromolecular Science, Part A: Pure and Applied Chemistry* **2007,** *44* (2), 139-151.
978. Flors, C.; Oesterling, I.; Schnitzler, T.; Fron, E.; Schweitzer, G.; Sliwa, M.; Herrmann, A.; Van Der Auweraer, M.; De Schryver, F. C.; Müllen, K.; Hofkens, J., Energy and electron transfer in ethynylene bridged perylene diimide multichromophores. *Journal of Physical Chemistry C* **2007,** *111* (12), 4861-4870.
979. Fogel, Y.; Kastler, M.; Wang, Z.; Andrienko, D.; Bodwell, G. J.; Müllen, K., Electron-deficient N-heteroaromatic linkers for the elaboration of large, soluble polycyclic aromatic

hydrocarbons and their use in the synthesis of some very large transition metal complexes. *Journal of the American Chemical Society* **2007,** *129* (38), 11743-11749.
980. Fron, E.; Bell, T. D. M.; Van Vooren, A.; Schweitzer, G.; Cornil, J.; Beljonne, D.; Toele, P.; Jacob, J.; Müllen, K.; Hofkens, J.; Van Der Auweraer, M.; De Schryver, F. C., CT-CT annihilation in rigid perylene end-capped pentaphenylenes. *Journal of the American Chemical Society* **2007,** *129* (3), 610-619.
981. Fron, E.; Schweitzer, G.; Jacob, J.; Van Vooren, A.; Beljonne, D.; Müllen, K.; Hofkens, J.; Van Der Auweraer, M.; De Schryver, F. C., Singlet-singlet annihilation leading to a charge-transfer intermediate in chromophore-end-capped pentaphenylenes. *ChemPhysChem* **2007,** *8* (9), 1386-1393.
982. Geerts, Y.; Klarner, G.; Müllen, K., Hydrocarbon Oligomers. In *Electronic Materials: The Oligomer Approach*, 2007; pp 1-103.
983. Grenier, C. R. G.; Pisula, W.; Joncheray, T. J.; Müllen, K.; Reynolds, J. R., Regiosymmetric poly(dialkylphenylenedioxythiophene)s: Electron-rich, stackable π-conjugated nanoribbons. *Angewandte Chemie - International Edition* **2007,** *46* (5), 714-717.
984. Grimsdale, A. C.; Müllen, K., Oligomers and polymers based on bridged phenylenes as electronic materials. *Macromolecular Rapid Communications* **2007,** *28* (17), 1676-1702.
985. Kappaun, S.; Sax, S.; Eder, S.; Möller, K. C.; Waich, K.; Niedermair, F.; Saf, R.; Mereiter, K.; Jacob, J.; Müllen, K.; List, E. J. W.; Slugovc, C., 8-quinolinolates as ligands for luminescent cyclometalated iridium complexes. *Chemistry of Materials* **2007,** *19* (6), 1209-1211.
986. Kastler, M.; Pisula, W.; Davies, R. J.; Gorelik, T.; Kolb, U.; Müllen, K., Nanostructuring with a crosslinkable discotic material. *Small* **2007,** *3* (8), 1438-1444.
987. Khrenov, V.; Schwager, F.; Klapper, M.; Koch, M.; Müllen, K., Compatibilization of inorganic particles for polymeric nanocomposites. Optimization of the size and the compatibility of ZnO particles. *Polymer Bulletin* **2007,** *58* (5-6), 799-807.
988. Klapper, M.; Nenov, S.; Diesing, T.; Müllen, K., Morphology control in metallocene polymerization; organic supports vs. non-aqueous emulsion polymerization. *Macromolecular Symposia* **2007,** *260*, 90-97.
989. Klymchenko, A. S.; Furukawa, S.; Müllen, K.; Van Der Auweraer, M.; De Feyter, S., Supramolecular hydrophobic-hydrophilic nanopatterns at electrified interfaces. *Nano Letters* **2007,** *7* (3), 791-795.
990. Knoll, W.; Cameron, P.; Caminade, A. M.; Feng, C. L.; Kim, D. H.; Kreiter, M.; Majoral, J. P.; Müllen, K.; Rocholz, H.; Shumaker-Parry, J.; Steinhart, M.; Zhong, X. In *Nanoscopic building blocks from polymers, metals, and semiconductors*, Proceedings of SPIE - The International Society for Optical Engineering, 2007.
991. Koynov, K.; Mihov, G.; Mondeshki, M.; Moon, C.; Spiess, H. W.; Müllen, K.; Butt, H. J.; Floudas, G., Diffusion and conformation of peptide-functionalized polyphenylene dendrimers studied by fluorescence correlation and 13C NMR spectroscopy. *Biomacromolecules* **2007,** *8* (5), 1745-1750.
992. Krasteva, N.; Fogel, Y.; Bauer, R. E.; Müllen, K.; Joseph, Y.; Matsuzawa, N.; Yasuda, A.; Vossmeyer, T., Vapor sorption and electrical response of Au-nanoparticle-dendrimer composites. *Advanced Functional Materials* **2007,** *17* (6), 881-888.
993. Laquai, F.; Mishra, A. K.; Ribas, M. R.; Petrozza, A.; Jacob, J.; Akcelrud, L.; Müllen, K.; Friend, R. H.; Wegner, G., Photophysical properties of a series of poly(ladder-type phenylene)s. *Advanced Functional Materials* **2007,** *17* (16), 3231-3240.
994. Li, J.; Kastler, M.; Pisula, W.; Robertson, J. W. F.; Wasserfallen, D.; Grimsdale, A. C.; Wu, J.; Müllen, K., Organic bulk-heterojunction photovoltaics based on alkyl substituted discotics. *Advanced Functional Materials* **2007,** *17* (14), 2528-2533.
995. Luszczynska, B.; Dobruchowska, E.; Glowacki, I.; Ulanski, J.; Ego, C. H.; Grimsdale, A. C.; Müllen, K., Influence of physical and chemical modification on charge carrier trapping and

recombination processes in polyfluorenes. *Journal of Nanostructured Polymers and Nanocomposites* **2007,** *3* (4), 125-135.
996. Margineanu, A.; Hotta, J. I.; Van Der Auweraer, M.; Ameloot, M.; Stefan, A.; Beljonne, D.; Engelborghs, Y.; Herrmann, A.; Müllen, K.; De Schryver, F. C.; Hofkens, J., Visualization of membrane rafts using a perylene monoimide derivative and fluorescence lifetime imaging. *Biophysical Journal* **2007,** *93* (8), 2877-2891.
997. Melnikov, S. M.; Yeow, E. K. L.; Uji-i, H.; Cotlet, M.; Müllen, K.; De Schryver, F. C.; Enderlein, J.; Hofkens, J., Origin of simultaneous donor-acceptor emission in single molecules of peryleneimide-terrylenediimide labeled polyphenylene dendrimers. *Journal of Physical Chemistry B* **2007,** *111* (4), 708-719.
998. Métivier, R.; Nolde, F.; Müllen, K.; Basché, T., Electronic excitation energy transfer between two single molecules embedded in a polymer host. *Physical Review Letters* **2007,** *98* (4).
999. Mishra, A. K.; Jacob, J.; Müllen, K., Synthesis of aminocarbazole-anthraquinone fused dyes and polymers. *Dyes and Pigments* **2007,** *75* (1), 1-10.
1000. Miskiewicz, P.; Rybak, A.; Jung, J.; Glowacki, I.; Maniukiewicz, W.; Tracz, A.; Pfleger, J.; Ulanski, J.; Müllen, K., One-step method of producing uniaxially oriented layers of organic discotic molecules for field-effect transistors. *Nonlinear Optics Quantum Optics* **2007,** *37* (1-3), 207-218.
1001. Muellen, K.; Smith Jr, D. W.; Kumacheva, E., Change in editorship. *Polymer Bulletin* **2007,** *59* (3), 299-302.
1002. Müllen, K.; Klapper, M.; Iván, B., Polymer architecture - From structure to functional control. *Macromolecular Chemistry and Physics* **2007,** *208* (13), 1323.
1003. Müllen, K.; Klarner, G., *Electronic Materials: The Oligomer Approach*. 2007; p 1-599.
1004. Müller, A. M.; Avlasevich, Y. S.; Schoeller, W. W.; Müllen, K.; Bardeen, C. J., Exciton fission and fusion in bis(tetracene) molecules with different covalent linker structures. *Journal of the American Chemical Society* **2007,** *129* (46), 14240-14250.
1005. Müller, K.; Klapper, M.; Müllen, K., Preparation of high molecular weight polyurethane particles by nonaqueous emulsion polyaddition. *Colloid and Polymer Science* **2007,** *285* (10), 1157-1161.
1006. Müller, K.; Klapper, M.; Müllen, K., Polyester nanoparticles by non-aqueous emulsion polycondensation. *Journal of Polymer Science, Part A: Polymer Chemistry* **2007,** *45* (6), 1101-1108.
1007. Müller, K.; Park, M. K.; Klapper, M.; Knoll, W.; Müllen, K., Synthesis and layer-by-layer deposition of spherical poly(3,4- ethylenedioxythiophene) nanoparticles - Toward fast switching times between reduced and oxidized states. *Macromolecular Chemistry and Physics* **2007,** *208* (13), 1394-1401.
1008. Müller, S.; Müllen, K., Expanding benzene to giant graphenes: Towards molecular devices. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* **2007,** *365* (1855), 1453-1472.
1009. Nabetani, Y.; Yoshikawa, H.; Grimsdale, A. C.; Müllen, K.; Masuhara, H., Effects of optical trapping and liquid surface deformation on the laser microdeposition of a polymer assembly in solution. *Langmuir* **2007,** *23* (12), 6725-6729.
1010. Nabetani, Y.; Yoshikawa, H.; Grimsdale, A. C.; Müllen, K.; Masuhara, H., Laser deposition of polymer micro- and nanoassembly from solution using focused near-infrared laser beam. *Japanese Journal of Applied Physics, Part 1: Regular Papers and Short Notes and Review Papers* **2007,** *46* (1), 449-454.
1011. Nenov, S.; Clark Jr, C. G.; Klapper, M.; Müllen, K., Metallocene-catalyzed polymerization in nonaqueous fluorous emulsion. *Macromolecular Chemistry and Physics* **2007,** *208* (13), 1362-1369.
1012. Oesterling, I.; Müllen, K., Multichromophoric polyphenylene dendrimers: Toward brilliant light emitters with an increased number of fluorophores. *Journal of the American Chemical Society* **2007,** *129* (15), 4595-4605.

1013. Palermo, V.; Liscio, A.; Gentilini, D.; Nolde, F.; Müllen, K.; Samori, P., Scanning probe microscopy investigation of self-organized perylenetetracarboxdiimide nanostructures at surfaces: Structural and electronic properties. *Small* **2007,** *3* (1), 161-167.
1014. Palermo, V.; Liscio, A.; Talarico, A. M.; Zhi, L.; Müllen, K.; Samorì, P., Unconventional nanotubes self-assembled in alumina channels: Morphology and surface potential of isolated nanostructures at surfaces. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* **2007,** *365* (1855), 1577-1588.
1015. Pisuia, W.; Tomović, Ž.; Watson, M. D.; Müllen, K.; Kussmann, J.; Ochsenfeld, C.; Metzroth, T.; Gauss, J., Helical packing of discotic hexaphenyl hexa-peri-hexabenzocoronenes: Theory and experiment. *Journal of Physical Chemistry B* **2007,** *111* (26), 7481-7487.
1016. Pisula, W.; Kastler, M.; El Hamaoui, B.; García-Gutiérrez, M. C.; Davies, R. J.; Riekel, C.; Müllen, K., Dendritic morphology in homeotropically aligned discotic films. *ChemPhysChem* **2007,** *8* (7), 1025-1028.
1017. Pisula, W.; Kastler, M.; Yang, C.; Enkelmann, V.; Müllen, K., Columnar mesophase formation of cyclohexa-m-phenylene-based macrocycles. *Chemistry - An Asian Journal* **2007,** *2* (1), 51-56.
1018. Rajadurai, M. S.; Shifrina, Z. B.; Kuchkina, N. V.; Rusanov, A. L.; Müllen, K., Rigid aromatic dendrimers. *Russian Chemical Reviews* **2007,** *76* (8), 767-783.
1019. Ruffieux, P.; Palotás, K.; Gröning, O.; Wasserfallen, D.; Müllen, K.; Hofer, W. A.; Gröning, P.; Fasel, R., Site- and orientation-selective anchoring of a prototypical molecular building block. *Journal of the American Chemical Society* **2007,** *129* (16), 5007-5011.
1020. Rusanov, A. L.; Komarova, L. G.; Prigozhina, M. P.; Askadskii, A. A.; Margalitadze, Y. N.; Likhachev, D. Y.; Araujo, S.; Muellen, K., Poly(imides) containing hexoxy side groups. *Polymer Science - Series B* **2007,** *49* (5-6), 128-130.
1021. Sliwa, M.; Flors, C.; Oesterling, I.; Hotta, J.; Müllen, K.; De Schryver, F. C.; Hofkens, J., Single perylene diimide dendrimers as single-photon sources. *Journal of Physics Condensed Matter* **2007,** *19* (44).
1022. Sonar, P.; Grimsdale, A. C.; Heeney, M.; Shkunov, M.; McCulloch, I.; Müllen, K., A study of the effects metal residues in poly(9,9-dioctylfluorene) have on field-effect transistor device characteristics. *Synthetic Metals* **2007,** *157* (21), 872-875.
1023. Sukumar, P. R.; Wu, W.; Markova, D.; Ünsal, Ö.; Klapper, M.; Müllen, K., Functionalized poly(benzimidazole)s as membrane materials for fuel cells. *Macromolecular Chemistry and Physics* **2007,** *208* (19-20), 2258-2267.
1024. Surin, M.; Sonar, P.; Grimsdale, A. C.; Müllen, K.; De Feyter, S.; Habuchi, S.; Sarzi, S.; Braeken, E.; Ver Heyen, A.; Van Der Auweraer, M.; De Schryver, F. C.; Cavallini, M.; Moulin, J. F.; Biscarini, F.; Femoni, C.; Lazzaroni, R.; Leclère, P., Solid-state assemblies and optical properties of conjugated oligomers combining fluorene and thiophene units. *Journal of Materials Chemistry* **2007,** *17* (8), 728-735.
1025. Takase, M.; Enkelmann, V.; Sebastiani, D.; Baumgarten, M.; Müllen, K., Annularly fused hexapyrrolohexaazacoronenes: An extended π system with multiple interior nitrogen atoms displays stable oxidation states. *Angewandte Chemie - International Edition* **2007,** *46* (29), 5524-5527.
1026. Tang, T.; Herrmann, A.; Peneva, K.; Müllen, K.; Webber, S. E., Energy transfer in molecular layer-by-layer films of water-soluble perylene diimides. *Langmuir* **2007,** *23* (8), 4623-4628.
1027. Tang, T.; Peneva, K.; Müllen, K.; Webber, S. E., Photophysics of water soluble perylene diimides in surfactant solutions. *Journal of Physical Chemistry A* **2007,** *111* (42), 10609-10614.
1028. Wu, D.; Zhi, L.; Bodwell, G. J.; Cui, G.; Tsao, N.; Müllen, K., Self-assembly of positively charged discotic PAHs: From nanofibers to nanotubes. *Angewandte Chemie - International Edition* **2007,** *46* (28), 5417-5420.

1029. Wu, J.; Pisula, W.; Müllen, K., Graphenes as potential material for electronics. *Chemical Reviews* **2007,** *107* (3), 718-747.
1030. Yin, M.; Bauer, R.; Klapper, M.; Müllen, K., Amphiphilic multicore-shell particles based on polyphenylene dendrimers. *Macromolecular Chemistry and Physics* **2007,** *208* (15), 1646-1656.
1031. Zhang, H.; Müllen, K.; De Feyter, S., Pulsed-force-mode AFM studies of polyphenylene dendrimers on self-assembled monolayers. *Journal of Physical Chemistry C* **2007,** *111* (23), 8142-8144.
1032. Zhang, M.; Tsao, H. N.; Pisula, W.; Yang, C.; Mishra, A. K.; Müllen, K., Field-effect transistors based on a benzothiadiazole-cyclopentadithiophene copolymer. *Journal of the American Chemical Society* **2007,** *129* (12), 3472-3473.
1033. Zhang, M.; Yang, C.; Mishra, A. K.; Pisula, W.; Zhou, G.; Schmaltz, B.; Baumgarten, M.; Müllen, K., Conjugated alternating copolymers containing both donor and acceptor moieties in the main chain. *Chemical Communications* **2007,** (17), 1704-1706.
1034. Zhi, L.; Wang, J.; Cui, G.; Kastler, M.; Schmaltz, B.; Kolb, U.; Jonas, U.; Müllen, K., From well-defined carbon-rich precursors to monodisperse carbon particles with hierarchic structures. *Advanced Materials* **2007,** *19* (14), 1849-1853.
1035. Zhou, G.; Baumgarten, M.; Müllen, K., Arylamine-substituted oligo(ladder-type pentaphenylene)s: Electronic communication between bridged redox centers. *Journal of the American Chemical Society* **2007,** *129* (40), 12211-12221.
1036. Ai, M.; Groeper, S.; Zhuang, W.; Dou, X.; Feng, X.; Müllen, K.; Rabe, J. P., Optical switching studies of an azobenzene rigidly linked to a hexa-peri-hexabenzocoronene derivative in solution and at a solid-liquid interface. *Applied Physics A: Materials Science and Processing* **2008,** *93* (2), 277-283.
1037. Andreitchenko, E. V.; Bauer, R. E.; Kreutz, C.; Baumgarten, M.; Bargon, J.; Müllen, K., Size and shape variation of polyphenylene dendrimers through the heterogeneous hydrogenation of embedded triple bonds. *Macromolecules* **2008,** *41* (3), 548-558.
1038. Bardeen, C. J.; Spano, F. C.; Ahn, T. S.; Muller, A. M.; Avlasevich, Y. S.; Schoeller, W. W.; Müllen, K. In *Time-resolved spectroscopy of exciton dynamics and fission in organic molecular crystalline materials*, Optics InfoBase Conference Papers, 2008.
1039. Bröker, B.; Blum, R. P.; Frisch, J.; Vollmer, A.; Hofmann, O. T.; Rieger, R.; Müllen, K.; Rabe, J. P.; Zojer, E.; Koch, N., Gold work function reduction by 2.2 eV with an air-stable molecular donor layer. *Applied Physics Letters* **2008,** *93* (24).
1040. Cristadoro, A.; Ai, M.; Räder, H. J.; Rabe, J. P.; Müllen, K., Electrical field-induced alignment of nonpolar hexabenzocoronene molecules into columnar structures on highly oriented pyrolitic graphite investigated by STM and SFM. *Journal of Physical Chemistry C* **2008,** *112* (14), 5563-5566.
1041. Cristadoro, A.; Räder, H. J.; Müllen, K., Quantitative analyses of fullerene and polycyclic aromatic hydrocarbon mixtures via solvent-free matrix-assisted laser desorption/ionization mass spectrometry. *Rapid Communications in Mass Spectrometry* **2008,** *22* (16), 2463-2470.
1042. Cui, G.; Gu, L.; Zhi, L.; Kaskhedikar, N.; Van Aken, P. A.; Müllen, K.; Maier, J., A germanium-carbon nanocomposite material for lithium batteries. *Advanced Materials* **2008,** *20* (16), 3079-3083.
1043. Dasgupta, A.; Klapper, M.; Müllen, K., Controlled polymerization of N-trimethylsilyl methacrylamide: A new polymethacrylamide precursor. *Polymer Bulletin* **2008,** *60* (2-3), 199-210.
1044. De Luca, G.; Liscio, A.; Nolde, F.; Scolaro, L. M.; Palermo, V.; Müllen, K.; Samorì, P., Self-assembly of discotic molecules into mesoscopic crystals by solvent-vapour annealing. *Soft Matter* **2008,** *4* (10), 2064-2070.
1045. Dou, X.; Pisula, W.; Wu, J.; Bodwell, G. J.; Müllen, K., Reinforced self-assembly of hexa-peri-hexabenzocoronenes by hydrogen bonds: From microscopic aggregates to macroscopic fluorescent organogels. *Chemistry - A European Journal* **2008,** *14* (1), 240-249.

1046. Elmahdy, M. M.; Dou, X.; Mondeshki, M.; Floudas, G.; Butt, H. J.; Spiess, H. W.; Müllen, K., Self-assembly, molecular dynamics, and kinetics of structure formation in dipole-functionalized discotic liquid crystals. *Journal of the American Chemical Society* **2008,** *130* (15), 5311-5319.
1047. Elmahdy, M. M.; Floudas, G.; Kastler, M.; Müllen, K., Molecular dynamics of branched hexaalkyl hexa-peri-hexabenzocoronenes. *Journal of Physics Condensed Matter* **2008,** *20* (24).
1048. Elmahdy, M. M.; Floudas, G.; Mondeshki, M.; Spiess, H. W.; Dou, X.; Müllen, K., Origin of the complex molecular dynamics in functionalized discotic liquid crystals. *Physical Review Letters* **2008,** *100* (10).
1049. Feng, X.; Chandrasekhar, N.; Su, H.; Müllen, K., Ballistic electron microscopy of nanographene layers. *Nano Letters* **2008,** *8* (12), 4259-4264.
1050. Feng, X.; Liu, M.; Pisula, W.; Takase, M.; Li, J.; Müllen, K., Supramolecular organization and photovoltaics of triangle-shaped discotic graphenes with swallow-tailed alkyl substituent. *Advanced Materials* **2008,** *20* (14), 2684-2689.
1051. Feng, X.; Pisula, W.; Ai, M.; Gröper, S.; Rabe, J. P.; Müllen, K., Unusual symmetry effect on hexa-peri-hexabenzocoronene. *Chemistry of Materials* **2008,** *20* (4), 1191-1193.
1052. Feng, X.; Pisula, W.; Takase, M.; Dou, X.; Enkelmann, V.; Wagner, M.; Ding, N.; Müllen, K., Synthesis, helical organization, and fibrous formation of C3 symmetric methoxy-substituted discotic hexa-peri-hexabenzocoronene. *Chemistry of Materials* **2008,** *20* (9), 2872-2874.
1053. Feng, X.; Pisula, W.; Zhi, L.; Takase, M.; Müllen, K., Controlling the columnar orientation of C3-symmetric "superbenzenes" through alternating polar/apolar substitutents. *Angewandte Chemie - International Edition* **2008,** *47* (9), 1703-1706.
1054. Figueira-Duarte, T. M.; Simon, S. C.; Wagner, M.; Druzhinin, S. I.; Zachariasse, K. A.; Müllen, K., Polypyrene dendrimers. *Angewandte Chemie - International Edition* **2008,** *47* (52), 10175-10178.
1055. Finlayson, C. E.; Friend, R. H.; Otten, M. B. J.; Schwartz, E.; Cornelissen, J. J. L. M.; Nolte, R. J. M.; Rowan, A. E.; Samorì, P.; Palermo, V.; Liscio, A.; Peneva, K.; Müllen, K.; Trapani, S.; Beljonne, D., Electronic transport properties of ensembles of perylene-substituted poly-isocyanopeptide arrays. *Advanced Functional Materials* **2008,** *18* (24), 3947-3955.
1056. Finlayson, C. E.; Kim, J. S.; Liddell, M. J.; Friend, R. H.; Jung, S. H.; Grimsdale, A. C.; Müllen, K., Exciplex emission from electroluminescent ladder-type pentaphenylene oligomers bearing both electron- and hole-accepting substituents. *Journal of Chemical Physics* **2008,** *128* (4).
1057. Forker, R.; Kasemann, D.; Dienel, T.; Wagner, C.; Franke, R.; Müllen, K.; Fritz, T., Electronic decoupling of aromatic molecules from a metal by an atomically thin organic spacer. *Advanced Materials* **2008,** *20* (23), 4450-4454.
1058. Fron, E.; Pilot, R.; Schweitzer, G.; Qu, J.; Herrmann, A.; Müllen, K.; Hofkens, J.; Van Der Auweraer, M.; De Schryver, F. C., Photoinduced electron-transfer in perylenediimide triphenylamine-based dendrimers: Single photon timing and femtosecond transient absorption spectroscopy. *Photochemical and Photobiological Sciences* **2008,** *7* (5), 597-604.
1059. Fron, E.; Schweitzer, G.; Jacob, J.; Müllen, K.; Van Der Auweraer, M.; De Schryver, F. C., Multi-pulse excitation reveals a novel excited state pathway in a peryleneimide-pentaphenylene dyad. *Polish Journal of Chemistry* **2008,** *82* (4), 701-713.
1060. Fron, E.; Schweitzer, G.; Osswald, P.; Würthner, F.; Marsal, P.; Beljonne, D.; Müllen, K.; De Schryver, F. C.; Van Der Auweraer, M., Photophysical study of bay substituted perylenediimides. *Photochemical and Photobiological Sciences* **2008,** *7* (12), 1509-1521.
1061. Gao, P.; Beckmann, D.; Tsao, H. N.; Feng, X.; Enkelmann, V.; Pisula, W.; Müllen, K., Benzo[1,2-b:4,5-b']bis[b]benzothiophene as solution processible organic semiconductor for field-effect transistors. *Chemical Communications* **2008,** (13), 1548-1550.
1062. Gao, P.; Feng, X.; Yang, X.; Enkelmann, V.; Baumgarten, M.; Müllen, K., Conjugated

ladder-type heteroacenes bearing pyrrole and thiophene ring units: Facile synthesis and characterization. *Journal of Organic Chemistry* **2008,** *73* (23), 9207-9213.
1063. Glowatzki, H.; Bröker, B.; Blum, R. P.; Hofmann, O. T.; Vollmer, A.; Rieger, R.; Mullen, K.; Zojer, E.; Rabe, J. P.; Koch, N., "Soft" metallic contact to isolated C60 molecules. *Nano Letters* **2008,** *8* (11), 3825-3829.
1064. Glowatzki, H.; Gavrila, G. N.; Seifert, S.; Johnson, R. L.; Räder, J.; Müllen, K.; Zahn, D. R. T.; Rabe, J. P.; Koch, N., Hexa-pm-hexabenzocoronene on Ag(111): Monolayer/multilayer transition of molecular orientation and electronic structure. *Journal of Physical Chemistry C* **2008,** *112* (5), 1570-1574.
1065. Grimsdale, A. C.; Müllen, K., Bridged polyphenylenes - From polyfluorenes to ladder polymers. In *Advances in Polymer Science*, 2008; Vol. 212, pp 1-48.
1066. Haberecht, M. C.; Schnorr, J. M.; Andreitchenko, E. V.; Clark Jr, C. G.; Wagner, M.; Müllen, K., Tris(2,2'-bipyridyl)ruthenium(II) with branched polyphenylene shells: A family of charged shape-persistent nanoparticles. *Angewandte Chemie - International Edition* **2008,** *47* (9), 1662-1667.
1067. Hahn, F.; Müllen, K.; Schepers, U., 2-Iminothiolane as a useful coupling reagent for polyamine solid-phase synthesis. *Synlett* **2008,** (18), 2785-2790.
1068. Haschick, R.; Mueller, K.; Klapper, M.; Muellen, K., Nonaqueous emulsions as a tool for particles with unique core-shell topologies. *Macromolecules* **2008,** *41* (14), 5077-5081.
1069. He, B.; Tian, H.; Geng, Y.; Wang, F.; Mllen, K., Facile synthesis of 9,10-diarylphenanthrenes and poly(9,10- diarylphenanthrene)s. *Organic Letters* **2008,** *10* (5), 773-776.
1070. Hinze, G.; Ḿtivier, R.; Nolde, F.; Müllen, K.; Basch́, T., Intramolecular electronic excitation energy transfer in donoracceptor dyads studied by time and frequency resolved single molecule spectroscopy. *Journal of Chemical Physics* **2008,** *128* (12).
1071. Jaiser, F.; Neher, D.; Meisel, A.; Nothofer, H. G.; Miteva, T.; Herrmann, A.; Müllen, K.; Scherf, U., Energy and charge transfer in blends of dendronized perylenes with polyfluorene. *Journal of Chemical Physics* **2008,** *129* (11).
1072. Jung, C.; Kirstein, J.; Platschek, B.; Bein, T.; Budde, M.; Frank, I.; Müllen, K.; Michaelis, J.; Bräuchle, C., Diffusion of oriented single molecules with switchable mobility in networks of long unidimensional nanochannels. *Journal of the American Chemical Society* **2008,** *130* (5), 1638-1648.
1073. Kappaun, S.; Horner, S.; Kelterer, A. M.; Waich, K.; Grasse, F.; Graf, M.; Romaner, L.; Niedermair, F.; Müllen, K.; Grimsdale, A. C.; Saf, R.; List, E. J. W.; Zojer, E.; Slugovc, C., The effect of protonation on the optical properties of conjugated fluorene-pyridine copolymersa. *Macromolecular Chemistry and Physics* **2008,** *209* (20), 2122-2134.
1074. Kawano, S. I.; Yang, C.; Ribas, M.; Baluschev, S.; Baumgarten, M.; Müllen, K., Blue-emitting poly(2,7-pyrenylene)s: Synthesis and optical properties. *Macromolecules* **2008,** *41* (21), 7933-7937.
1075. Klapper, M.; Clark Jr, C. G.; Müllen, K., Application-directed syntheses of surface-functionalized organic and inorganic nanoparticles. *Polymer International* **2008,** *57* (2), 181-202.
1076. Klapper, M.; Nenov, S.; Haschick, R.; Müller, K.; Müllen, K., Oil-in-Oil emulsions: A unique tool for the formation of polymer nanoparticles. *Accounts of Chemical Research* **2008,** *41* (9), 1190-1201.
1077. Klymchenko, A. S.; Furukawa, S.; Auweraer, M. V. D.; Müllen, K.; Feyter, S. D., Directing the assembly of charged organic molecules by a hydrcophilic-hydrophobic nanostructured monolayer at electrified interfaces. *Nano Letters* **2008,** *8* (4), 1163-1168.
1078. Laquai, F.; Mishra, A. K.; Müllen, K.; Friend, R. H., Amplified spontaneous emission of poly (ladder-type phenylene)s - The influence of photophysical properties on ASE thresholds. *Advanced Functional Materials* **2008,** *18* (20), 3265-3275.
1079. Lei, S.; Tahara, K.; Feng, X.; Furukawa, S.; De Schryver, F. C.; Müllen, K.; Tobe, Y.; De Feyter, S., Molecular clusters in two-dimensional surface-confined nanoporous molecular networks:

Structure, rigidity, and dynamics. *Journal of the American Chemical Society* **2008,** *130* (22), 7119-7129.
1080. Li, C.; Yum, J. H.; Moon, S. J.; Herrmann, A.; Eickemeyer, F.; Pschirer, N. G.; Erk, P.; Schöneboom, J.; Müllen, K.; Grätzel, M.; Nazeeruddin, M. K., An improved perylene sensitizer for solar cell applications. *ChemSusChem* **2008,** *1* (7), 615-618.
1081. Liscio, A.; De Luca, G.; Nolde, F.; Palermo, V.; Müllen, K.; Samorì, P., Photovoltaic charge generation visualized at the nanoscale: A proof of principle. *Journal of the American Chemical Society* **2008,** *130* (3), 780-781.
1082. Liscio, A.; Palermo, V.; Müllen, K.; Samorì, P., Tip - Sample interactions in Kelvin probe force microscopy: Quantitative measurement of the local surface potential. *Journal of Physical Chemistry C* **2008,** *112* (44), 17368-17377.
1083. Liu, Z.; Li, C.; Wagner, M.; Avlasevich, Y.; Herrmann, A.; Müllen, K., Amino-substituted rylene dicarboximides and their quinoidal charge delocalization after deprotonation. *Chemical Communications* **2008,** (40), 5028-5030.
1084. Margineanu, A.; Hotta, J. I.; Vallée, R. A. L.; Van Der Auweraer, M.; Ameloot, M.; Stefan, A.; Beljonne, D.; Engelborghs, Y.; Herrmann, A.; Mullen, K.; De Schryver, F. C.; Hofkens, J., Visualization of membrane rafts using a perylene monoimide derivative and fluorescence lifetime imaging (Biophysical Journal (2007) 93, (2877-2891)). *Biophysical Journal* **2008,** *94* (2), 715.
1085. Markova, D.; Kumar, A.; Müllen, K.; Klapper, M. In *Poly(vinylbenzylphosphonic acid)-based proton conductors as polymer electrolyte membranes for fuel cells applications*, ACS National Meeting Book of Abstracts, 2008.
1086. Markovu, D.; Kumar, A.; Müllen, K.; Klupper, M. In *Poly(vinylbenzylphosphonic acid)-based proton conductors as polymer electrolyte membranes for fuel cells applications*, American Chemical Society, Polymer Preprints, Division of Polymer Chemistry, 2008; pp 556-557.
1087. Müllen, K., Organic Chemistry and the Synthesis of Weil-Defined Polymers. In *Materials Science and Technology: A Comprehensive Treatment*, 2008; pp 1-9.
1088. Müllen, K., New year greetings from the president. *Nachrichten aus der Chemie* **2008,** *56* (1), 3.
1089. Müllen, K.; Koch, W., How satisfied are you with us? *Nachrichten aus der Chemie* **2008,** *56* (9), 861.
1090. Müllen, K.; Rabe, J. P., Nanographenes as active components of single-molecule electronics and how a scanning tunneling microscope puts them to work. *Accounts of Chemical Research* **2008,** *41* (4), 511-520.
1091. Müllen, K.; Swager, T. M., Advanced polymer design and synthesis. *Accounts of Chemical Research* **2008,** *41* (9), 1085.
1092. Núñez, E.; Clark Jr, C. G.; Cheng, W.; Best, A.; Floudas, G.; Semenov, A. N.; Fytas, G.; Mullen, K., Thermodynamic, structural, and nanomechanical properties of a fluorous biphasic material. *Journal of Physical Chemistry B* **2008,** *112* (21), 6542-6549.
1093. Ooi, Z. E.; Tam, T. L.; Shin, R. Y. C.; Chen, Z. K.; Kietzke, T.; Sellinger, A.; Baumgarten, M.; Mullen, K.; DeMello, J. C., Solution processable bulk-heterojunction solar cells using a small molecule acceptor. *Journal of Materials Chemistry* **2008,** *18* (39), 4619-4622.
1094. Palermo, V.; Otten, M. B. J.; Liscio, A.; Schwartz, E.; De Witte, P. A. J.; Castriciano, M. A.; Wienk, M. M.; Nolde, F.; De Luca, G.; Cornelissen, J. J. L. M.; Janssen, R. A. J.; Müllen, K.; Rowan, A. E.; Nolte, R. J. M.; Samori, P., The relationship between nanoscale architecture and function in photovoltaic multichromophoric arrays as visualized by kelvin probe force microscopy. *Journal of the American Chemical Society* **2008,** *130* (44), 14605-14614.
1095. Peneva, K.; Mihov, G.; Herrmann, A.; Zarrabi, N.; Börsch, M.; Duncan, T. M.; Müllen, K., Exploiting the nitrilotriacetic acid moiety for biolabeling with ultrastable perylene dyes. *Journal of the American Chemical Society* **2008,** *130* (16), 5398-5399.
1096. Peneva, K.; Mihov, G.; Nolde, F.; Rocha, S.; Hotta, J. I.; Braeckmans, K.; Hofkens, J.;

Uji-i, H.; Herrmann, A.; Müllen, K., Water-soluble monofunctional perylene and terrylene dyes: Powerful labels for single-enzyme tracking. *Angewandte Chemie - International Edition* **2008,** *47* (18), 3372-3375.
1097. Piot, L.; Marie, C.; Feng, X.; Müllen, K.; Fichou, D., Hierarchical self-assembly of edge-on nanocolumnar superstructures of large disc-like molecules. *Advanced Materials* **2008,** *20* (20), 3854-3858.
1098. Qin, T.; Zhou, G.; Scheiber, H.; Bauer, R. E.; Baumgarten, M.; Anson, C. E.; List, E. J. W.; Müllen, K., Polytriphenylene dendrimers: A unique design for blue-light-emitting materials. *Angewandte Chemie - International Edition* **2008,** *47* (43), 8292-8296.
1099. Ren, T.; Mandal, P. K.; Erker, W.; Liu, Z.; Aviasevich, Y.; Puhl, L.; Mullen, K.; Basché, T., A simple and versatile route to stable quantum dot-dye hybrids in nonaqueous and aqueous solutions. *Journal of the American Chemical Society* **2008,** *130* (51), 17242-17243.
1100. Rieger, R.; Kastler, M.; Enkelmann, V.; Müllen, K., Entry to coronene chemistry - Making large electron donors and acceptors. *Chemistry - A European Journal* **2008,** *14* (21), 6322-6325.
1101. Rueda, A.; Stemmler, M.; Bauer, R.; Fogel, Y.; Müllen, K.; Kreiter, M., Localized plasmons seen by propagating surface plasmons: Unique determination of their dielectric response. *Journal of Physical Chemistry C* **2008,** *112* (38), 14801-14811.
1102. Rueda, A.; Stemmler, M.; Bauer, R.; Müllen, K.; Fogel, Y.; Kreiter, M., Optical resonances of gold nanoparticles on a gold surface: Quantitative correlation of geometry and resonance wavelength. *New Journal of Physics* **2008,** *10*.
1103. Stelzig, S. H.; Klapper, M.; Müllen, K., A simple and efficient route to transparent nanocomposites. *Advanced Materials* **2008,** *20* (5), 929-932.
1104. Treier, M.; Ruffieux, P.; Schillinger, R.; Greber, T.; Müllen, K.; Fasel, R., Living on the edge: A nanographene molecule adsorbed across gold step edges. *Surface Science* **2008,** *602* (13), L84-L88.
1105. Tsao, H. N.; Pisula, W.; Liu, Z.; Osikowicz, W.; Salaneck, W. R.; Müllen, K., From ambi- To unipolar behavior in discotic dye field-effect transistors. *Advanced Materials* **2008,** *20* (14), 2715-2719.
1106. Tsao, H. N.; Räder, H. J.; Pisula, W.; Rouhanipour, A.; Müllen, K., Novel organic semiconductors and processing techniques for organic field-effect transistors. *Physica Status Solidi (A) Applications and Materials Science* **2008,** *205* (3), 421-429.
1107. Tyutyulkov, N.; Drebov, N.; Müllen, K.; Staykov, A.; Dietz, F., Energy spectra and electric and magnetic properties of 1D stacks of conjugated π-electron systems with defect surface states. I. π systems with tamm surface states. *Journal of Physical Chemistry C* **2008,** *112* (16), 6232-6239.
1108. Ver Heyen, A. J. J.; Buron, C. C.; Tianshi, Q.; Bauer, R.; Jonas, A. M.; Müllen, K.; De Schryver, F. C.; De Feyter, S., Guiding the self-assembly of a second-generation polyphenylene dendrimer into weil-defined patterns. *Small* **2008,** *4* (8), 1160-1167.
1109. Wang, X.; Zhi, L.; Müllen, K., Transparent, conductive graphene electrodes for dye-sensitized solar cells. *Nano Letters* **2008,** *8* (1), 323-327.
1110. Wang, X.; Zhi, L.; Tsao, N.; Tomović, Ž.; Li, J.; Müllen, K., Transparent carbon films as electrodes in organic solar cells. *Angewandte Chemie - International Edition* **2008,** *47* (16), 2990-2992.
1111. Wöll, D.; Uji-i, H.; Schnitzler, T.; Hotta, J. I.; Dedecker, P.; Herrmann, A.; De Schryver, F. C.; Müllen, K.; Hofkens, J., Radical polymerization tracked by single molecule spectroscopy. *Angewandte Chemie - International Edition* **2008,** *47* (4), 783-787.
1112. Wu, D.; Feng, X.; Takase, M.; Haberecht, M. C.; Müllen, K., Synthesis and self-assembly of dibenzo[jk,mn]naphtho[2,1,8-fgh]thebenidinium derivates. *Tetrahedron* **2008,** *64* (50), 11379-11386.
1113. Xiao, W.; Feng, X.; Ruffieux, P.; Gröning, O.; Müllen, K.; Fasel, R., Self-assembly of chiral molecular honeycomb networks on Au(111). *Journal of the American Chemical Society* **2008,** *130* (28), 8910-8912.

1114. Yang, X.; Dou, X.; Müllen, K., Efficient synthesis of symmetrically and unsymmetrically substituted hexaphenylbenzene analogues by Suzuki-Miyaura coupling reactions. *Chemistry - An Asian Journal* **2008,** *3* (4), 759-766.
1115. Yang, X.; Dou, X.; Rouhanipour, A.; Zhi, L.; Räder, H. J.; Müllen, K., Two-dimensional graphene nanoribbons. *Journal of the American Chemical Society* **2008,** *130* (13), 4216-4217.
1116. Yasukuni, R.; Asahi, T.; Sugiyama, T.; Masuhara, H.; Sliwa, M.; Hofkens, J.; De Schryver, F. C.; Van Der Auweraer, M.; Herrmann, A.; Müllen, K., Fabrication of fluorescent nanoparticles of dendronized perylenediimide by laser ablation in water. *Applied Physics A: Materials Science and Processing* **2008,** *93* (1), 5-9.
1117. Yin, C. X.; Tan, X.; Müllen, K.; Stryker, J. M.; Gray, M. R., Associative π-π interactions of condensed aromatic compounds with vanadyl or nickel porphyrin complexes are not observed in the organic phase. *Energy and Fuels* **2008,** *22* (4), 2465-2469.
1118. Yin, M.; Cheng, Y.; Liu, M.; Gutmann, J. S.; Müllen, K., Nanostructured TiO2 films templated by amphiphilic dendritic core-double-shell macromolecules: From isolated nanorings to continuous 2D mesoporous networks. *Angewandte Chemie - International Edition* **2008,** *47* (44), 8400-8403.
1119. Yin, M.; Ding, K.; Gropeanu, R. A.; Shen, J.; Berger, R.; Weil, T.; Müllen, K., Dendritic star polymers for efficient DNA binding and stimulus-dependent DNA release. *Biomacromolecules* **2008,** *9* (11), 3231-3238.
1120. Yin, M.; Kuhlmann, C. R. W.; Sorokina, K.; Li, C.; Mihov, G.; Pietrowski, E.; Koynov, K.; Klapper, M.; Luhmann, H. J.; Müllen, K.; Weil, T., Novel fluorescent core-shell nanocontainers for cell membrane transport. *Biomacromolecules* **2008,** *9* (5), 1381-1389.
1121. Yin, M.; Shen, J.; Gropeanu, R.; Pflugfelder, G. O.; Weil, T.; Müllen, K., Fluorescent core/shell nanoparticles for specific cell-nucleus staining. *Small* **2008,** *4* (7), 894-898.
1122. Yin, M.; Shen, J.; Pflugfelder, G. O.; Müllen, K., A fluorescent core-shell dendritic macromolecule specifically stains the extracellular matrix. *Journal of the American Chemical Society* **2008,** *130* (25), 7806-7807.
1123. Zhi, L.; Hu, Y. S.; El Hamaoui, B.; Wang, X.; Lieberwirth, I.; Kolb, U.; Maier, J.; Müllen, K., Precursor-controlled formation of novel carbon/metal and carbon/metal oxide nanocomposites. *Advanced Materials* **2008,** *20* (9), 1727-1731.
1124. Zhi, L.; Müllen, K., A bottom-up approach from molecular nanographenes to unconventional carbon materials. *Journal of Materials Chemistry* **2008,** *18* (13), 1472-1484.
1125. Zhou, G.; Baumgarten, M.; Müllen, K., Mesitylboron-substituted ladder-type pentaphenylenes: Charge-transfer, electronic communication, and sensing properties. *Journal of the American Chemical Society* **2008,** *130* (37), 12477-12484.
1126. Zhou, G.; Pschirer, N.; Schöneboom, J. C.; Eickemeyer, F.; Baumgarten, M.; Müllen, K., Ladder-type pentaphenylene dyes for dye-sensitized solar cells. *Chemistry of Materials* **2008,** *20* (5), 1808-1815.
1127. Aït-Mansour, K.; Cañas-Ventura, M. E.; Ruffieux, P.; Jaafar, R.; Bieri, M.; Rieger, R.; Müllen, K.; Fasel, R.; Gröning, O., Strain-relief pattern as guide for the formation of surface-supported bimolecular nanoribbons. *Applied Physics Letters* **2009,** *95* (14).
1128. Beaujuge, P. M.; Pisula, W.; Hoi, N. T.; Ellinger, S.; Müllen, K.; Reynolds, J. R., Tailoring structure-property relationships in dithienosilole- benzothiadiazole donor-acceptor copolymers. *Journal of the American Chemical Society* **2009,** *131* (22), 7514-7515.
1129. Bieri, M.; Treier, M.; Cai, J.; Aït-Mansour, K.; Ruffieux, P.; Gröning, O.; Gröning, P.; Kastler, M.; Rieger, R.; Feng, X.; Müllen, K.; Fasel, R., Porous graphenes: Two-dimensional polymer synthesis with atomic precision. *Chemical Communications* **2009,** (45), 6919-6921.
1130. Braeken, E.; De Cremer, G.; Marsal, P.; Pèpe, G.; Müllen, K.; Vallée, R. A. L., Single

molecule probing of the local segmental relaxation dynamics in polymer above the glass transition temperature. *Journal of the American Chemical Society* **2009,** *131* (34), 12201-12210.
1131. Brunklaus, G.; Schauff, S.; Markova, D.; Klapper, M.; Müllen, K.; Spiess, H. W., Proton mobilities in phosphonic acid-based proton exchange membranes probed by 1H and 2H solid-state NMR spectroscopy. *Journal of Physical Chemistry B* **2009,** *113* (19), 6674-6681.
1132. Cañas-Ventura, M. E.; Xiao, W.; Ruffieux, P.; Rieger, R.; Müllen, K.; Brune, H.; Fasel, R., Stabilization of bimolecular islands on ultrathin NaCl films by a vicinal substrate. *Surface Science* **2009,** *603* (15), 2294-2299.
1133. Cherdhirankorn, T.; Best, A.; Koynov, K.; Peneva, K.; Muellen, K.; Fytas, G., Diffusion in polymer solutions studied by fluorescence correlation spectroscopy. *Journal of Physical Chemistry B* **2009,** *113* (11), 3355-3359.
1134. Chiad, K.; Stelzig, S. H.; Gropeanu, R.; Weil, T.; Klapper, M.; Muüllen, K., Isothermal titration calorimetry: A powerful technique to quantify interactions in polymer hybrid systems. *Macromolecules* **2009,** *42* (19), 7545-7552.
1135. Clark Jr, C. G.; Floudas, G. A.; Young, J. L.; Graf, R.; Spiess, H. W.; Müllen, K., Molecularly tethered amphiphiles as 3-D supramolecular assembly platforms: Unlocking a trapped conformation. *Journal of the American Chemical Society* **2009,** *131* (24), 8537-8547.
1136. Cristadoro, A.; Kulkarni, S. U.; Burgess, W. A.; Cervo, E. G.; Räder, H. J.; Müllen, K.; Bruce, D. A.; Thies, M. C., Structural characterization of the oligomeric constituents of petroleum pitches. *Carbon* **2009,** *47* (10), 2358-2370.
1137. Dablrlan, R.; Palermo, V.; Liscio, A.; Schwartz, E.; Otten, M. B. J.; Finlayson, C. E.; Treossi, E.; Friend, R. H.; Calestani, G.; Müllen, K.; Nolte, R. J. M.; Rowan, A. E.; Samori, P., The relationship between nanoscale architecture and charge transport in conjugated nanocrystals bridged by multichromophoric polymers. *Journal of the American Chemical Society* **2009,** *131* (20), 7055-7063.
1138. Dedecker, P.; Muls, B.; Deres, A.; Uji-I, H.; Hotta, J. I.; Sliwa, M.; Soumillion, J. P.; Müllen, K.; Enderlein, J.; Hofkens, J., Defocused wide-field imaging unravels structural and temporal heterogeneity in complex systems. *Advanced Materials* **2009,** *21* (10-11), 1079-1090.
1139. Diesing, T.; Rojas, G.; Klapper, M.; Fink, G.; Müllen, K., Spatially resolved catalysis for controlling the morphology of polymer particles. *Angewandte Chemie - International Edition* **2009,** *48* (35), 6472-6475.
1140. Elmahdy, M. M.; Mondeshki, M.; Dou, X.; Butt, H. J.; Spiess, H. W.; Müllen, K.; Floudas, G., Slow kinetics of phase transformation in a dipole-functionalized discotic liquid crystal. *Journal of Chemical Physics* **2009,** *131* (11).
1141. Feil, F.; Jung, C.; Kirstein, J.; Michaelis, J.; Li, C.; Nolde, F.; Müllen, K.; Bräuchle, C., Diffusional and orientational dynamics of various single terylene diimide conjugates in mesoporous materials. *Microporous and Mesoporous Materials* **2009,** *125* (1-2), 70-78.
1142. Feng, X.; Liang, Y.; Zhi, L.; Thomas, A.; Wu, D.; Lieberwirth, I.; Kolb, U.; Müllen, K., Synthesis of microporous carbon nanofibers and nanotubes from conjugated polymer network and evaluation in electrochemical capacitor. *Advanced Functional Materials* **2009,** *19* (13), 2125-2129.
1143. Feng, X.; Marcon, V.; Pisula, W.; Hansen, M. R.; Kirkpatrick, J.; Grozema, F.; Andrienko, D.; Kremer, K.; Müllen, K., Towards high charge-carrier mobilities by rational design of the shape and periphery of discotics. *Nature Materials* **2009,** *8* (5), 421-426.
1144. Feng, X.; Pisula, W.; Kudernac, T.; Wu, D.; Zhi, L.; De Feyter, S.; Müllen, K., Controlled self-assembly of C3-symmetric hexa-peri- hexabenzocoronenes with alternating hydrophilic and hydrophobic substituents in solution, in the bulk, and on a surface. *Journal of the American Chemical Society* **2009,** *131* (12), 4439-4448.
1145. Feng, X.; Pisula, W.; Müllen, K., Large polycyclic aromatic hydrocarbons: Synthesis and discotic organization. *Pure and Applied Chemistry* **2009,** *81* (12), 2203-2224.

1146. Fogel, Y.; Zhi, L.; Rouhanipour, A.; Andrienko, D.; Räder, H. J.; Müllen, K., Graphitic nanoribbons with dibenzo[e,l]pyrene repeat units: Synthesis and self-assembly. *Macromolecules* **2009,** *42* (18), 6878-6884.
1147. Frank, P.; Koch, N.; Koini, M.; Rieger, R.; Müllen, K.; Resel, R.; Winkler, A., Layer growth and desorption kinetics of a discoid molecular acceptor on Au(1 1 1). *Chemical Physics Letters* **2009,** *473* (4-6), 321-325.
1148. Fückel, B.; Hinze, G.; Nolde, F.; Müllen, K.; Basché, T., Control of the Electronic Energy Transfer Pathway between Two Single Fluorophores by Dual Pulse Excitation. *Physical Review Letters* **2009,** *103* (10).
1149. Gao, P.; Beckmann, D.; Tsao, H. N.; Feng, X.; Enkelmann, V.; Baumgarten, M.; Pisula, W.; Müllen, K., Dithieno[2,3-d;2'3'-d']benzo[1,2-b;4,5-b'] dithiophene (DTBDT) as semiconductor for high-performance, solution-processed organic field-effect transistors. *Advanced Materials* **2009,** *21* (2), 213-216.
1150. Gonzalez-Lakunza, N.; Cañas-Ventura, M. E.; Ruffieux, P.; Rieger, R.; Müllen, K.; Fasel, R.; Arnau, A., Hydrogen-Bonding fingerprints in electronic states of Two-Dimensional supramolecular assemblies. *ChemPhysChem* **2009,** *10* (17), 2943-2946.
1151. Haick, H.; Gang, P.; Tisch, U.; Zilberman, Y.; Pisula, W.; Feng, X.; Müllen, K. In *Sniffing out cancer in the breath: Detection of non-polar volatile compounds through carrier scattering in random networks of carbon nanotubes*, Proceedings of SPIE - The International Society for Optical Engineering, 2009.
1152. Hansen, M. R.; Schnitzler, T.; Pisula, W.; Graf, R.; Müllen, K.; Spies, H. W. G., Cooperative molecular motion within a self-assembled liquid-crystalline molecular wire: The case of a TEG-substituted perylenediimide disc. *Angewandte Chemie - International Edition* **2009,** *48* (25), 4621-4624.
1153. Hoffmann, M. S.; Nenov, S.; Diesing, T.; Naundorf, C.; Fink, G.; Klapper, M.; Müllen, K., Modern analytical tools essential for studying olefin polymerization. *Macromolecular Symposia* **2009,** *285* (1), 35-44.
1154. Jiménez-García, L.; Kaltbeitzel, A.; Pisula, W.; Gutmann, J. S.; Klapper, M.; Müllen, K., Phosphonated hexaphenylbenzene: A crystalline proton conductor. *Angewandte Chemie - International Edition* **2009,** *48* (52), 9951-9953.
1155. Jung, C.; Ruthardt, N.; Lewis, R.; Michaelis, J.; Sodeik, B.; Nolde, F.; Peneva, K.; Müllen, K.; Bräuchle, C., Photophysics of new water-soluble terrylenediimide derivatives and applications in biology. *ChemPhysChem* **2009,** *10* (1), 180-190.
1156. Kasemann, D.; Wagner, C.; Forker, R.; Dienel, T.; Müllen, K.; Fritz, T., Line-on-line organic-organic heteroepitaxy of quaterrylene on hexa-pen-hexabenzocoronene on au(111). *Langmuir* **2009,** *25* (21), 12569-12573.
1157. Kinkhabwala, A.; Yu, Z.; Fan, S.; Avlasevich, Y.; Müllen, K.; Moerner, W. E., Large single-molecule fluorescence enhancements produced by a bowtie nanoantenna. *Nature Photonics* **2009,** *3* (11), 654-657.
1158. Kinkhabwala, A.; Yu, Z.; Fan, S.; Avlasevich, Y.; Müllen, K.; Moerner, W. E. In *Large single-molecule fluorescence enhancements produced by a bowtie nanoantenna*, Optics InfoBase Conference Papers, 2009.
1159. Lebold, T.; Mühlstein, L. A.; Blechinger, J.; Riederer, M.; Amentsch, H.; Köhn, R.; Peneva, K.; Müllen, K.; Michaelis, J.; Bräuchte, C.; Bein, T., Tuning single-molecule dynamics in functionalized mesoporous silica. *Chemistry - A European Journal* **2009,** *15* (7), 1661-1672.
1160. Lee, Y. J.; Clark Jr, C. G.; Graf, R.; Wagner, M.; Mullen, K.; Spiess, H. W., Solid-state organization of semifluorinated alkanes probed by 19F MAS NMR spectroscopy. *Journal of Physical Chemistry B* **2009,** *113* (5), 1360-1366.

1161. Li, C.; Liu, Z.; Schöneboom, J.; Eickemeyer, F.; Pschirer, N. G.; Erk, P.; Herrmann, A.; Müllen, K., Perylenes as sensitizers in hybrid solar cells: How molecular size influences performance. *Journal of Materials Chemistry* **2009,** *19* (30), 5405-5415.
1162. Li, C.; Schöneboom, J.; Liu, Z.; Pschiret, N. G.; Erk, P.; Herrmann, A.; Müllen, K., Rainbow perylene monoimides: Easy control of optical properties. *Chemistry - A European Journal* **2009,** *15* (4), 878-884.
1163. Li, Y.; Yildiz, U. H.; Mullen, K.; Gröhn, F., Association of DNA with multivalent organic counterions: From flowers to rods and toroids. *Biomacromolecules* **2009,** *10* (3), 530-540.
1164. Liang, Y.; Feng, X.; Zhi, L.; Kolb, U.; Müllen, K., A simple approach towards one-dimensional mesoporous carbon with superior electrochemical capacitive activity. *Chemical Communications* **2009,** (7), 809-811.
1165. Liang, Y.; Frisch, J.; Zhi, L.; Norouzi-Arasi, H.; Feng, X.; Rabe, J. P.; Koch, N.; Müllen, K., Transparent, highly conductive graphene electrodes from acetylene-assisted thermolysis of graphite oxide sheets and nanographene molecules. *Nanotechnology* **2009,** *20* (43).
1166. Liang, Y.; Wu, D.; Feng, X.; Müllen, K., Dispersion of graphene sheets in organic solvent supported by ionic interactions. *Advanced Materials* **2009,** *21* (17), 1679-1683.
1167. Markova, D.; Kumar, A.; Klapper, M.; Müllen, K., Phosphonic acid-containing homo-, AB and BAB block copolymers via ATRP designed for fuel cell applications. *Polymer* **2009,** *50* (15), 3411-3421.
1168. Mativetsky, J. M.; Kastler, M.; Savage, R. C.; Gentilini, D.; Palma, M.; Pisula, W.; Müllen, K.; Samorì, P., Self-assembly of a donor-acceptor dyad across multiple length scales: functional architectures for organic electronics. *Advanced Functional Materials* **2009,** *19* (15), 2486-2494.
1169. Meizhen, Y.; Jie, S.; Pisula, W.; Minghui, L.; Linjie, Z.; Müllen, K., Functionalization of self-assembled hexa-peri-hexabenzocoronene fibers with peptides for bioprobing. *Journal of the American Chemical Society* **2009,** *131* (41), 14618-14619.
1170. Müllen, K., A new year greeting from the president. *Nachrichten aus der Chemie* **2009,** *57* (1), 3.
1171. Naundorf, C.; Ferrari, D.; Rojas, G.; Fink, G.; Klapper, M.; Müllen, K., Hard versus soft materials as supports for metallocene and post-metallocene catalysts. *Macromolecular Reaction Engineering* **2009,** *3* (8), 456-466.
1172. Nenov, S.; Hoffmann, M. S.; Steffen, W.; Klapper, M.; Müllen, K., Fluorous miniemulslons: A powerful tool to control morphology in metallocene-catalyzed propene polymerization. *Journal of Polymer Science, Part A: Polymer Chemistry* **2009,** *47* (6), 1724-1730.
1173. Palermo, V.; Schwartz, E.; Liscio, A.; Otten, M. B. J.; Müllen, K.; Nolte, R. J. M.; Rowan, A. E.; Samorì, P., Influence of π-π Stacking on the self-assembly and coiling of multi-chromophoric polymers based on perylenebis(dicarboximides): An AFM study. *Soft Matter* **2009,** *5* (23), 4680-4686.
1174. Pang, S.; Tsao, H. N.; Feng, X.; Mullen, K., Patterned graphene electrodes from solution-processed graphite oxide films for organic field-effect transistors. *Advanced Materials* **2009,** *21* (34), 3488-3491.
1175. Pinkston, D. S.; Duan, P.; Gallardo, V. A.; Habicht, S. C.; Tan, X.; Qian, K.; Gray, M.; Mullen, K.; Kenttämaa, H. I., Analysis of asphaltenes and asphaltene model compounds by laser-induced acoustic desorption/fourier transform ion cyclotron resonance mass spectrometry. *Energy and Fuels* **2009,** *23* (11), 5564-5570.
1176. Piot, L.; Marie, C.; Dou, X.; Feng, X.; Mullen, K.; Fichou, D., Growth of long, highly stable, and densely packed worm-like nanocolumns of hexa-peri-hexabenzocoronenes via chemisorption on Au(111). *Journal of the American Chemical Society* **2009,** *131* (4), 1378-1379.
1177. Pisula, W.; Mishra, A. K.; Li, J.; Baumgarten, M.; Müllen, K., Carbazole-Based Conjugated Polymers as Donor Material for Photovoltaic Devices. In *Organic Photovoltaics: Materials, Device Physics, and Manufacturing Technologies*, 2009; pp 93-128.

1178. Pisula, W.; Zorn, M.; Chang, J. Y.; Müllen, K.; Zentel, R., Liquid crystalline ordering and charge transport In semiconducting materials. *Macromolecular Rapid Communications* **2009,** *30* (14), 1179-1202.
1179. Proń, A.; Zhou, G.; Norouzi-Arasi, H.; Baumgarten, M.; Müllen, K., Controlling the charge transfer in phenylene-bridged borylene-amine π-conjugated systems. *Organic Letters* **2009,** *11* (16), 3550-3553.
1180. Qin, T.; Ding, J.; Wang, L.; Baumgarten, M.; Zhou, G.; Müllen, K., A divergent synthesis of very large polyphenylene dendrimers with iridium(III) cores: Molecular size effect on the performance of phosphorescent organic light-emitting diodes. *Journal of the American Chemical Society* **2009,** *131* (40), 14329-14336.
1181. Rivoire, K.; Kinkhabwala, A.; Hatami, F.; Masselink, W. T.; Avlasevich, Y.; Müllen, K.; Moerner, W. E.; Vučković, J., Lithographic positioning of fluorescent molecules on high- Q photonic crystal cavities. *Applied Physics Letters* **2009,** *95* (12).
1182. Rivoire, K.; Kinkhabwala, A.; Moerner, W. E.; Vučković, J.; Hatami, F.; Masselink, W. T.; Avlasevich, Y.; Müllen, K. In *Probing high-Q photonic crystal resonances with fluorescent molecules*, 2009 Conference on Lasers and Electro-Optics and 2009 Conference on Quantum Electronics and Laser Science Conference, CLEO/QELS 2009, 2009.
1183. Rivoire, K.; Kinkhabwala, A.; Moerner, W. E.; Vučković, J.; Hatami, F.; Ted Masselink, W.; Avlasevich, Y.; Müllen, K. In *Probing high-Q photonic crystal resonances with fluorescent molecules*, Optics InfoBase Conference Papers, 2009.
1184. Rocha, S.; Hutchison, J. A.; Peneva, K.; Herrmann, A.; Müllen, K.; Skjøt, M.; Jørgensen, C. I.; Svendsen, A.; De Schryver, F. C.; Hofkens, J.; Uji-i, H., Linking phospholipase mobility to activity by single-molecule wide-field microscopy. *ChemPhysChem* **2009,** *10* (1), 151-161.
1185. Rouhanipour, A.; Roy, M.; Feng, X.; Räder, H. J.; Müllen, K., Subliming the unsublim able: How to deposit nanographenes. *Angewandte Chemie - International Edition* **2009,** *48* (25), 4602-4604.
1186. Rouillé, G.; Steglich, M.; Huisken, F.; Henning, T.; Müllen, K., UV/visible spectroscopy of matrix-isolated hexa-peri-hexabenzocoronene: Interacting electronic states and astrophysical context. *Journal of Chemical Physics* **2009,** *131* (20).
1187. Saleh, M.; Park, Y. S.; Baumgarten, M.; Kim, J. J.; Müllen, K., Conjugated triphenylene polymers for blue OLED devices. *Macromolecular Rapid Communications* **2009,** *30* (14), 1279-1283.
1188. Schmaltz, B.; Rouhanipour, A.; Räder, H. J.; Pisula, W.; Müllen, K., Filling the cavity of conjugated carbazole macrocycles with graphene molecules: Monolayers formed by physisorption serve as a surface for pulsed laser deposition. *Angewandte Chemie - International Edition* **2009,** *48* (4), 720-724.
1189. Schmaltz, B.; Weil, T.; Müllen, K., Polyphenylene-based materials: Control of the electronic function by molecular and supramolecular complexity. *Advanced Materials* **2009,** *21* (10-11), 1067-1078.
1190. Schnitzler, T.; Li, C.; Müllen, K., Synthesis and characterization of pentafluorophenyl-substituted perylenebis(dicarboximides). *Helvetica Chimica Acta* **2009,** *92* (11), 2525-2531.
1191. Schwab, M. G.; Fassbender, B.; Spiess, H. W.; Thomas, A.; Feng, X.; Müllen, K., Catalyst-free preparation of melamine-based microporous polymer networks through Schiff base chemistry. *Journal of the American Chemical Society* **2009,** *131* (21), 7216-7217.
1192. Schwartz, E.; Palermo, V.; Finlayson, C. E.; Huang, Y. S.; Otten, M. B. J.; Liscio, A.; Trapani, S.; González-Valls, I.; Brocorens, P.; Cornelissen, J. J. L. M.; Peneva, K.; Müllen, K.; Spano, F. C.; Yartsev, A.; Westenhoff, S.; Friend, R. H.; Beljonne, D.; Nolte, R. J. M.; Samorì, P.; Rowan, A. E., "Helter-skelter-like" perylene polyisocyanopeptides. *Chemistry - A European Journal* **2009,** *15* (11), 2536-2547.
1193. Seifert, C.; Skuridina, D.; Dou, X.; Müllen, K.; Severin, N.; Rabe, J. P., Tomography of

molecular nanographene double layers using scanning tunneling microscopy. *Physical Review B - Condensed Matter and Materials Physics* **2009,** *80* (24).
1194. Simon, S. C.; Schmaltz, B.; Rouhanipour, A.; Räder, H. J.; Müllen, K., A macrocyclic model dodecamer for polyfluorenes. *Advanced Materials* **2009,** *21* (1), 83-85.
1195. Stemmler, M.; Stefani, F. D.; Bernhardt, S.; Bauer, R. E.; Kreiter, M.; Müllen, K.; Knoll, W., One-pot preparation of dendrimer - Gold nanoparticle hybrids in a dipolar aprotic solvent. *Langmuir* **2009,** *25* (21), 12425-12428.
1196. Su, Q.; Pang, S.; Alijani, V.; Li, C.; Feng, X.; Müllen, K., Composites of craphene with large aromatic molecules. *Advanced Materials* **2009,** *21* (31), 3191-3195.
1197. Sun, Z.; Cheng, Y.; Lechmann, M.; Li, J.; Li, J.; Wu, J.; Grimsdale, A.; Müllen, K.; Butt, H. J.; Gutmann, J. S., Exciton diffusion controlled quantum efficiency in hybrid dye sensitized solar cells. *Physical Chemistry Chemical Physics* **2009,** *11* (10), 1604-1609.
1198. Treossi, E.; Liscio, A.; Feng, X.; Palermo, V.; Müllen, K.; Samorì, P., Large-area bi-component processing of organic semiconductors by spray deposition and spin coating with orthogonal solvents. *Applied Physics A: Materials Science and Processing* **2009,** *95* (1), 15-20.
1199. Treossi, E.; Liscio, A.; Feng, X.; Palermo, V.; Müllen, K.; Samorì, P., Temperature-enhanced solvent vapor annealing of a C3 symmetric hexa-peri-hexabenzocoronene: Controlling the self-assembly from nano- to macroscale. *Small* **2009,** *5* (1), 112-119.
1200. Tsao, H. N.; Cho, D.; Andreasen, J. W.; Rouhanipour, A.; Breiby, D. W.; Pisula, W.; Müllen, K., The influence of morphology on high-performance polymer field-effect transistors. *Advanced Materials* **2009,** *21* (2), 209-212.
1201. Tsao, H. N.; Räder, H. J.; Pisula, W.; Rouhanipour, A.; Müllen, K., Novel Organic Semiconductors and Processing Techniques for Organic Field-Effect Transistors. In *Organic Electronics: Structural and Electronic Properties of OFETs*, 2009; pp 61-74.
1202. Vollmer, A.; Feng, X. L.; Wang, X.; Zhi, L. J.; Müllen, K.; Koch, N.; Rabe, J. P., Electronic and structural properties of graphene-based transparent and conductive thin film electrodes. *Applied Physics A: Materials Science and Processing* **2009,** *94* (1), 1-4.
1203. Vosch, T.; Fron, E.; Hotta, J. I.; Deres, A.; Uji-i, H.; Idrissi, A.; Yang, J.; Kim, D.; Puhl, L.; Haeuseler, A.; Müllen, K.; De Schryver, F. C.; Sliwa, M.; Hofkens, J., Synthesis, ensemble, and single molecule characterization of a diphenyl-acetylene linked perylenediimide trimer. *Journal of Physical Chemistry C* **2009,** *113* (27), 11773-11782.
1204. Wu, D.; Pisula, W.; Enkelmann, V.; Feng, X.; Müllen, K., Controllable columnar organization of positively charged polycyclic aromatic hydrocarbons by choice of counterions. *Journal of the American Chemical Society* **2009,** *131* (28), 9620-9621.
1205. Wu, D.; Pisula, W.; Haberecht, M. C.; Feng, X.; Müllen, K., Oxygen- and sulfur-containing positively charged polycyclic aromatic hydrocarbons. *Organic Letters* **2009,** *11* (24), 5686-5689.
1206. Yasukuni, R.; Sliwa, M.; Hofkens, J.; De Schryver, F. C.; Herrmann, A.; Müllen, K.; Asahi, T., Size-dependent optical properties of dendronized perylenediimide nanoparticle prepared by laser ablation in water. *Japanese Journal of Applied Physics* **2009,** *48* (6).
1207. Zhang, J.; Wang, X.; Su, Q.; Zhi, L.; Thomas, A.; Feng, X.; Dang, S. S.; Schlögl, R.; Müllen, K., Metal-free phenanthrenequinone cyclotrimer as an effective heterogeneous catalyst. *Journal of the American Chemical Society* **2009,** *131* (32), 11296-11297.
1208. Zilberman, Y.; Tisch, U.; Pisula, W.; Feng, X.; Müllen, K.; Haic, H., Spongelike structures of hexa-peri-hexabenzocoronene derivatives enhance the sensitivity of chemiresistive carbon nanotubes to nonpolar volatile organic compounds of cancer. *Langmuir* **2009,** *25* (9), 5411-5416.
1209. Anaya, M.; Kwak, M.; Musser, A. J.; Müllen, K.; Herrmann, A., Tunable hydrophobicity in DNA micelles: Design, synthesis, and characterization of a new family of DNA amphiphiles. *Chemistry - A European Journal* **2010,** *16* (43), 12852-12859.

1210. Antonietti, M.; Müllen, K., Carbon: The sixth element. *Advanced Materials* **2010,** *22* (7), 787.
1211. Arlt, W.; Willis, D. S.; Wild, S. H.; Krone, N.; Doherty, E. J.; Hahner, S.; Han, T. S.; Carroll, P. V.; Conway, G. S.; Rees, D. A.; Stimson, R. H.; Walker, B. R.; Connell, J. M. C.; Ross, R. J.; Arlt, W.; Ayyagari, U.; Ball, S.; Bevan, J. S.; Booth, S. A.; Bradley, U.; Breen, S. L.; Carroll, P. V.; Clements, M.; Chambers, T.; Cole, T. R.; Connell, J. M. C.; Conway, G.; Daly, M.; Davis, J. R.; Doane, S. A.; Doherty, E. J.; Han, T. S.; Hughes, I. A.; Hunter, S.; Ibbotson, S. V.; Krone, N.; MacDonald, S. J.; Mullen, K.; Peacey, S.; Perry, C.; Ray, D. W.; Rees, D. A.; Ross, R. J. M.; Scanlon, M.; Simpson, H.; Stewart, P. M.; Stewart, S. S. E.; Stimson, R. H.; Vora, J. P.; Wake, D.; Walker, S. E.; Walker, B. R.; Wass, J. A. H.; Whittingham, S. P.; Willis, D. S.; Wright, S. D.; Wu, F. C., Health status of adults with congenital adrenal hyperplasia: A cohort study of 203 patients. *Journal of Clinical Endocrinology and Metabolism* **2010,** *95* (11), 5110-5121.
1212. Avlasevich, Y.; Li, C.; Müllen, K., Synthesis and applications of core-enlarged perylene dyes. *Journal of Materials Chemistry* **2010,** *20* (19), 3814-3826.
1213. Baumgarten, M.; Müllen, K., Functional Polyphenylenes for Supramolecular Ordering and Application in Organic Electronics. In *Functional Supramolecular Architectures: For Organic Electronics and Nanotechnology*, 2010; Vol. 1, pp 155-194.
1214. Bieri, M.; Nguyen, M. T.; Gröning, O.; Cai, J.; Treier, M.; Aït-Mansour, K.; Ruffieux, P.; Pignedoli, C. A.; Passerone, D.; Kastler, M.; Müllen, K.; Fasel, R., Two-dimensional polymer formation on surfaces: Insight into the roles of precursor mobility and reactivity. *Journal of the American Chemical Society* **2010,** *132* (46), 16669-16676.
1215. Blankenburg, S.; Bieri, M.; Fasel, R.; Müllen, K.; Pignedoli, C. A.; Passerone, D., Porous graphene as an atmospheric nanofilter. *Small* **2010,** *6* (20), 2266-2271.
1216. Brinks, D.; Stefani, F. D.; Kulzer, F.; Hildner, R.; Taminiau, T. H.; Avlasevich, Y.; Müllen, K.; Van Hulst, N. F., Visualizing and controlling vibrational wave packets of single molecules. *Nature* **2010,** *465* (7300), 905-908.
1217. Bröker, B.; Hofmann, O. T.; Rangger, G. M.; Frank, P.; Blum, R. P.; Rieger, R.; Venema, L.; Vollmer, A.; Müllen, K.; Rabe, J. P.; Winkler, A.; Rudolf, P.; Zojer, E.; Koch, N., Density-dependent reorientation and rehybridization of chemisorbed conjugated molecules for controlling interface electronic structure. *Physical Review Letters* **2010,** *104* (24).
1218. Cai, J.; Ruffieux, P.; Jaafar, R.; Bieri, M.; Braun, T.; Blankenburg, S.; Muoth, M.; Seitsonen, A. P.; Saleh, M.; Feng, X.; Müllen, K.; Fasel, R., Atomically precise bottom-up fabrication of graphene nanoribbons. *Nature* **2010,** *466* (7305), 470-473.
1219. Christensson, N.; Avlasevich, Y.; Yartsev, A.; Müllen, K.; Pascher, T.; Pullerits, T., Weakly chirped pulses in frequency resolved coherent spectroscopy. *Journal of Chemical Physics* **2010,** *132* (17).
1220. Cordes, T.; Vogelsang, J.; Anaya, M.; Spagnuolo, C.; Gietl, A.; Summerer, W.; Herrmann, A.; Müllen, K.; Tinnefeld, P., Single-molecule redox blinking of perylene diimide derivatives in water. *Journal of the American Chemical Society* **2010,** *132* (7), 2404-2409.
1221. Curutchet, C.; Feist, F. A.; Averbeke, B. V.; Mennucci, B.; Jacob, J.; Müllen, K.; Basché, T.; Beljonne, D., Superexchange-mediated electronic energy transfer in a model dyad. *Physical Chemistry Chemical Physics* **2010,** *12* (27), 7378-7385.
1222. Dabirian, R.; Feng, X.; Ortolani, L.; Liscio, A.; Morandi, V.; Müllen, K.; Samorì, P.; Palermo, V., Micron-sized [6,6]-phenyl C61 butyric acid methyl ester crystals grown by dip coating in solvent vapour atmosphere: Interfaces for organic photovoltaics. *Physical Chemistry Chemical Physics* **2010,** *12* (17), 4473-4480.
1223. De Luca, G.; Liscio, A.; Melucci, M.; Schnitzler, T.; Pisula, W.; Clark, C. G.; Scolaro, L. M.; Palermo, V.; Müllen, K.; Samorì, P., Phase separation and affinity between a fluorinated perylene diimide dye and an alkyl-substituted hexa-peri-hexabenzocoronene. *Journal of Materials Chemistry* **2010,** *20* (1), 71-82.

1224. Dietz, F.; Staykov, A.; Müllen, K.; Tyutyulkov, N., Energy spectra and electric and magnetic properties of one-dimensional stacks of conjugated π-electron systems with defect surface states. II. π-systems with Schottky and chemisorption surface states. *Journal of Physical Chemistry C* **2010,** *114* (32), 13678-13684.
1225. Diez-Perez, I.; Li, Z.; Hihath, J.; Li, J.; Zhang, C.; Yang, X.; Zang, L.; Dai, Y.; Feng, X.; Muellen, K.; Tao, N., Gate-controlled electron transport in coronenes as a bottom-up approach towards graphene transistors. *Nature Communications* **2010,** *1* (3).
1226. Dorfschmid, M.; Müllen, K.; Zumbusch, A.; Wöll, D., Translational and rotational diffusion during radical bulk polymerization: A comparative investigation by full correlation fluorescence correlation spectroscopy (fcFCS). *Macromolecules* **2010,** *43* (14), 6174-6179.
1227. Dvorakova, G.; Haschick, R.; Chiad, K.; Klapper, M.; Müllen, K.; Biffis, A., Molecularly imprinted nanospheres by nonaqueous emulsion polymerization. *Macromolecular Rapid Communications* **2010,** *31* (23), 2035-2040.
1228. Eisele, K.; Gropeanu, R.; Musante, A.; Glasser, G.; Li, C.; Muellen, K.; Weil, T., Tailored albumin-based copolymers for receptor-mediated delivery of perylenediimide guest molecules. *Macromolecular Rapid Communications* **2010,** *31* (17), 1501-1508.
1229. Englert, J. M.; Hauke, F.; Feng, X.; Müllen, K.; Hirsch, A., Exfoliation of hexa-peri-hexabenzocoronene in water. *Chemical Communications* **2010,** *46* (48), 9194-9196.
1230. Figueira-Duarte, T. M.; Del Rosso, P. G.; Trattnig, R.; Sax, S.; List, E. J. W.; Mullen, K., Designed suppression of aggregation in polypyrene: Toward high-performance blue-light-emitting diodes. *Advanced Materials* **2010,** *22* (9), 990-993.
1231. Frank, P.; Djuric, T.; Koini, M.; Salzmann, I.; Rieger, R.; Müllen, K.; Resel, R.; Koch, N.; Winkler, A., Layer growth, thermal stability, and desorption behavior of hexaaza-triphenylene-hexacarbonitrile on Ag(111). *Journal of Physical Chemistry C* **2010,** *114* (14), 6650-6657.
1232. Fron, E.; Deres, A.; Rocha, S.; Zhou, G.; Müllen, K.; De Schryver, F. C.; Sliwa, M.; Uji-i, H.; Hofkens, J.; Vosch, T., Unraveling excited-state dynamics in a polyfluorene-perylenediimide copolymer. *Journal of Physical Chemistry B* **2010,** *114* (3), 1277-1286.
1233. Fruth, A.; Klapper, M.; Müllen, K., Synthesis and characterization of amphiphilic polyelectrolyte brush copolymers based on Poly(2,7-carbazole). *Macromolecules* **2010,** *43* (1), 467-472.
1234. Fückel, B.; Hinze, G.; Nolde, F.; Müllen, K.; Basché, T., Quantification of the singlet-singlet annihilation times of individual bichromophoric molecules by photon coincidence measurements. *Journal of Physical Chemistry A* **2010,** *114* (29), 7671-7676.
1235. Gao, P.; Cho, D.; Yang, X.; Enkelmann, V.; Baumgarten, M.; Müllen, K., Heteroheptacenes with fused thiophene and pyrrole rings. *Chemistry - A European Journal* **2010,** *16* (17), 5119-5128.
1236. Grigoriadis, C.; Haase, N.; Butt, H. J.; Müllen, K.; Floudas, C., Negative thermal expansion in discotic liquid crystals of nanographenes. *Advanced Materials* **2010,** *22* (12), 1403-1406.
1237. Grimsdale, A. C.; Müllen, K., Phenylene-Based Ladder Polymers. In *Design and Synthesis of Conjugated Polymers*, 2010; pp 227-245.
1238. Gudmand, M.; Rocha, S.; Hatzakis, N. S.; Peneva, K.; Müllen, K.; Stamou, D.; Uji-I, H.; Hofkens, J.; Bjørnholm, T.; Heimburg, T., Influence of lipid heterogeneity and phase behavior on phospholipase A 2 action at the single molecule level. *Biophysical Journal* **2010,** *98* (9), 1873-1882.
1239. Haschick, R.; Hoffmann, M. S.; Zhao, Y.; Klapper, M.; Müllen, K., Nonaqueous emulsions - A versatile tool for new types of functional nanoparticles. *Macromolecular Symposia* **2010,** *296* (1), 21-27.
1240. Haschick, R.; Klapper, M.; Wagener, K. B.; Müllen, K., Nanoparticles by ROMP in nonaqueous emulsions. *Macromolecular Chemistry and Physics* **2010,** *211* (24), 2547-2554.
1241. Hesse, H. C.; Weickert, J.; Al-Hussein, M.; Dössel, L.; Feng, X.; Müllen, K.; Schmidt-Mende, L., Discotic materials for organic solar cells: Effects of chemical structure on assembly

and performance. *Solar Energy Materials and Solar Cells* **2010,** *94* (3), 560-567.
1242. Hiller, W.; Pasch, H.; Sinha, P.; Wagner, T.; Thiel, J.; Wagner, M.; Müllen, K., Coupling of NMR and liquid chromatography at critical conditions: A new tool for the block length and microstructure analysis of block copolymers. *Macromolecules* **2010,** *43* (11), 4853-4863.
1243. Hines, T.; Diez-Perez, I.; Hihath, J.; Liu, H.; Wang, Z. S.; Zhao, J.; Zhou, G.; Müllen, K.; Tao, N., Transition from tunneling to hopping in single molecular junctions by measuring length and temperature dependence. *Journal of the American Chemical Society* **2010,** *132* (33), 11658-11664.
1244. Hotta, J. I.; Fron, E.; Dedecker, P.; Janssen, K. P. F.; Li, C.; Mu̗llen, K.; Harke, B.; Bu̗ckers, J.; Hell, S. W.; Hofkens, J., Spectroscopic rationale for efficient stimulated-emission depletion microscopy fluorophores. *Journal of the American Chemical Society* **2010,** *132* (14), 5021-5023.
1245. Jiménez-García, L.; Kaltbeitzel, A.; Enkelmann, V.; Gutmann, J. S.; Klapper, M.; Müllen, K. In *Proton-conducting organic molecules as separator materials for fuel cell applications*, ACS National Meeting Book of Abstracts, 2010.
1246. Käfer, D.; Bashir, A.; Dou, X.; Witte, G.; Müllen, K.; Wöll, C., Evidence for band-like transport in craphene-based organic monolayers. *Advanced Materials* **2010,** *22* (3), 384-388.
1247. Klymchenko, A. S.; Furukawa, S.; Balandina, T.; Müllen, K.; Van Der Auweraer, M.; De Feyter, S., 2D analogues of the inverted hexagonal phase self-assembled from 4,6-dialkoxylated isophthalic acids at solid-liquid interfaces. *Nanoscale* **2010,** *2* (9), 1773-1780.
1248. Kwak, M.; Minten, I. J.; Anaya, D. M.; Musser, A. J.; Brasch, M.; Nolte, R. J. M.; Müllen, K.; Cornelissen, J. J. L. M.; Herrmann, A., Virus-like particles templated by DNA micelles: A general method for loading virus nanocarriers. *Journal of the American Chemical Society* **2010,** *132* (23), 7834-7835.
1249. Lee, E. J. H.; Zhi, L.; Burghard, M.; Mullen, K.; Kern, K., Electrical properties and photoconductivity of stacked-graphene carbon nanotubes. *Advanced Materials* **2010,** *22* (16), 1854-1857.
1250. Leenen, M. A. M.; Cucinotta, F.; Viani, L.; Mavrinskiy, A.; Pisula, W.; Gierschner, J.; Cornil, J.; Prodi-Schwab, A.; Thiem, H.; Müllen, K.; De Cola, L., Electronic properties and supramolecular organization of terminal bis(alkylethynyl)-substituted benzodithiophenes. *Journal of Physical Chemistry B* **2010,** *114* (45), 14614-14620.
1251. Li, C.; Liu, M.; Pschirer, N. G.; Baumgarten, M.; Müllen, K., Polyphenylene-based materials for organic photovoltaics. *Chemical Reviews* **2010,** *110* (11), 6817-6855.
1252. Li, H.; Pang, S.; Feng, X.; Müllen, K.; Bubeck, C., Polyoxometalate assisted photoreduction of graphene oxide and its nanocomposite formation. *Chemical Communications* **2010,** *46* (34), 6243-6245.
1253. Li, L.; Gao, P.; Schuermann, K. C.; Ostendorp, S.; Wang, W.; Du, C.; Lei, Y.; Fuchs, H.; Cola, L. D.; Müllen, K.; Chi, L., Controllable growth and field-effect property of monolayer to multilayer microstripes of an organic semiconductor. *Journal of the American Chemical Society* **2010,** *132* (26), 8807-8809.
1254. Liang, Y.; Schwab, M. G.; Zhi, L.; Mugnaioli, E.; Kolb, U.; Feng, X.; Müllen, K., Direct access to metal or metal oxide nanocrystals integrated with one-dimensional nanoporous carbons for electrochemical energy storage. *Journal of the American Chemical Society* **2010,** *132* (42), 15030-15037.
1255. Liu, C.; Liu, Z.; Lemke, H. T.; Tsao, H. N.; Naber, R. C. G.; Li, Y.; Banger, K.; Müllen, K.; Nielsen, M. M.; Sirringhaus, H., High-performance solution-deposited ambipolar organic transistors based on terrylene diimides. *Chemistry of Materials* **2010,** *22* (6), 2120-2124.
1256. Liu, M.; Rieger, R.; Li, C.; Menges, H.; Kastler, M.; Baumgarten, M.; Müllen, K., A polymer with a benzo[2,1-b;3,4-b']dithiophene moiety for photovoltaic applications. *ChemSusChem* **2010,** *3* (1), 106-111.
1257. Liu, R.; Wu, D.; Feng, X.; Müllen, K., Nitrogen-doped ordered mesoporous graphitic arrays

with high electrocatalytic activity for oxygen reduction. *Angewandte Chemie - International Edition* **2010,** *49* (14), 2565-2569.
1258. Lubczyk, D.; Siering, C.; Lörgen, J.; Shifrina, Z. B.; Müllen, K.; Waldvogel, S. R., Simple and sensitive online detection of triacetone triperoxide explosive. *Sensors and Actuators, B: Chemical* **2010,** *143* (2), 561-566.
1259. Marie, C.; Silly, F.; Tortech, L.; Müllen, K.; Fichou, D., Tuning the packing density of 2D supramolecular self-assemblies at the solid-liquid interface using variable temperature. *ACS Nano* **2010,** *4* (3), 1288-1292.
1260. Medjanik, K.; Kutnyakhov, D.; Nepijko, S. A.; Schönhense, G.; Naghavi, S.; Alijani, V.; Felser, C.; Koch, N.; Rieger, R.; Baumgarten, M.; Müllen, K., Electronic structure of large disc-type donors and acceptors. *Physical Chemistry Chemical Physics* **2010,** *12* (26), 7184-7193.
1261. Medjanik, K.; Perkert, S.; Naghavi, S.; Rudloff, M.; Solovyeva, V.; Chercka, D.; Huth, M.; Nepijko, S. A.; Methfessel, T.; Felser, C.; Baumgarten, M.; Müllen, K.; Elmers, H. J.; Schönhense, G., Formation of an intermolecular charge-transfer compound in UHV codeposited tetramethoxypyrene and tetracyanoquinodimethane. *Physical Review B - Condensed Matter and Materials Physics* **2010,** *82* (24).
1262. Müllen, K.; Kreimeyer, A., Venturing again into more cooperation. *Nachrichten aus der Chemie* **2010,** *58* (3), 215.
1263. Müllen, K.; Wolf, P., The reaction of enones with electrophiles. In *The Chemistry of the Metal Carbon Bond, Carbon-Carbon Bond Formation Using Organometallic Compounds*, 2010; pp 513-558.
1264. Nordendorf, G.; Kasdorf, O.; Kitzerow, H. S.; Liang, Y.; Feng, X.; Müllen, K., Liquid crystal addressing by graphene electrodes made from graphene oxide. *Japanese Journal of Applied Physics* **2010,** *49* (10), 1002061-1002063.
1265. Opper, K. L.; Markova, D.; Klapper, M.; Müllen, K.; Wagener, K. B., Precision phosphonic acid functionalized polyolefin architectures. *Macromolecules* **2010,** *43* (8), 3690-3698.
1266. Palermo, V.; Schwartz, E.; Finlayson, C. E.; Liscio, A.; Otten, M. B. J.; Trapani, S.; Müllen, K.; Beljonne, D.; Friend, R. H.; Nolte, R. J. M.; Rowan, A. E.; Samori, P., Macromolecular scaffolding: The relationship between nanoscale architecture and function in multichromophoric arrays for organic electronics. *Advanced Materials* **2010,** *22* (8), E81-E88.
1267. Palkovits, R.; von Malotki, C.; Baumgarten, M.; Müllen, K.; Baltes, C.; Antonietti, M.; Kuhn, P.; Weber, J.; Thomas, A.; Schüth, F., Development of molecular and solid catalysts for the direct low-temperature oxidation of methane to methanol. *ChemSusChem* **2010,** *3* (2), 277-282.
1268. Pang, S.; Englert, J. M.; Tsao, H. N.; Hernandez, Y.; Hirsch, A.; Feng, X.; Müllen, K., Extrinsic corrugation-assisted mechanical exfoliation of monolayer graphene. *Advanced Materials* **2010,** *22* (47), 5374-5377.
1269. Peneva, K.; Gundlach, K.; Herrmann, A.; Paulsen, H.; Müllen, K., Site-specific incorporation of perylene into an N-terminally modified light-harvesting complex II. *Organic and Biomolecular Chemistry* **2010,** *8* (21), 4823-4826.
1270. Pisula, W.; Feng, X.; Mllen, K., Tuning the columnar organization of discotic polycyclic aromatic hydrocarbons. *Advanced Materials* **2010,** *22* (33), 3634-3649.
1271. Pisula, W.; Feng, X.; Müllen, K., Self-Organization of Nanographenes. In *Carbon Nanotubes and Related Structures: Synthesis, Characterization, Functionalization, and Applications*, 2010; pp 405-453.
1272. Proń, A.; Baumgarten, M.; Müllen, K., Phenylene bridged boron-nitrogen containing dendrimers. *Organic Letters* **2010,** *12* (19), 4236-4239.
1273. Qi, X.; Huang, Y.; Klapper, M.; Boey, F.; Huang, W.; De Feyter, S.; Müllen, K.; Zhang, H., In situ modification of three-dimensional polyphenylene dendrimer-templated CuO rice-shaped architectures with electron beam irradiation. *Journal of Physical Chemistry C* **2010,** *114* (32), 13465-13470.

1274. Qi, X.; Xue, C.; Huang, X.; Huang, Y.; Zhou, X.; Li, H.; Liu, D.; Boey, F.; Yan, Q.; Huang, W.; De Feyter, S.; Müllen, K.; Zhang, H., Polyphenylene dendrimer-templated in situ construction of inorganic-organic hybrid rice-shaped Architectures. *Advanced Functional Materials* **2010,** *20* (1), 43-49.
1275. Rieger, B. R.; Beckmann, D.; Pisula, W.; Steffen, W.; Kastler, M.; Müllen, K., Rational optimization of benzo[2,1-b;3,4-b']dithiophene-containing polymers for organic field-effect transistors. *Advanced Materials* **2010,** *22* (1), 83-86.
1276. Rieger, R.; Beckmann, D.; Mavrinskiy, A.; Kastler, M.; Müllen, K., Backbone curvature in polythiophenes. *Chemistry of Materials* **2010,** *22* (18), 5314-5318.
1277. Rieger, R.; Beckmann, D.; Mavrinskiy, A.; Pisula, W.; Kastler, M.; Müllen, K. In *Curvature as design concept for semiconducting benzodithiophenecontaining polymers in organic field-effect transistors*, Proceedings of SPIE - The International Society for Optical Engineering, 2010.
1278. Rieger, R.; Beckmann, D.; Pisula, W.; Kastler, M.; Müllen, K., Tetrathiahexacene as building block for solution-processable semiconducting polymers: Exploring the monomer size limit. *Macromolecules* **2010,** *43* (15), 6264-6267.
1279. Rieger, R.; Enkelmann, V.; Müllen, K., Charge-transfer controlled crystallization of a model oligomer for donor-acceptor-polythiophenes. *Materials* **2010,** *3* (3), 1904-1912.
1280. Rieger, R.; Müllen, K., Forever young: Polycyclic aromatic hydrocarbons as model cases for structural and optical studies. *Journal of Physical Organic Chemistry* **2010,** *23* (4), 315-325.
1281. Saleh, M.; Baumgarten, M.; Mavrinskiy, A.; Schäfer, T.; Müllen, K., Triphenylene-based polymers for blue polymerie light emitting diodes. *Macromolecules* **2010,** *43* (1), 137-143.
1282. Sax, S.; Rugen-Penkalla, N.; Neuhold, A.; Schuh, S.; Zojer, E.; List, E. J. W.; Müllen, K., Efficient blue-light-emitting polymer heterostructure devices: the fabrication of multilayer structures from orthogonal solvents. *Advanced Materials* **2010,** *22* (18), 2087-2091.
1283. Scaria, R.; Muellen, K.; Jacob, J., Synthesis and optical studies of conjugated polyfluorenyl cations. *Polymer* **2010,** *51* (24), 5705-5711.
1284. Schmelzeisen, M.; Zhao, Y.; Klapper, M.; Müllen, K.; Kreiter, M., Fluorescence enhancement from individual plasmonic gap resonances. *ACS Nano* **2010,** *4* (6), 3309-3317.
1285. Schmidtke, K.; Lieser, G.; Klapper, M.; Müllen, K., Complex inorganic/organic core-shell architectures via an inverse emulsion process. *Colloid and Polymer Science* **2010,** *288* (3), 333-339.
1286. Schmidtke, K.; Stelzig, S. H.; Geidel, C.; Klapper, M.; Müllen, K., Complex inorganic/organic core-shell particles by an inverse emulsion technique. *Macromolecular Symposia* **2010,** *296* (1), 28-37.
1287. Schwab, M. G.; Hamburger, M.; Feng, X.; Shu, J.; Spiess, H. W.; Wang, X.; Antonietti, M.; Müllen, K., Photocatalytic hydrogen evolution through fully conjugated poly(azomethine) networks. *Chemical Communications* **2010,** *46* (47), 8932-8934.
1288. Sonar, P.; Oldridge, L.; Grimsdale, A. C.; Müllen, K.; Surin, M.; Lazzaroni, R.; Leclère, P.; Pinto, J.; Chua, L. L.; Sirringhaus, H.; Friend, R. H., Synthesis, characterization and comparative OFET behaviour of indenofluorene-bithiophene and terthiophene alternating copolymers. *Synthetic Metals* **2010,** *160* (5-6), 468-474.
1289. Su, Q.; Liang, Y.; Feng, X.; Müllen, K., Towards free-standing graphene/carbon nanotube composite films via acetylene-assisted thermolysis of organocobalt functionalized graphene sheets. *Chemical Communications* **2010,** *46* (43), 8279-8281.
1290. Tasios, N.; Grigoriadis, C.; Hansen, M. R.; Wonneberger, H.; Li, C.; Spiess, H. W.; Müllen, K.; Floudas, G., Self-assembly, dynamics, and phase transformation kinetics of donor-acceptor substituted perylene derivatives. *Journal of the American Chemical Society* **2010,** *132* (21), 7478-7487.
1291. Treier, M.; Orgiu, E.; Zalewski, L.; Cho, D.; Rieger, R.; Müllen, K.; Samorì, P., Solid-solid transfer of organic semiconductors for field-effect transistor fabrication. *Journal of Materials Chemistry* **2010,** *20* (41), 9018-9021.

1292. Tsao, H. N.; Müllen, K., Improving polymer transistor performance via morphology control. *Chemical Society Reviews* **2010,** *39* (7), 2372-2386.
1293. Tyutyulkov, N.; Drebov, N.; Müllen, K.; Dietz, F., Structure and properties of non-classical polymers. XV. 1D polymers possessing two bands with ferromagnetically coupled electrons. *Zeitschrift fur Naturforschung - Section B Journal of Chemical Sciences* **2010,** *65* (1), 49-56.
1294. Wagner, C.; Kasemann, D.; Golnik, C.; Forker, R.; Esslinger, M.; Müllen, K.; Fritz, T., Repulsion between molecules on a metal: Monolayers and submonolayers of hexa-peri-hexabenzocoronene on Au(111). *Physical Review B - Condensed Matter and Materials Physics* **2010,** *81* (3).
1295. Weber, C. M.; Eisele, D. M.; Rabe, J. P.; Liang, Y.; Feng, X.; Zhi, L.; Müllen, K.; Lyon, J. L.; Williams, R.; VandenBout, D. A.; Stevenson, K. J., Graphene-based optically transparent electrodes for spectroelectrochemistry in the UV-vis region. *Small* **2010,** *6* (2), 184-189.
1296. Weil, T.; Vosch, T.; Hofkens, J.; Peneva, K.; Müllen, K., The rylene colorant family-tailored nanoemitters for photonics research and applications. *Angewandte Chemie - International Edition* **2010,** *49* (48), 9068-9093.
1297. Wong, W. W. H.; Birendra Singh, T.; Vak, D.; Pisula, W.; Yan, C.; Feng, X.; Williams, E. L.; Chan, K. L.; Mao, Q.; Jones, D. J.; Chang-Qi, M.; Müllen, K.; Bäuerle, P.; Holmes, A. B., Solution processable fluorenyl hexa-peri-hexabenzocoronenes in organic field-effect transistors and solar cells. *Advanced Functional Materials* **2010,** *20* (6), 927-938.
1298. Wong, W. W. H.; Ma, C. Q.; Pisula, W.; Yan, C.; Feng, X.; Jones, D. J.; Müllen, K.; Janssen, R. A. J.; Bäuerle, P.; Holmes, A. B., Self-assembling thiophene dendrimers with a hexa-peri-hexabenzocoronene core-synthesis, characterization and performance in bulk heterojunction solar cells. *Chemistry of Materials* **2010,** *22* (2), 457-466.
1299. Wonneberger, H.; Ma, C. Q.; Gatys, M. A.; Li, C.; Bäuerle, P.; Müllen, K., Terthiophene-perylene diimides: Color tuning via architecture variation. *Journal of Physical Chemistry B* **2010,** *114* (45), 14343-14347.
1300. Yang, S.; Cui, G.; Pang, S.; Cao, Q.; Kolb, U.; Feng, X.; Maier, J.; Müllen, K., Fabrication of cobalt and cobalt oxide/graphene composites: Towards high-performance anode materials for lithium ion batteries. *ChemSusChem* **2010,** *3* (2), 236-239.
1301. Yang, S.; Feng, X.; Ivanovici, S.; Müllen, K., Fabrication of graphene-encapsulated oxide nanoparticles: Towards high-performance anode materials for lithium storage. *Angewandte Chemie - International Edition* **2010,** *49* (45), 8408-8411.
1302. Yang, S.; Feng, X.; Wang, L.; Tang, K.; Maier, J.; Müllen, K., Graphene-based nanosheets with a sandwich structure. *Angewandte Chemie - International Edition* **2010,** *49* (28), 4795-4799.
1303. Yang, S.; Feng, X.; Zhi, L.; Cao, Q.; Maier, J.; Müllen, K., Nanographene-constructed hollow carbon spheres and their favorable electroactivity with respect to lithium storage. *Advanced Materials* **2010,** *22* (7), 838-842.
1304. Zilberman, Y.; Tisch, U.; Shuster, G.; Pisula, W.; Feng, X.; Müllen, K.; Haick, H., Carbon nanotube/hexa-peri-hexabenzocoronene bilayers for discrimination between nonpolar volatile organic compounds of cancer and humid atmospheres. *Advanced Materials* **2010,** *22* (38), 4317-4320.
1305. Zöphel, L.; Eisele, K.; Gropeanu, R.; Rouhanipour, A.; Koynov, K.; Lieberwirth, I.; Müllen, K.; Weil, T., Preparation of defined albumin-polymer hybrids for efficient cell transfection. *Macromolecular Chemistry and Physics* **2010,** *211* (2), 146-153.
1306. Al-Hussein, M.; Hesse, H. C.; Weickert, J.; Dössel, L.; Feng, X.; Müllen, K.; Schmidt-Mende, L., Structural properties of the active layer of discotic hexabenzocoronene/ perylene diimide bulk hetero junction photovoltaic devices: The role of alkyl side chain length. *Thin Solid Films* **2011,** *520* (1), 307-313.
1307. Amsalem, P.; Niederhausen, J.; Frisch, J.; Wilke, A.; Bröker, B.; Vollmer, A.; Rieger, R.;

Müllen, K.; Rabe, J. P.; Koch, N., Metal-to-acceptor charge transfer through a molecular spacer layer. *Journal of Physical Chemistry C* **2011,** *115* (35), 17503-17507.
1308. Amsalem, P.; Wilke, A.; Frisch, J.; Niederhausen, J.; Vollmer, A.; Rieger, R.; Müllen, K.; Rabe, J. P.; Koch, N., Interlayer molecular diffusion and thermodynamic equilibrium in organic heterostructures on a metal electrode. *Journal of Applied Physics* **2011,** *110* (11).
1309. Arnold, L.; Müllen, K., Modifying the porphyrin core - A chemist's jigsaw. *Journal of Porphyrins and Phthalocyanines* **2011,** *15* (9-10), 757-779.
1310. Arnold, L.; Norouzi-Arasi, H.; Wagner, M.; Enkelmann, V.; Müllen, K., A porphyrin-related macrocycle from carbazole and pyridine building blocks: Synthesis and metal coordination. *Chemical Communications* **2011,** *47* (3), 970-972.
1311. Battagliarin, G.; Li, C.; Enkelmann, V.; Müllen, K., 2,5,8,11-tetraboronic ester perylenediimides: A next generation building block for dye-stuff synthesis. *Organic Letters* **2011,** *13* (12), 3012-3015.
1312. Battagliarin, G.; Zhao, Y.; Li, C.; Müllen, K., Efficient tuning of LUMO levels of 2,5,8,11-substituted perylenediimides via copper catalyzed reactions. *Organic Letters* **2011,** *13* (13), 3399-3401.
1313. Bieri, M.; Blankenburg, S.; Kivala, M.; Pignedoli, C. A.; Ruffieux, P.; Müllen, K.; Fasel, R., Surface-supported 2D heterotriangulene polymers. *Chemical Communications* **2011,** *47* (37), 10239-10241.
1314. Boukhvalov, D. W.; Feng, X.; Müllen, K., First-principles modeling of the polycyclic aromatic hydrocarbons reduction. *Journal of Physical Chemistry C* **2011,** *115* (32), 16001-16005.
1315. Cañas-Ventura, M. E.; Aït-Mansour, K.; Ruffieux, P.; Rieger, R.; Müllen, K.; Brune, H.; Fasel, R., Complex interplay and hierarchy of interactions in two-dimensional supramolecular assemblies. *ACS Nano* **2011,** *5* (1), 457-469.
1316. Davies, M.; Jung, C.; Wallis, P.; Schnitzler, T.; Li, C.; Müllen, K.; Bräuchle, C., Photophysics of new photostable rylene derivatives: Applications in single-molecule studies and membrane labelling. *ChemPhysChem* **2011,** *12* (8), 1588-1595.
1317. De Luca, G.; Pisula, W.; Credgington, D.; Treossi, E.; Fenwick, O.; Lazzerini, G. M.; Dabirian, R.; Orgiu, E.; Liscio, A.; Palermo, V.; Müllen, K.; Cacialli, F.; Samorì, P., Non-conventional processing and post-processing methods for the nanostructuring of conjugated materials for organic electronics. *Advanced Functional Materials* **2011,** *21* (7), 1279-1295.
1318. De Viguerie, L.; Keller, R.; Jonas, U.; Berger, R.; Clark, C. G.; Klein, C. O.; Geue, T.; Müllen, K.; Butt, H. J.; Vlassopoulos, D., Effect of the molecular structure on the hierarchical self-assembly of semifluorinated alkanes at the air/water interface. *Langmuir* **2011,** *27* (14), 8776-8786.
1319. Deng, X.; Mammen, L.; Zhao, Y.; Lellig, P.; Müllen, K.; Li, C.; Butt, H. J.; Vollmer, D., Transparent, thermally stable and mechanically robust superhydrophobic surfaces made from porous silica capsules. *Advanced Materials* **2011,** *23* (26), 2962-2965.
1320. Deres, A.; Floudas, G. A.; Müllen, K.; Van Der Auweraer, M.; De Schryver, F.; Enderlein, J.; Uji-I, H.; Hofkens, J., The origin of heterogeneity of polymer dynamics near the glass temperature as probed by defocused imaging. *Macromolecules* **2011,** *44* (24), 9703-9709.
1321. Diez-Perez, I.; Hihath, J.; Hines, T.; Wang, Z. S.; Zhou, G.; Müllen, K.; Tao, N., Controlling single-molecule conductance through lateral coupling of ϕ orbitals. *Nature Nanotechnology* **2011,** *6* (4), 226-231.
1322. Dössel, L.; Gherghel, L.; Feng, X.; Müllen, K., Graphene nanoribbons by chemists: Nanometer-sized, soluble, and defect-free. *Angewandte Chemie - International Edition* **2011,** *50* (11), 2540-2543.
1323. Falkenberg, C.; Olthof, S.; Rieger, R.; Baumgarten, M.; Muellen, K.; Leo, K.; Riede, M., The role of energy level matching in organic solar cells- Hexaazatriphenylene hexacarbonitrile as

transparent electron transport material. *Solar Energy Materials and Solar Cells* **2011,** *95* (3), 927-932.
1324. Feng, C. L.; Yin, M.; Zhang, D.; Zhu, S.; Caminade, A. M.; Majoral, J. P.; Müllen, K., Fluorescent core-shell star polymers based bioassays for ultrasensitive DNA detection by surface plasmon fluorescence spectroscopy. *Macromolecular Rapid Communications* **2011,** *32* (8), 679-683.
1325. Figueira-Duarte, T. M.; Müllen, K., Pyrene-based materials for organic electronics. *Chemical Reviews* **2011,** *111* (11), 7260-7314.
1326. Flier, B. M. I.; Baier, M.; Huber, J.; Müllen, K.; Mecking, S.; Zumbusch, A.; Wöll, D., Single molecule fluorescence microscopy investigations on heterogeneity of translational diffusion in thin polymer films. *Physical Chemistry Chemical Physics* **2011,** *13* (5), 1770-1775.
1327. Fron, E.; Puhl, L.; Oesterling, I.; Li, C.; Müllen, K.; De Schryver, F. C.; Hofkens, J.; Vosch, T., Energy transfer pathways in a rylene-based triad. *ChemPhysChem* **2011,** *12* (3), 595-608.
1328. Geidel, C.; Schmachtel, S.; Riedinger, A.; Pfeiffer, C.; Müllen, K.; Klapper, M.; Parak, W. J., A general synthetic approach for obtaining cationic and anionic inorganic nanoparticles via encapsulation in amphiphilic copolymers. *Small* **2011,** *7* (20), 2929-2934.
1329. Geidel, C.; Schmidtke, K.; Klapper, M.; Müllen, K., Polymer-assisted formation of hydrophobized, shape-anisotropic zinc oxide nanoparticles via an inverse emulsion technique. *Polymer Bulletin* **2011,** *67* (8), 1443-1454.
1330. Grigoriadis, C.; Haase, N.; Butt, H. J.; Müllen, K.; Floudas, G., To tilt or not to tilt? Kinetics of structure formation in a discotic liquid crystal. *Soft Matter* **2011,** *7* (10), 4680-4689.
1331. Grimsdale, A. C.; Müllen, K., Molecular and Supramolecular Conjugated Polymers for Electronic Applications. In *Macromolecular Engineering: Precise Synthesis, Materials Properties, Applications*, 2011; Vol. 4, pp 2225-2262.
1332. Guo, X.; Wang, S.; Enkelmann, V.; Baumgarten, M.; Müllen, K., Making benzotrithiophene a stronger electron donor. *Organic Letters* **2011,** *13* (22), 6062-6065.
1333. Haase, M.; Hübner, C. G.; Nolde, F.; Müllen, K.; Basché, T., Photoblinking and photobleaching of rylene diimide dyes. *Physical Chemistry Chemical Physics* **2011,** *13* (5), 1776-1785.
1334. Haase, N.; Grigoriadis, C.; Butt, H. J.; Müllen, K.; Floudas, G., Effect of dipole functionalization on the thermodynamics and dynamics of discotic liquid crystals. *Journal of Physical Chemistry B* **2011,** *115* (19), 5807-5814.
1335. Hansen, M. R.; Feng, X.; MacHo, V.; Müllen, K.; Spiess, H. W.; Floudas, G., Fast and slow dynamics in a discotic liquid crystal with regions of columnar order and disorder. *Physical Review Letters* **2011,** *107* (25).
1336. Hesse, H. C.; Lembke, D.; Dössel, L.; Feng, X.; Müllen, K.; Schmidt-Mende, L., Nanostructuring discotic molecules on ITO support. *Nanotechnology* **2011,** *22* (5).
1337. Hesse, H. C.; Weickert, J.; Hundschell, C.; Feng, X.; Müllen, K.; Nickel, B.; Mozer, A. J.; Schmidt-Mende, L., Perylene sensitization of fullerenes for improved performance in organic photovoltaics. *Advanced Energy Materials* **2011,** *1* (5), 861-869.
1338. Hirsch, A.; Englert, J. M.; Feng, X.; Mullen, K., Chemical methods for the generation of graphenes and graphene nanoribbons. *Angewandte Chemie - International Edition* **2011,** *50* (37), A17-A24.
1339. Hoffmann, M. S.; Haschick, R.; Klapper, M.; Müllen, K., Oil-in-oil-emulsions: Tailor-made amphipolar emulsifiers. In *ACS Symposium Series*, 2011; Vol. 1070, pp 91-104.
1340. Ionescu, R.; Broza, Y.; Shaltieli, H.; Sadeh, D.; Zilberman, Y.; Feng, X.; Glass-Marmor, L.; Lejbkowicz, I.; Müllen, K.; Miller, A.; Haick, H., Detection of multiple sclerosis from exhaled breath using bilayers of polycyclic aromatic hydrocarbons and single-wall carbon nanotubes. *ACS Chemical Neuroscience* **2011,** *2* (12), 687-693.
1341. Jiménez-García, L.; Kaltbeitzel, A.; Enkelmann, V.; Gutmann, J. S.; Klapper, M.; Müllen, K., Organic proton-conducting molecules as solid-state separator materials for fuel cell applications.

Advanced Functional Materials **2011,** *21* (12), 2216-2224.
1342. Kajen, R. S.; Chandrasekhar, N.; Feng, X.; Müllen, K.; Su, H., Vibrational excitations in molecular layers probed by ballistic electron microscopy. *Nanotechnology* **2011,** *22* (43).
1343. Kamm, V.; Battagliarin, G.; Howard, I. A.; Pisula, W.; Mavrinskiy, A.; Li, C.; Müllen, K.; Laquai, F., Polythiophene:perylene diimide solar cells - The impact of alkyl-substitution on the photovoltaic performance. *Advanced Energy Materials* **2011,** *1* (2), 297-302.
1344. Keivanidis, P. E.; Laquai, F.; Robertson, J. W. F.; Baluschev, S.; Jacob, J.; Müllen, K.; Wegner, G., Erratum: Electron-exchange assisted photon energy up-conversion in thin films of π-conjugated polymeric composites(The Journal of Physical Chemistry Letters (2011) 2 (1893-1899) DOI: 10.1021/jz2007462). *Journal of Physical Chemistry Letters* **2011,** *2* (20), 2634.
1345. Keivanidis, P. E.; Laquai, F.; Robertson, J. W. F.; Baluschev, S.; Jacob, J.; Müllen, K.; Wegner, G., Electron-exchange-assisted photon energy up-conversion in thin films of π-conjugated polymeric composites. *Journal of Physical Chemistry Letters* **2011,** *2* (15), 1893-1899.
1346. Kim, H.; Schulte, N.; Zhou, G.; Müllen, K.; Laquai, F., A high gain and high charge carrier mobility indenofluorene-phenanthrene copolymer for light amplification and organic lasing. *Advanced Materials* **2011,** *23* (7), 894-897.
1347. Klapper, M.; Kaltbeitzel, A.; Enkelmann, V.; Gutmann, J. S.; Jimenez-Garcia, L.; Müllen, K. In *Organic proton-conducting molecules as solid-state separator materials for fuel cell applications*, ACS National Meeting Book of Abstracts, 2011.
1348. Klein, C. O.; De Viguerie, L.; Christopoulou, C.; Jonas, U.; Clark, C. G.; Müllen, K.; Vlassopoulos, D., Viscoelasticity of semifluorinated alkanes at the air/water interface. *Soft Matter* **2011,** *7* (17), 7737-7746.
1349. Kumar, R.; Varandani, D.; Mehta, B. R.; Singh, V. N.; Wen, Z.; Feng, X.; Müllen, K., Fast response and recovery of hydrogen sensing in Pd-Pt nanoparticle-graphene composite layers. *Nanotechnology* **2011,** *22* (27).
1350. Lei, S.; Tahara, K.; Müllen, K.; Szabelski, P.; Tobe, Y.; De Feyter, S., Mixing behavior of alkoxylated dehydrobenzo[12]annulenes at the solid-liquid interface: Scanning tunneling microscopy and Monte Carlo simulations. *ACS Nano* **2011,** *5* (5), 4145-4157.
1351. Li, H.; Pang, S.; Wu, S.; Feng, X.; Müllen, K.; Bubeck, C., Layer-by-layer assembly and UV photoreduction of graphene-polyoxometalate composite films for electronics. *Journal of the American Chemical Society* **2011,** *133* (24), 9423-9429.
1352. Liscio, A.; Palermo, V.; Fenwick, O.; Braun, S.; Müllen, K.; Fahlman, M.; Cacialli, F.; Samorì, P., Local surface potential of π-conjugated nanostructures by Kelvin Probe Force microscopy: Effect of the sampling depth. *Small* **2011,** *7* (5), 634-639.
1353. Liu, R.; Von Malotki, C.; Arnold, L.; Koshino, N.; Higashimura, H.; Baumgarten, M.; Müllen, K., Triangular trinuclear metal-N4 complexes with high electrocatalytic activity for oxygen reduction. *Journal of the American Chemical Society* **2011,** *133* (27), 10372-10375.
1354. Liu, R.; Wu, D.; Feng, X.; Müllen, K., Bottom-up fabrication of photoluminescent graphene quantum dots with uniform morphology. *Journal of the American Chemical Society* **2011,** *133* (39), 15221-15223.
1355. Lütke Eversloh, C.; Avlasevich, Y.; Li, C.; Müllen, K., Palladium-catalyzed pentannulation of polycyclic aromatic hydrocarbons. *Chemistry - A European Journal* **2011,** *17* (45), 12756-12762.
1356. Lütke Eversloh, C.; Li, C.; Müllen, K., Core-extended perylene tetracarboxdiimides: The homologous series of coronene tetracarboxdiimides. *Organic Letters* **2011,** *13* (15), 4148-4150.
1357. Lütke Eversloh, C.; Liu, Z.; Müller, B.; Stangl, M.; Li, C.; Müllen, K., Core-extended terrylene tetracarboxdiimide: Synthesis and chiroptical characterization. *Organic Letters* **2011,** *13* (20), 5528-5531.
1358. Ma, C. Q.; Pisula, W.; Weber, C.; Feng, X. L.; Müllen, K., Dendritic oligothiophenes

terminated with tris(alkyloxy)phenylethynyl tails: Synthesis, physical properties, and self-assembly. *Chemistry - A European Journal* **2011,** *17* (5), 1507-1518.
1359. Mali, K. S.; Wu, D.; Feng, X.; Müllen, K.; Van Der Auweraer, M.; De Feyter, S., Scanning tunneling microscopy-induced reversible phase transformation in the two-dimensional crystal of a positively charged discotic polycyclic aromatic hydrocarbon. *Journal of the American Chemical Society* **2011,** *133* (15), 5686-5688.
1360. Mavrinskaya, N.; Räder, H. J.; Müllen, K., Nonlinear behavior during semi-quantitative analysis of thin organic layers by laser desorption mass spectrometry. *Rapid Communications in Mass Spectrometry* **2011,** *25* (15), 2196-2200.
1361. Mavrinskiy, A.; Nielsen, C. B.; Reynolds, J. R.; Müllen, K.; Pisula, W., Influence of the alkyl mantle on the self-assembly of phenylene-thienylene- based oligomers. *Chemistry of Materials* **2011,** *23* (7), 1939-1945.
1362. Mpoukouvalas, K.; Türp, D.; Wagner, M.; Müllen, K.; Butt, H. J.; Floudas, G., Dissociation and charge transport in salts of dendronized ions in solvents of low polarity. *Journal of Physical Chemistry B* **2011,** *115* (19), 5801-5806.
1363. Müllen, K.; Feng, X. In *Controlled synthesis of carbon materials for energy storage*, ACS National Meeting Book of Abstracts, 2011.
1364. Naghavi, S. S.; Gruhn, T.; Alijani, V.; Fecher, G. H.; Felser, C.; Medjanik, K.; Kutnyakhov, D.; Nepijko, S. A.; Schönhense, G.; Rieger, R.; Baumgarten, M.; Müllen, K., Theoretical study of new acceptor and donor molecules based on polycyclic aromatic hydrocarbons. *Journal of Molecular Spectroscopy* **2011,** *265* (2), 95-101.
1365. Nguyen, T. T. T.; Türp, D.; Wang, D.; Nölscher, B.; Laquai, F.; Müllen, K., A fluorescent, shape-persistent dendritic host with photoswitchable guest encapsulation and intramolecular energy transfer. *Journal of the American Chemical Society* **2011,** *133* (29), 11194-11204.
1366. Nie, H.; Zhao, Y.; Zhang, M.; Ma, Y.; Baumgarten, M.; Müllen, K., Detection of TNT explosives with a new fluorescent conjugated polycarbazole polymer. *Chemical Communications* **2011,** *47* (4), 1234-1236.
1367. Niederhausen, J.; Amsalem, P.; Frisch, J.; Wilke, A.; Vollmer, A.; Rieger, R.; Müllen, K.; Rabe, J. P.; Koch, N., Tuning hole-injection barriers at organic/metal interfaces exploiting the orientation of a molecular acceptor interlayer. *Physical Review B - Condensed Matter and Materials Physics* **2011,** *84* (16).
1368. Norouzi-Arasi, H.; Pisula, W.; Mavrinskiy, A.; Feng, X.; Müllen, K., Synthesis and self-assembly of macrocyclic mesogens based on 1,10-phenanthroline. *Chemistry - An Asian Journal* **2011,** *6* (2), 367-371.
1369. Pang, S.; Hernandez, Y.; Feng, X.; Müllen, K., Graphene as transparent electrode material for organic electronics. *Advanced Materials* **2011,** *23* (25), 2779-2795.
1370. Papadopoulos, P.; Grigoriadis, C.; Haase, N.; Butt, H. J.; Müllen, K.; Floudas, G., Dynamics of Structure Formation in a Discotic Liquid Crystal by Infrared Spectroscopy and Related Techniques. *Journal of Physical Chemistry B* **2011,** *115* (50), 14919-14927.
1371. Pfisterer, A.; Eisele, K.; Chen, X.; Wagner, M.; Müllen, K.; Weil, T., Bioactive unnatural somatostatin analogues through bioorthogonal iodo-and ethynyl-disulfide intercalators. *Chemistry - A European Journal* **2011,** *17* (35), 9697-9707.
1372. Pisula, W.; Feng, X.; Müllen, K., Charge-carrier transporting graphene-type molecules. *Chemistry of Materials* **2011,** *23* (3), 554-567.
1373. Pisula, W.; Tomović, Z.; Kolb, U.; Müllen, K., Melt processing of hexa-peri-hexabenzocoronene on the water surface. *Langmuir* **2011,** *27* (4), 1524-1529.
1374. Qin, T.; Wiedemair, W.; Nau, S.; Trattnig, R.; Sax, S.; Winkler, S.; Vollmer, A.; Koch, N.; Baumgarten, M.; List, E. J. W.; Müllen, K., Core, shell, and surface-optimized dendrimers for blue

light-emitting diodes. *Journal of the American Chemical Society* **2011,** *133* (5), 1301-1303.
1375. Rudat, B.; Birtalan, E.; Vollrath, S. B. L.; Fritz, D.; Kölmel, D. K.; Nieger, M.; Schepers, U.; Müllen, K.; Eisler, H. J.; Lemmer, U.; Bräse, S., Photophysical properties of fluorescently-labeled peptoids. *European Journal of Medicinal Chemistry* **2011,** *46* (9), 4457-4465.
1376. Scaria, R.; Lucas, N. T.; Müllen, K.; Jacob, J., Blue-emitting copolymers of isoquinoline and fluorene. *Reactive and Functional Polymers* **2011,** *71* (8), 849-856.
1377. Schwab, M. G.; Crespy, D.; Feng, X.; Landfester, K.; Müllen, K., Preparation of microporous melamine-based polymer networks in an anhydrous high-temperature miniemulsion. *Macromolecular Rapid Communications* **2011,** *32* (22), 1798-1803.
1378. Schwab, M. G.; Qin, T.; Pisula, W.; Mavrinskiy, A.; Feng, X.; Baumgarten, M.; Kim, H.; Laquai, F.; Schuh, S.; Trattnig, R.; List, E. J. W.; Müllen, K., Molecular triangles: Synthesis, self-assembly, and blue emission of cyclo-7,10-tris-triphenylenyl macrocycles. *Chemistry - An Asian Journal* **2011,** *6* (11), 3001-3010.
1379. Singh, B.; Mehta, B. R.; Govind; Feng, X.; Müllen, K., Electronic interaction and bipolar resistive switching in copper oxide-multilayer graphene hybrid interface: Graphene as an oxygen ion storage and blocking layer. *Applied Physics Letters* **2011,** *99* (22).
1380. Singh, B.; Mehta, B. R.; Singh, M.; Gupta, G.; Dössel, L.; Feng, X.; Müllen, K., Structural and electronic interaction at CuO-hexa-peri-hexabenzocoronene hybrid interface. *Applied Physics Letters* **2011,** *98* (7).
1381. Stelzig, S. H.; Menneking, C.; Hoffmann, M. S.; Eisele, K.; Barcikowski, S.; Klapper, M.; Müllen, K., Compatibilization of laser generated antibacterial Ag- and Cu-nanoparticles for perfluorinated implant materials. *European Polymer Journal* **2011,** *47* (4), 662-667.
1382. Trattnig, R.; Figueira-Duarte, T. M.; Lorbach, D.; Wiedemair, W.; Sax, S.; Winkler, S.; Vollmer, A.; Koch, N.; Manca, M.; Loi, M. A.; Baumgarten, M.; List, E. J. W.; Müllen, K., Deep blue polymer light emitting diodes based on easy to synthesize, non-aggregating polypyrene. *Optics Express* **2011,** *19* (106), A1281-A1293.
1383. Treier, M.; Pignedoli, C. A.; Laino, T.; Rieger, R.; Müllen, K.; Passerone, D.; Fasel, R., Surface-assisted cyclodehydrogenation provides a synthetic route towards easily processable and chemically tailored nanographenes. *Nature Chemistry* **2011,** *3* (1), 61-67.
1384. Tsao, H. N.; Cho, D. M.; Park, I.; Hansen, M. R.; Mavrinskiy, A.; Yoon, D. Y.; Graf, R.; Pisula, W.; Spiess, H. W.; Müllen, K., Ultrahigh mobility in polymer field-effect transistors by design. *Journal of the American Chemical Society* **2011,** *133* (8), 2605-2612.
1385. Türp, D.; Wagner, M.; Enkelmann, V.; Müllen, K., Synthesis of nanometer-sized, rigid, and hydrophobic anions. *Angewandte Chemie - International Edition* **2011,** *50* (21), 4962-4965.
1386. Wahle, M.; Kasdorf, O.; Kitzerow, H. S.; Liang, Y.; Feng, X.; Müllen, K., Electrooptic switching in graphene-based liquid crystal cells. *Molecular Crystals and Liquid Crystals* **2011,** *543*, 187/[953]-193/[959].
1387. Wang, S.; Dössel, L.; Mavrinskiy, A.; Gao, P.; Feng, X.; Pisula, W.; Müllen, K., Self-assembly and microstructural control of a hexa-peri-hexabenzocoronene- perylene diimide dyad by solvent vapor diffusion. *Small* **2011,** *7* (20), 2841-2846.
1388. Wang, S.; Gao, P.; Liebewirth, I.; Kirchhoff, K.; Pang, S.; Feng, X.; Pisula, W.; Müllen, K., Microribbon field-effect transistors based on dithieno[2,3-d;2,3'- d']benzo[1,2-b;4,5-b']dithiophene processed by solvent vapor diffusion. *Chemistry of Materials* **2011,** *23* (22), 4960-4964.
1389. Wang, S.; Kivala, M.; Lieberwirth, I.; Kirchhoff, K.; Feng, X.; Pisula, W.; Müllen, K., Dip-coating-induced fiber growth of a soluble heterotriangulene. *ChemPhysChem* **2011,** *12* (9), 1648-1651.
1390. Wong, W. W. H.; Ma, C. Q.; Pisula, W.; Mavrinskiy, A.; Feng, X.; Seyler, H.; Jones, D. J.; Müllen, K.; Bäuerle, P.; Holmes, A. B., Fluorenyl hexa-peri-hexabenzocoronene-dendritic

oligothiophene hybrid materials: Synthesis, photophysical properties, self-association behaviour and device performance. *Chemistry - A European Journal* **2011,** *17* (20), 5549-5560.
1391. Wonneberger, H.; Pschirer, N.; Bruder, I.; Schöneboom, J.; Ma, C. Q.; Erk, P.; Li, C.; Bäuerle, P.; Müllen, K., Double donor-thiophene dendron-perylene monoimide: Efficient light-harvesting metal-free chromophore for solid-state dye-sensitized solar cells. *Chemistry - An Asian Journal* **2011,** *6* (7), 1744-1747.
1392. Wu, D.; Liu, R.; Pisula, W.; Feng, X.; Müllen, K., Two-dimensional nanostructures from positively charged polycyclic aromatic hydrocarbons. *Angewandte Chemie - International Edition* **2011,** *50* (12), 2791-2794.
1393. Wunderlich, K.; Markova, D.; Klapper, M.; Müllen, K. In *Phosphonic acid functionalized diblock copolymers as emulsifiers and for fuel cell application*, ACS National Meeting Book of Abstracts, 2011.
1394. Xu, X.; Stöttinger, S.; Battagliarin, G.; Hinze, G.; Mugnaioli, E.; Li, C.; Müllen, K.; Basché, T., Assembly and separation of semiconductor quantum dot dimers and trimers. *Journal of the American Chemical Society* **2011,** *133* (45), 18062-18065.
1395. Yang, S.; Feng, X.; Müllen, K., Sandwich-like, graphene-based titania nanosheets with high surface area for fast lithium storage. *Advanced Materials* **2011,** *23* (31), 3575-3579.
1396. Yang, S.; Feng, X.; Wang, X.; Müllen, K., Graphene-based carbon nitride nanosheets as efficient metal-free electrocatalysts for oxygen reduction reactions. *Angewandte Chemie - International Edition* **2011,** *50* (23), 5339-5343.
1397. Yin, M.; Feng, C.; Shen, J.; Yu, Y.; Xu, Z.; Yang, W.; Knoll, W.; Müllen, K., Dual-responsive interaction to detect DNA on template-based fluorescent nanotubes. *Small* **2011,** *7* (12), 1629-1634.
1398. Zhou, H. T.; Mao, J. H.; Li, G.; Wang, Y. L.; Feng, X. L.; Du, S. X.; Müllen, K.; Gao, H. J., Direct imaging of intrinsic molecular orbitals using two-dimensional, epitaxially-grown, nanostructured graphene for study of single molecule and interactions. *Applied Physics Letters* **2011,** *99* (15).
1399. Zilberman, Y.; Ionescu, R.; Feng, X.; Müllen, K.; Haick, H., Nanoarray of polycyclic aromatic hydrocarbons and carbon nanotubes for accurate and predictive detection in real-world environmental humidity. *ACS Nano* **2011,** *5* (8), 6743-6753.
1400. Zöphel, L.; Beckmann, D.; Enkelmann, V.; Chercka, D.; Rieger, R.; Müllen, K., Asymmetric pyrene derivatives for organic field-effect transistors. *Chemical Communications* **2011,** *47* (24), 6960-6962.
1401. Zöphel, L.; Enkelmann, V.; Rieger, R.; Müllen, K., Saddle shaped hexaaryl[a,c,fg,j,l,op]tetracenes from 4,5,9,10- tetrafunctionalized pyrenes. *Organic Letters* **2011,** *13* (17), 4506-4509.
1402. Arnold, L.; Baumgarten, M.; Müllen, K., A carbazole-containing porphyrinoid: Synthesis and oxidation to the porphyrin-state. *Chemical Communications* **2012,** *48* (77), 9640-9642.
1403. Arnold, L.; Puniredd, S. R.; Von Malotki, C.; Pisula, W.; Koshino, N.; Higashimura, H.; Baumgarten, M.; Wagner, M.; Müllen, K., Fused π-extended discotic triangular porphyrinoids. *Journal of Porphyrins and Phthalocyanines* **2012,** *16* (5-6), 564-575.
1404. Bachar, N.; Mintz, L.; Zilberman, Y.; Ionescu, R.; Feng, X.; Müllen, K.; Haick, H., Polycyclic aromatic hydrocarbon for the detection of nonpolar analytes under counteracting humidity conditions. *ACS Applied Materials and Interfaces* **2012,** *4* (9), 4960-4965.
1405. Battagliarin, G.; Davies, M.; MacKowiak, S.; Li, C.; Müllen, K., Ortho-functionalized perylenediimides for highly fluorescent water-soluble dyes. *ChemPhysChem* **2012,** *13* (4), 923-926.
1406. Beaujuge, P. M.; Tsao, H. N.; Hansen, M. R.; Amb, C. M.; Risko, C.; Subbiah, J.; Choudhury, K. R.; Mavrinskiy, A.; Pisula, W.; Brédas, J. L.; So, F.; Müllen, K.; Reynolds, J. R., Synthetic principles directing charge transport in low-band-gap dithienosilole-benzothiadiazole copolymers. *Journal of the American Chemical Society* **2012,** *134* (21), 8944-8957.

1407. Beckmann, D.; Müllen, K., Supramolecular structures in organic electronics. In *Applications of Supramolecular Chemistry*, 2012; pp 187-230.
1408. Blankenburg, S.; Cai, J.; Ruffieux, P.; Jaafar, R.; Passerone, D.; Feng, X.; Müllen, K.; Fasel, R.; Pignedoli, C. A., Intraribbon heterojunction formation in ultranarrow graphene nanoribbons. *ACS Nano* **2012,** *6* (3), 2020-2025.
1409. Chen, L.; Dou, X.; Pisula, W.; Yang, X.; Wu, D.; Floudas, G.; Feng, X.; Müllen, K., Discotic hexa-peri-hexabenzocoronenes with strong dipole: Synthesis, self-assembly and dynamic studies. *Chemical Communications* **2012,** *48* (5), 702-704.
1410. Chen, L.; Hernandez, Y.; Feng, X.; Müllen, K., From nanographene and graphene nanoribbons to graphene sheets: Chemical synthesis. *Angewandte Chemie - International Edition* **2012,** *51* (31), 7640-7654.
1411. Chen, L.; Puniredd, S. R.; Tan, Y. Z.; Baumgarten, M.; Zschieschang, U.; Enkelmann, V.; Pisula, W.; Feng, X.; Klauk, H.; Müllen, K., Hexathienocoronenes: Synthesis and self-organization. *Journal of the American Chemical Society* **2012,** *134* (43), 17869-17872.
1412. Cho, N.; Zhou, G.; Kamada, K.; Kim, R. H.; Ohta, K.; Jin, S. H.; Müllen, K.; Lee, K. S., The impact of charge defects and resonance enhancement on the two-photon absorption activity of spirofluorene and ladder-type pentaphenylene derivatives. *Journal of Materials Chemistry* **2012,** *22* (1), 185-191.
1413. Dorresteijn, R.; Haschick, R.; Klapper, M.; Müllen, K., Poly(L -lactide) nanoparticles via ring-opening polymerization in non-aqueous emulsion. *Macromolecular Chemistry and Physics* **2012,** *213* (19), 1996-2002.
1414. Dössel, L. F.; Kamm, V.; Howard, I. A.; Laquai, F.; Pisula, W.; Feng, X.; Li, C.; Takase, M.; Kudernac, T.; De Feyter, S.; Müllen, K., Synthesis and controlled self-assembly of covalently linked hexa- peri -hexabenzocoronene/perylene diimide dyads as models to study fundamental energy and electron transfer processes. *Journal of the American Chemical Society* **2012,** *134* (13), 5876-5886.
1415. Duran, H.; Hartmann-Azanza, B.; Steinhart, M.; Gehrig, D.; Laquai, F.; Feng, X.; Müllen, K.; Butt, H. J.; Floudas, G., Arrays of aligned supramolecular wires by macroscopic orientation of columnar discotic mesophases. *ACS Nano* **2012,** *6* (11), 9359-9365.
1416. Edelsztein, V. C.; Jares-Erijman, E. A.; Müllen, K.; Di Chenna, P. H.; Spagnuolo, C. C., A luminescent steroid-based organogel: ON-OFF photoswitching by dopant interplay and templated synthesis of fluorescent nanoparticles. *Journal of Materials Chemistry* **2012,** *22* (41), 21857-21861.
1417. Elmahdy, M. M.; Clark, C. G.; Butt, H. J.; Müllen, K.; Floudas, G., Dynamics and kinetics of structure formation in molecularly tethered fluorocarbon/hydrocarbon amphiphiles. *Journal of Physical Chemistry B* **2012,** *116* (46), 13812-13820.
1418. Elstner, M.; Weisshart, K.; Müllen, K.; Schiller, A., Molecular logic with a saccharide probe on the few-molecules level. *Journal of the American Chemical Society* **2012,** *134* (19), 8098-8100.
1419. Etzold, F.; Howard, I. A.; Forler, N.; Cho, D. M.; Meister, M.; Mangold, H.; Shu, J.; Hansen, M. R.; Müllen, K.; Laquai, F., The effect of solvent additives on morphology and excited-state dynamics in PCPDTBT:PCBM photovoltaic blends. *Journal of the American Chemical Society* **2012,** *134* (25), 10569-10583.
1420. Flier, B. M. I.; Baier, M. C.; Huber, J.; Müllen, K.; Mecking, S.; Zumbusch, A.; Wöll, D., Heterogeneous diffusion in thin polymer films as observed by high-temperature single-molecule fluorescence microscopy. *Journal of the American Chemical Society* **2012,** *134* (1), 480-488.
1421. Fückel, B.; Hinze, G.; Wu, J.; Müllen, K.; Basché, T., Probing the electronic state of a single coronene molecule by the emission from proximate fluorophores. *ChemPhysChem* **2012,** *13* (4), 938-945.
1422. Geidel, C.; Klapper, M.; Müllen, K., In situ hydrophobized, shape-anisotropic nanoparticles for composite materials. *Colloid and Polymer Science* **2012,** *290* (13), 1265-1274.

1423. Gemayel, M. E.; Treier, M.; Musumeci, C.; Li, C.; Müllen, K.; Samorì, P., Tuning the photoresponse in organic field-effect transistors. *Journal of the American Chemical Society* **2012,** *134* (4), 2429-2433.
1424. Golling, F. E.; Schuster, T.; Geidel, C.; Mammen, L.; Vollmer, D.; Müllen, K.; Klapper, M., The power of perfluorinated amphiphilic polymers at interfaces. In *ACS Symposium Series*, 2012; Vol. 1106, pp 111-126.
1425. Groll, J.; Müllen, K.; Walther, A., Macromolecular chemistry 2011. *Nachrichten aus der Chemie* **2012,** *60* (3), 332-345.
1426. Guo, X.; Puniredd, S. R.; Baumgarten, M.; Pisula, W.; Müllen, K., Benzotrithiophene-based donor-acceptor copolymers with distinct supramolecular organizations. *Journal of the American Chemical Society* **2012,** *134* (20), 8404-8407.
1427. Henson, Z. B.; Müllen, K.; Bazan, G. C., Design strategies for organic semiconductors beyond the molecular formula. *Nature Chemistry* **2012,** *4* (9), 699-704.
1428. Hernandez, Y.; Pang, S.; Feng, X.; Müllen, K., Graphene and Its Synthesis. In *Polymer Science: A Comprehensive Reference, 10 Volume Set*, 2012; Vol. 8, pp 415-438.
1429. Hesse, H. C.; Schaffer, C.; Hundschell, C.; Narita, A.; Feng, X.; Müllen, K.; Nickel, B.; Schmidt-Mende, L., Large polycyclic aromatic hydrocarbons for application in donor-acceptor photovoltaics. *Physica Status Solidi (A) Applications and Materials Science* **2012,** *209* (4), 785-789.
1430. Hu, W.; Bao, Z.; Muellen, K., Themed issue on "organic optoelectronic materials". *Journal of Materials Chemistry* **2012,** *22* (10), 4134-4135.
1431. Hughes, J. M.; Hernandez, Y.; Aherne, D.; Doessel, L.; Müllen, K.; Moreton, B.; White, T. W.; Partridge, C.; Costantini, G.; Shmeliov, A.; Shannon, M.; Nicolosi, V.; Coleman, J. N., High quality dispersions of hexabenzocoronene in organic solvents. *Journal of the American Chemical Society* **2012,** *134* (29), 12168-12179.
1432. Kumar, A.; Pisula, W.; Markova, D.; Klapper, M.; Müllen, K., Proton-conducting poly(phenylene oxide)-poly(vinyl benzyl phosphonic acid) block copolymers via atom transfer radical polymerization. *Macromolecular Chemistry and Physics* **2012,** *213* (5), 489-499.
1433. Linden, S.; Zhong, D.; Timmer, A.; Aghdassi, N.; Franke, J. H.; Zhang, H.; Feng, X.; Müllen, K.; Fuchs, H.; Chi, L.; Zacharias, H., Linden etal. Reply. *Physical Review Letters* **2012,** *109* (11).
1434. Linden, S.; Zhong, D.; Timmer, A.; Aghdassi, N.; Franke, J. H.; Zhang, H.; Feng, X.; Müllen, K.; Fuchs, H.; Chi, L.; Zacharias, H., Electronic structure of spatially aligned graphene nanoribbons on Au(788). *Physical Review Letters* **2012,** *108* (21).
1435. Liu, B.; Li, X.; Liu, M.; Ning, Z.; Zhang, Q.; Li, C.; Müllen, K.; Zhu, W., Photovoltaic performance of solid-state DSSCs sensitized with organic isophorone dyes: Effect of dye-loaded amount and dipole moment. *Dyes and Pigments* **2012,** *94* (1), 23-27.
1436. Liu, J.; Lukose, B.; Shekhah, O.; Arslan, H. K.; Weidler, P.; Gliemann, H.; Bräse, S.; Grosjean, S.; Godt, A.; Feng, X.; Müllen, K.; Magdau, I. B.; Heine, T.; Wöll, C., A novel series of isoreticular metal organic frameworks: Realizing metastable structures by liquid phase epitaxy. *Scientific Reports* **2012,** *2*.
1437. Lubczyk, D.; Grill, M.; Baumgarten, M.; Waldvogel, S. R.; Müllen, K., Scaffold-optimized dendrimers for the detection of the triacetone triperoxide explosive using quartz crystal microbalances. *ChemPlusChem* **2012,** *77* (2), 102-105.
1438. Madathil, P. K.; Lim, J. G.; Kim, T. D.; Beckmann, D.; Mavrinskiy, A.; Pisula, W.; Baumgarten, M.; Mullen, K.; Lee, K. S., Synthesis and characterization of anthracene derivative for organic field-effect transistor fabrication. *Journal of Nanoscience and Nanotechnology* **2012,** *12* (5), 4269-4273.
1439. Makarov, N. S.; Mukhopadhyay, S.; Yesudas, K.; Brédas, J. L.; Perry, J. W.; Pron, A.; Kivala, M.; Müllen, K., Impact of electronic coupling, symmetry, and planarization on one-and

two-photon properties of triarylamines with one, two, or three diarylboryl acceptors. *Journal of Physical Chemistry A* **2012,** *116* (15), 3781-3793.
1440. Medjanik, K.; Chercka, D.; Nagel, P.; Merz, M.; Schuppler, S.; Baumgarten, M.; Müllen, K.; Nepijko, S. A.; Elmers, H. J.; Schönhense, G.; Jeschke, H. O.; Valenti, R., Orbital-resolved partial charge transfer from the methoxy groups of substituted pyrenes in complexes with tetracyanoquinodimethane - A NEXAFS study. *Journal of the American Chemical Society* **2012,** *134* (10), 4694-4699.
1441. Medjanik, K.; Gloskovskii, A.; Kutnyakhov, D.; Felser, C.; Chercka, D.; Baumgarten, M.; Müllen, K.; Schönhense, G., Charge transfer in the novel donor-acceptor complexes tetra- and hexamethoxypyrene with tetracyanoquinodimethane studied by HAXPES. *Journal of Electron Spectroscopy and Related Phenomena* **2012,** *185* (3-4), 77-84.
1442. Müllen, K.; Antonietti, M., Carbon materials with a kick! *Macromolecular Chemistry and Physics* **2012,** *213* (10-11), 999-1000.
1443. Nie, H.; Sun, G.; Zhang, M.; Baumgarten, M.; Müllen, K., Fluorescent conjugated polycarbazoles for explosives detection: Side chain effects on TNT sensor sensitivity. *Journal of Materials Chemistry* **2012,** *22* (5), 2129-2132.
1444. Nishiuchi, T.; Feng, X.; Enkelmann, V.; Wagner, M.; Müllen, K., Three-dimensionally arranged cyclic p-hexaphenylbenzene: Toward a bottom-up synthesis of size-defined carbon nanotubes. *Chemistry - A European Journal* **2012,** *18* (52), 16621-16625.
1445. Ober, C. K.; Müllen, K., Introduction - Applications of Polymers. In *Polymer Science: A Comprehensive Reference, 10 Volume Set*, 2012; Vol. 8, pp 1-8.
1446. Osella, S.; Narita, A.; Schwab, M. G.; Hernandez, Y.; Feng, X.; Müllen, K.; Beljonne, D., Graphene nanoribbons as low band gap donor materials for organic photovoltaics: Quantum chemical aided design. *ACS Nano* **2012,** *6* (6), 5539-5548.
1447. Pang, S.; Yang, S.; Feng, X.; Müllen, K., Coplanar asymmetrical reduced graphene oxide-titanium electrodes for polymer photodetectors. *Advanced Materials* **2012,** *24* (12), 1566-1570.
1448. Papadopoulos, P.; Deng, X.; Mammen, L.; Drotlef, D. M.; Battagliarin, G.; Li, C.; Müllen, K.; Landfester, K.; Del Campo, A.; Butt, H. J.; Vollmer, D., Erratum: Wetting on the microscale: Shape of a liquid drop on a microstructured surface at different length scales (Langmuir (2012) 28: 22 (8392-8398) DOI: 10.1021/la300379u). *Langmuir* **2012,** *28* (26), 10136-10139.
1449. Papadopoulos, P.; Deng, X.; Mammen, L.; Drotlef, D. M.; Battagliarin, G.; Li, C.; Müllen, K.; Landfester, K.; Del Campo, A.; Butt, H. J.; Vollmer, D., Wetting on the microscale: Shape of a liquid drop on a microstructured surface at different length scales. *Langmuir* **2012,** *28* (22), 8392-8398.
1450. Parvez, K.; Yang, S.; Hernandez, Y.; Winter, A.; Turchanin, A.; Feng, X.; Müllen, K., Nitrogen-doped graphene and its iron-based composite as efficient electrocatalysts for oxygen reduction reaction. *ACS Nano* **2012,** *6* (11), 9541-9550.
1451. Qin, T.; Ding, J.; Baumgarten, M.; Wang, L.; Müllen, K., Red-emitting dendritic Iridium(III) complexes for solution processable phosphorescent organic light-emitting diodes. *Macromolecular Rapid Communications* **2012,** *33* (12), 1036-1041.
1452. Ruffieux, P.; Cai, J.; Plumb, N. C.; Patthey, L.; Prezzi, D.; Ferretti, A.; Molinari, E.; Feng, X.; Müllen, K.; Pignedoli, C. A.; Fasel, R., Electronic structure of atomically precise graphene nanoribbons. *ACS Nano* **2012,** *6* (8), 6930-6935.
1453. Rugen-Penkalla, N.; Klapper, M.; Müllen, K., Highly charged conjugated polymers with polyphenylene backbones and poly(acrylic acid) side chains. *Macromolecules* **2012,** *45* (5), 2301-2311.
1454. Sabbah, H.; Pomerantz, A. E.; Wagner, M.; Müllen, K.; Zare, R. N., Laser desorption single-photon ionization of asphaltenes: Mass range, compound sensitivity, and matrix effects. *Energy and Fuels* **2012,** *26* (6), 3521-3526.

1455. Salzmann, I.; Moser, A.; Oehzelt, M.; Breuer, T.; Feng, X.; Juang, Z. Y.; Nabok, D.; Della Valle, R. G.; Duhm, S.; Heimel, G.; Brillante, A.; Venuti, E.; Bilotti, I.; Christodoulou, C.; Frisch, J.; Puschnig, P.; Draxl, C.; Witte, G.; Müllen, K.; Koch, N., Epitaxial growth of π-stacked perfluoropentacene on graphene-coated quartz. *ACS Nano* **2012,** *6* (12), 10874-10883.
1456. Savage, R. C.; Orgiu, E.; Mativetsky, J. M.; Pisula, W.; Schnitzler, T.; Eversloh, C. L.; Li, C.; Müllen, K.; Samorì, P., Charge transport in fibre-based perylene-diimide transistors: Effect of the alkyl substitution and processing technique. *Nanoscale* **2012,** *4* (7), 2387-2393.
1457. Schwab, M. G.; Narita, A.; Hernandez, Y.; Balandina, T.; Mali, K. S.; De Feyter, S.; Feng, X.; Müllen, K., Structurally defined graphene nanoribbons with high lateral extension. *Journal of the American Chemical Society* **2012,** *134* (44), 18169-18172.
1458. Soe, W. H.; Wong, H. S.; Manzano, C.; Grisolia, M.; Hliwa, M.; Feng, X.; Müllen, K.; Joachim, C., Mapping the excited states of single hexa- peri -benzocoronene oligomers. *ACS Nano* **2012,** *6* (4), 3230-3235.
1459. Stempfle, B.; Dill, M.; Winterhalder, M. J.; Müllen, K.; Wöll, D., Single molecule diffusion and its heterogeneity during the bulk radical polymerization of styrene and methyl methacrylate. *Polymer Chemistry* **2012,** *3* (9), 2456-2463.
1460. Tomar, M.; Lucas, N. T.; Gardiner, M. G.; Müllen, K.; Jacob, J., Facile synthesis and coupling of functionalized isomeric biquinolines. *Tetrahedron Letters* **2012,** *53* (3), 285-288.
1461. Tomar, M.; Lucas, N. T.; Kim, H.; Laquai, F.; Müllen, K.; Jacob, J., Facile synthesis of 5,8-linked quinoline-based copolymers. *Polymer International* **2012,** *61* (8), 1318-1325.
1462. Türp, D.; Nguyen, T. T. T.; Baumgarten, M.; Müllen, K., Uniquely versatile: Nano-site defined materials based on polyphenylene dendrimers. *New Journal of Chemistry* **2012,** *36* (2), 282-298.
1463. Vasilev, A. A.; De Mey, K.; Asselberghs, I.; Clays, K.; Champagne, B.; Angelova, S. E.; Spassova, M. I.; Li, C.; Müllen, K., Enhanced intramolecular charge transfer in new type donor-acceptor substituted perylenes. *Journal of Physical Chemistry C* **2012,** *116* (43), 22711-22719.
1464. Wang, S.; Kappl, M.; Liebewirth, I.; Müller, M.; Kirchhoff, K.; Pisula, W.; Müllen, K., Organic field-effect transistors based on highly ordered single polymer fibers. *Advanced Materials* **2012,** *24* (3), 417-420.
1465. Wang, S.; Kiersnowski, A.; Pisula, W.; Müllen, K., Microstructure evolution and device performance in solution-processed polymeric field-effect transistors: The key role of the first monolayer. *Journal of the American Chemical Society* **2012,** *134* (9), 4015-4018.
1466. Wang, S.; Pisula, W.; Müllen, K., Nanofiber growth and alignment in solution processed n-type naphthalene-diimide-based polymeric field-effect transistors. *Journal of Materials Chemistry* **2012,** *22* (47), 24827-24831.
1467. Wießner, M.; Rodríguez Lastra, N. S.; Ziroff, J.; Forster, F.; Puschnig, P.; Dössel, L.; Müllen, K.; Schöll, A.; Reinert, F., Different views on the electronic structure of nanoscale graphene: Aromatic molecule versus quantum dot. *New Journal of Physics* **2012,** *14*.
1468. Wong, H. S.; Feng, X.; Müllen, K.; Chandrasekhar, N.; Durkan, C., Channel selective tunnelling through a nanographene assembly. *Nanotechnology* **2012,** *23* (9).
1469. Wong, H. S.; Feng, X.; Yang, Z. Y.; Müllen, K.; Chandrasekhar, N.; Durkan, C., Altering the ordering and disordering of a triangular nanographene at room temperature. *Nanotechnology* **2012,** *23* (1).
1470. Wong, W. W. H.; Subbiah, J.; Puniredd, S. R.; Purushothaman, B.; Pisula, W.; Kirby, N.; Müllen, K.; Jones, D. J.; Holmes, A. B., Liquid crystalline hexa-peri-hexabenzocoronene-diketopyrrolopyrrole organic dyes for photovoltaic applications. *Journal of Materials Chemistry* **2012,** *22* (39), 21131-21137.
1471. Wu, Z. S.; Sun, Y.; Tan, Y. Z.; Yang, S.; Feng, X.; Müllen, K., Three-dimensional graphene-based macro- and mesoporous frameworks for high-performance electrochemical capacitive

energy storage. *Journal of the American Chemical Society* **2012,** *134* (48), 19532-19535.
1472. Wu, Z. S.; Winter, A.; Chen, L.; Sun, Y.; Turchanin, A.; Feng, X.; Müllen, K., Three-dimensional nitrogen and boron co-doped graphene for high-performance all-solid-state supercapacitors. *Advanced Materials* **2012,** *24* (37), 5130-5135.
1473. Wu, Z. S.; Yang, S.; Sun, Y.; Parvez, K.; Feng, X.; Müllen, K., 3D nitrogen-doped graphene aerogel-supported Fe 3O 4 nanoparticles as efficient electrocatalysts for the oxygen reduction reaction. *Journal of the American Chemical Society* **2012,** *134* (22), 9082-9085.
1474. Yang, S.; Sun, Y.; Chen, L.; Hernandez, Y.; Feng, X.; Müllen, K., Porous iron oxide ribbons grown on graphene for high-performance lithium storage. *Scientific Reports* **2012,** *2*.
1475. Yang, S.; Zhi, L.; Tang, K.; Feng, X.; Maier, J.; Müllen, K., Efficient synthesis of heteroatom (N or S)-doped graphene based on ultrathin graphene oxide-porous silica sheets for oxygen reduction reactions. *Advanced Functional Materials* **2012,** *22* (17), 3634-3640.
1476. Yin, M.; Kang, N.; Cui, G.; Liu, Z.; Wang, F.; Yang, W.; Klapper, M.; Müllen, K., Synthesis, electrochemical properties and self-assembly of a proton-conducting core-shell macromolecule. *Chemistry - A European Journal* **2012,** *18* (8), 2239-2243.
1477. Yu, Y.; Yin, M.; Müllen, K.; Knoll, W., LbL-assembled multilayer films of dendritic star polymers: Surface morphology and DNA hybridization detection. *Journal of Materials Chemistry* **2012,** *22* (16), 7880-7886.
1478. Zagranyarski, Y.; Chen, L.; Zhao, Y.; Wonneberger, H.; Li, C.; Müllen, K., Facile transformation of perylene tetracarboxylic acid dianhydride into strong donor-acceptor chromophores. *Organic Letters* **2012,** *14* (21), 5444-5447.
1479. Zöphel, L.; Mali, K. S.; Reddy, P. S.; Wagner, M.; De Feyter, S.; Pisula, W.; Müllen, K., 4,5-pyrenocyanine-just another phthalocyanine? A STM and 2D WAXS study. *Chemistry - A European Journal* **2012,** *18* (11), 3264-3276.
1480. Angelova, P.; Vieker, H.; Weber, N. E.; Matei, D.; Reimer, O.; Meier, I.; Kurasch, S.; Biskupek, J.; Lorbach, D.; Wunderlich, K.; Chen, L.; Terfort, A.; Klapper, M.; Müllen, K.; Kaiser, U.; Gölzhäuser, A.; Turchanin, A., A universal scheme to convert aromatic molecular monolayers into functional carbon nanomembranes. *ACS Nano* **2013,** *7* (8), 6489-6497.
1481. Bachar, N.; Liberman, L.; Muallem, F.; Feng, X.; Müllen, K.; Haick, H., Sensor arrays based on polycyclic aromatic hydrocarbons: Chemiresistors versus quartz-crystal microbalance. *ACS Applied Materials and Interfaces* **2013,** *5* (22), 11641-11653.
1482. Basak, S.; Narayana, Y. S. L. V.; Baumgarten, M.; Müllen, K.; Chandrasekar, R., White light emitting films from Eu(III) complexed copolymers of alternating fluorene and Bis(pyrazolyl)pyridine derivatives. *Macromolecules* **2013,** *46* (2), 362-369.
1483. Bayn, A.; Feng, X.; Müllen, K.; Haick, H., Field effect transistors based on polycyclic aromatic hydrocarbons for the detection and classification of volatile organic compounds. *ACS Applied Materials and Interfaces* **2013,** *5* (8), 3431-3440.
1484. Brutschy, M.; Lubczyk, D.; Müllen, K.; Waldvogel, S. R., Surface pretreatment boosts the performance of supramolecular affinity materials on quartz crystal microbalances for sensor applications. *Analytical Chemistry* **2013,** *85* (21), 10526-10530.
1485. Chen, L.; Mali, K. S.; Puniredd, S. R.; Baumgarten, M.; Parvez, K.; Pisula, W.; De Feyter, S.; Müllen, K., Assembly and fiber formation of a gemini-type hexathienocoronene amphiphile for electrical conduction. *Journal of the American Chemical Society* **2013,** *135* (36), 13531-13537.
1486. Chiad, K.; Grill, M.; Baumgarten, M.; Klapper, M.; Müllen, K., Guest uptake by rigid polyphenylene dendrimers acting as a unique dendritic box in solution proven by isothermal calorimetry. *Macromolecules* **2013,** *46* (9), 3554-3560.
1487. De Luca, G.; Liscio, A.; Battagliarin, G.; Chen, L.; Scolaro, L. M.; Müllen, K.; Samorï, P.; Palermo, V., Orthogonal self-assembly and selective solvent vapour annealing: Simplified processing of a

photovoltaic blend. *Chemical Communications* **2013,** *49* (39), 4322-4324.
1488. Dorresteijn, R.; Haschick, R.; Müller, K.; Klapper, M.; Müllen, K. In *Synthesis of nanosized polymer particles in nonaqueous emulsion*, Materials Research Society Symposium Proceedings, 2013; pp 61-65.
1489. Dorresteijn, R.; Ragg, R.; Rago, G.; Billecke, N.; Bonn, M.; Parekh, S. H.; Battagliarin, G.; Peneva, K.; Wagner, M.; Klapper, M.; Müllen, K., Biocompatible polylactide-block-polypeptide-block-polylactide nanocarrier. *Biomacromolecules* **2013,** *14* (5), 1572-1577.
1490. Dvorakova, G.; Haschick, R.; Klapper, M.; Müllen, K.; Biffis, A., Nonaqueous emulsion polymerization: A practical synthetic route for the production of molecularly imprinted nanospheres. *Journal of Polymer Science, Part A: Polymer Chemistry* **2013,** *51* (2), 267-274.
1491. Guo, X.; Baumgarten, M.; Müllen, K., Designing π-conjugated polymers for organic electronics. *Progress in Polymer Science* **2013,** *38* (12), 1832-1908.
1492. Guo, X.; Puniredd, S. R.; Baumgarten, M.; Pisula, W.; Müllen, K., Rational design of benzotrithiophene-diketopyrrolopyrrole-containing donor-acceptor polymers for improved charge carrier transport. *Advanced Materials* **2013,** *25* (38), 5467-5472.
1493. He, B.; Chu, Y.; Yin, M.; Müllen, K.; An, C.; Shen, J., Fluorescent nanoparticle delivered dsRNA toward genetic control of insect pests. *Advanced Materials* **2013,** *25* (33), 4580-4584.
1494. Hühn, D.; Kantner, K.; Geidel, C.; Brandholt, S.; De Cock, I.; Soenen, S. J. H.; Riveragil, P.; Montenegro, J. M.; Braeckmans, K.; Müllen, K.; Nienhaus, G. U.; Klapper, M.; Parak, W. J., Polymer-coated nanoparticles interacting with proteins and cells: Focusing on the sign of the net charge. *ACS Nano* **2013,** *7* (4), 3253-3263.
1495. Jensen, S. A.; Ulbricht, R.; Narita, A.; Feng, X.; Müllen, K.; Hertel, T.; Turchinovich, D.; Bonn, M., Ultrafast photoconductivity of graphene nanoribbons and carbon nanotubes. *Nano Letters* **2013,** *13* (12), 5925-5930.
1496. Jensen, S. A.; Ulbricht, R.; Narita, A.; Feng, X.; Müllen, K.; Turchinovich, D.; Hertel, T.; Bonn, M. In *Terahertz photoconductivity of graphene nanostructures*, International Conference on Infrared, Millimeter, and Terahertz Waves, IRMMW-THz, 2013.
1497. Kawano, S. I.; Baumgarten, M.; Chercka, D.; Enkelmann, V.; Müllen, K., Electron donors and acceptors based on 2,7-functionalized pyrene-4,5,9,10-tetraone. *Chemical Communications* **2013,** *49* (44), 5058-5060.
1498. Keller, R.; Kwak, M.; de Vries, J. W.; Sawaryn, C.; Wang, J.; Anaya, M.; Müllen, K.; Butt, H. J.; Herrmann, A.; Berger, R., Properties of amphiphilic oligonucleotide films at the air/water interface and after film transfer. *Colloids and Surfaces B: Biointerfaces* **2013,** *111*, 439-445.
1499. Kim, H. N.; Puhl, L.; Nolde, F.; Li, C.; Chen, L.; Basché, T.; Müllen, K., Energy transfer at the single-molecule level: Synthesis of a donor-acceptor dyad from perylene and terrylene diimides. *Chemistry - A European Journal* **2013,** *19* (28), 9160-9166.
1500. Kivala, M.; Pisula, W.; Wang, S.; Mavrinskiy, A.; Gisselbrecht, J. P.; Feng, X.; Müllen, K., Columnar self-assembly in electron-deficient heterotriangulenes. *Chemistry - A European Journal* **2013,** *19* (25), 8117-8128.
1501. Krumpfer, J. W.; Schuster, T.; Klapper, M.; Müllen, K., Make it nano-Keep it nano. *Nano Today* **2013,** *8* (4), 417-438.
1502. Kuan, S. L.; Stöckle, B.; Reichenwallner, J.; Ng, D. Y. W.; Wu, Y.; Doroshenko, M.; Koynov, K.; Hinderberger, D.; Müllen, K.; Weil, T., Dendronized albumin core-shell transporters with high drug loading capacity. *Biomacromolecules* **2013,** *14* (2), 367-376.
1503. Kunz, H.; Müllen, K., Natural product and material chemistries - Separated forever? *Journal of the American Chemical Society* **2013,** *135* (24), 8764-8769.
1504. Li, C.; Schwab, M.; Zhao, Y.; Chen, L.; Bruder, I.; Münster, I.; Erk, P.; Müllen, K., A

phenanthroline derivative as exciton blocking material for organic solar cells. *Dyes and Pigments* **2013,** *97* (1), 258-261.
1505. Li, L.; Gao, P.; Baumgarten, M.; Müllen, K.; Lu, N.; Fuchs, H.; Chi, L., High performance field-effect ammonia sensors based on a structured ultrathin organic semiconductor film. *Advanced Materials* **2013,** *25* (25), 3419-3425.
1506. Li, L.; Gao, P.; Wang, W.; Müllen, K.; Fuchs, H.; Chi, L., Growth of ultrathin organic semiconductor microstripes with thickness control in the monolayer precision. *Angewandte Chemie - International Edition* **2013,** *52* (48), 12530-12535.
1507. Li, R.; Parvez, K.; Hinkel, F.; Feng, X.; Müllen, K., Bioinspired wafer-scale production of highly stretchable carbon films for transparent conductive electrodes. *Angewandte Chemie - International Edition* **2013,** *52* (21), 5535-5538.
1508. Liang, H. W.; Wei, W.; Wu, Z. S.; Feng, X.; Müllen, K., Mesoporous metal-nitrogen-doped carbon electrocatalysts for highly efficient oxygen reduction reaction. *Journal of the American Chemical Society* **2013,** *135* (43), 16002-16005.
1509. Liao, Z.; Hooley, E. N.; Chen, L.; Stappert, S.; Müllen, K.; Vosch, T., Green emitting photoproducts from terrylene diimide after red illumination. *Journal of the American Chemical Society* **2013,** *135* (51), 19180-19185.
1510. Lorbach, D.; Wagne, M.; Baumgarten, M.; Klaus, M., The right way to self-fuse bi- and terpyrenyls to afford graphenic cutouts. *Chemical Communications* **2013,** *49* (90), 10578-10580.
1511. Mali, K. S.; Schwab, M. G.; Feng, X.; Müllen, K.; De Feyter, S., Structural polymorphism in self-assembled networks of a triphenylene based macrocycle. *Physical Chemistry Chemical Physics* **2013,** *15* (30), 12495-12503.
1512. Mali, K. S.; Zöphel, L.; Ivasenko, O.; Müllen, K.; De Feyter, S., Manifestations of non-planar adsorption geometries of lead pyrenocyanine at the liquid-solid interface. *Chemistry - An Asian Journal* **2013,** *8* (10), 2497-2505.
1513. Markova, D.; Opper, K. L.; Wagner, M.; Klapper, M.; Wagener, K. B.; Müllen, K., Synthesis of proton conducting phosphonic acid-functionalized polyolefins by the combination of ATRP and ADMET. *Polymer Chemistry* **2013,** *4* (5), 1351-1363.
1514. Mullen, K., Graphene as a target for polymer synthesis. In *Advances in Polymer Science*, 2013; Vol. 262, pp 61-92.
1515. Narayana, Y. S. L. V.; Basak, S.; Baumgarten, M.; Müllen, K.; Chandrasekar, R., White-emitting conjugated polymer/inorganic hybrid spheres: Phenylethynyl and 2,6-bis(pyrazolyl)pyridine copolymer coordinated to Eu(tta)3. *Advanced Functional Materials* **2013,** *23* (47), 5875-5880.
1516. Nau, S.; Trattnig, R.; Pevzner, L.; Jäger, M.; Schlesinger, R.; Nardi, M. V.; Ligorio, G.; Christodoulou, C.; Schulte, N.; Winkler, S.; Frisch, J.; Vollmer, A.; Baumgarten, M.; Sax, S.; Koch, N.; Müllen, K.; List-Kratochvil, E. J. W. In *All solution processed blue multi-layer light emitting diodes realized by thermal layer stabilization and orthogonal solvent processing*, Proceedings of SPIE - The International Society for Optical Engineering, 2013.
1517. Nguyen, T. T. T.; Baumgarten, M.; Rouhanipour, A.; Räder, H. J.; Lieberwirth, I.; Müllen, K., Extending the limits of precision polymer synthesis: Giant polyphenylene dendrimers in the megadalton mass range approaching structural perfection. *Journal of the American Chemical Society* **2013,** *135* (11), 4183-4186.
1518. Nguyen, T. T. T.; Türp, D.; Wagner, M.; Müllen, K., Photoswitchable conductivity in a rigidly dendronized salt. *Angewandte Chemie - International Edition* **2013,** *52* (2), 669-673.
1519. Niedzialek, D.; Lemaur, V.; Dudenko, D.; Shu, J.; Hansen, M. R.; Andreasen, J. W.; Pisula, W.; Müllen, K.; Cornil, J.; Beljonne, D., Probing the relation between charge transport and supramolecular organization down to Ångström resolution in a benzothiadiazole- cyclopentadithiophene

copolymer. *Advanced Materials* **2013,** *25* (13), 1939-1947.
1520. Parvez, K.; Li, R.; Puniredd, S. R.; Hernandez, Y.; Hinkel, F.; Wang, S.; Feng, X.; Müllen, K., Electrochemically exfoliated graphene as solution-processable, highly conductive electrodes for organic electronics. *ACS Nano* **2013,** *7* (4), 3598-3606.
1521. Pisula, W.; Tsao, H. N.; Dudenko, D.; Cho, D. M.; Puniredd, S. R.; Zhao, Y.; Mavrinskiy, A.; Shu, J.; Hansen, M. R.; Baumgarten, M.; Müllen, K., Solid-state organization and ambipolar field-effect transistors of benzothiadiazole-cyclopentadithiophene copolymer with long branched alkyl side chains. *Polymers* **2013,** *5* (2), 833-846.
1522. Puniredd, S. R.; Kiersnowski, A.; Battagliarin, G.; Zajączkowski, W.; Wong, W. W. H.; Kirby, N.; Müllen, K.; Pisula, W., Polythiophene-perylene diimide heterojunction field-effect transistors. *Journal of Materials Chemistry C* **2013,** *1* (13), 2433-2440.
1523. Puniredd, S. R.; Pisula, W.; Müllen, K., Influence of film morphology on optical and electronic properties of organic materials. In *Handbook of Organic Materials for Optical and (Opto)Electronic Devices: Properties and Applications*, 2013; pp 83-101.
1524. Schlütter, F.; Nishiuchi, T.; Enkelmann, V.; Müllen, K., π-Congested poly(paraphenylene) from 2,2′,6,6′-tetraphenyl- 1,1′-biphenyl units: Synthesis and structural characterization. *Polymer Chemistry* **2013,** *4* (10), 2963-2967.
1525. Schlütter, F.; Rossel, F.; Kivala, M.; Enkelmann, V.; Gisselbrecht, J. P.; Ruffieux, P.; Fasel, R.; Müllen, K., π-Conjugated heterotriangulene macrocycles by solution and surface-supported synthesis toward honeycomb networks. *Journal of the American Chemical Society* **2013,** *135* (11), 4550-4557.
1526. Schmoltner, K.; Schlütter, F.; Kivala, M.; Baumgarten, M.; Winkler, S.; Trattnig, R.; Koch, N.; Klug, A.; List, E. J. W.; Müllen, K., A heterotriangulene polymer for air-stable organic field-effect transistors. *Polymer Chemistry* **2013,** *4* (20), 5337-5344.
1527. Schuster, T.; Schellenberger, S.; Friedrich, R.; Klapper, M.; Müllen, K., Branched fluorinated amphiphiles based on carbohydrates. *Journal of Fluorine Chemistry* **2013,** *154*, 30-36.
1528. Shen, Y.; Deng, K.; Li, M.; Zhang, X.; Zhou, G.; Müllen, K.; Zeng, Q.; Wang, C., Self-assembling in fabrication of ordered porphyrins and phthalocyanines hybrid nano-arrays on HOPG. *CrystEngComm* **2013,** *15* (27), 5526-5531.
1529. Singh, B.; Mehta, B. R.; Varandani, D.; Govind; Narita, A.; Feng, X.; Müllen, K., Bipolar resistive switching properties of Ti-CuO/(hexafluoro-hexa-peri- hexabenzocoronene)-Cu hybrid interface device: Influence of electronic nature of organic layer. *Journal of Applied Physics* **2013,** *113* (20).
1530. Song, Q.; Wang, B.; Deng, K.; Feng, X.; Wagner, M.; Gale, J. D.; Müllen, K.; Zhi, L., Graphenylene, a unique two-dimensional carbon network with nondelocalized cyclohexatriene units. *Journal of Materials Chemistry C* **2013,** *1* (1), 38-41.
1531. Stangenberg, R.; Grigoriadis, C.; Schneider, D.; Butt, H. J.; Fytas, G.; Müllen, K.; Floudas, G., Self-assembly beyond semifluorinated alkanes in a semifluorinated benzene derivative. *Soft Matter* **2013,** *9* (47), 11334-11345.
1532. Steglich, M.; Jäger, C.; Huisken, F.; Friedrich, M.; Plass, W.; Räder, H. J.; Müllen, K.; Henning, T., The abundances of hydrocarbon functional groups in the interstellar medium inferred from laboratory spectra of hydrogenated and methylated polycyclic aromatic hydrocarbons. *Astrophysical Journal, Supplement Series* **2013,** *208* (2).
1533. Takase, M.; Narita, T.; Fujita, W.; Asano, M. S.; Nishinaga, T.; Benten, H.; Yoza, K.; Müllen, K., Pyrrole-fused azacoronene family: The influence of replacement with dialkoxybenzenes on the optical and electronic properties in neutral and oxidized states. *Journal of the American Chemical Society* **2013,** *135* (21), 8031-8040.
1534. Talirz, L.; Söde, H.; Cai, J.; Ruffieux, P.; Blankenburg, S.; Jafaar, R.; Berger, R.; Feng, X.; Müllen, K.; Passerone, D.; Fasel, R.; Pignedoli, C. A., Termini of bottom-up fabricated graphene

nanoribbons. *Journal of the American Chemical Society* **2013,** *135* (6), 2060-2063.
1535. Tan, Y. Z.; Yang, B.; Parvez, K.; Narita, A.; Osella, S.; Beljonne, D.; Feng, X.; Müllen, K., Atomically precise edge chlorination of nanographenes and its application in graphene nanoribbons. *Nature Communications* **2013,** *4*.
1536. Tomar, M.; Lucas, N. T.; Müllen, K.; Jacob, J., Facile synthesis and coupling of 3,9-dibromo-6-aryl-5H-dibenzo[d,f][1,3] diazepine derivatives. *Tetrahedron Letters* **2013,** *54* (44), 5883-5885.
1537. Trattnig, R.; Pevzner, L.; Jäger, M.; Schlesinger, R.; Nardi, M. V.; Ligorio, G.; Christodoulou, C.; Koch, N.; Baumgarten, M.; Müllen, K.; List, E. J. W., Bright blue solution processed triple-layer polymer light-emitting diodes realized by thermal layer stabilization and orthogonal solvents. *Advanced Functional Materials* **2013,** *23* (39), 4897-4905.
1538. Wäckerlin, C.; Maldonado, P.; Arnold, L.; Shchyrba, A.; Girovsky, J.; Nowakowski, J.; Ali, M. E.; Hählen, T.; Baljozovic, M.; Siewert, D.; Kleibert, A.; Müllen, K.; Oppeneer, P. M.; Jung, T. A.; Ballav, N., Magnetic exchange coupling of a synthetic Co(II)-complex to a ferromagnetic ni substrate. *Chemical Communications* **2013,** *49* (91), 10736-10738.
1539. Wang, B.; Song, Q.; Luo, B.; Li, X.; Liang, M.; Feng, X.; Wagner, M.; Müllen, K.; Zhi, L., Exploring the interaction between graphene derivatives and metal ions as a key step towards graphene-inorganic nanohybrids. *Chemistry - An Asian Journal* **2013,** *8* (2), 410-413.
1540. Wang, D.; Pevzner, L.; Li, C.; Peneva, K.; Li, C. Y.; Chan, D. Y. C.; Müllen, K.; Mezger, M.; Koynov, K.; Butt, H. J., Layer with reduced viscosity at water-oil interfaces probed by fluorescence correlation spectroscopy. *Physical Review E - Statistical, Nonlinear, and Soft Matter Physics* **2013,** *87* (1).
1541. Wang, T.; Pfisterer, A.; Kuan, S. L.; Wu, Y.; Dumele, O.; Lamla, M.; Müllen, K.; Weil, T., Cross-conjugation of DNA, proteins and peptides via a pH switch. *Chemical Science* **2013,** *4* (4), 1889-1894.
1542. Wei, W.; Yang, S.; Zhou, H.; Lieberwirth, I.; Feng, X.; Müllen, K., 3D graphene foams cross-linked with pre-encapsulated Fe3O 4 nanospheres for enhanced lithium storage. *Advanced Materials* **2013,** *25* (21), 2909-2914.
1543. Winkler, S.; Frisch, J.; Schlesinger, R.; Oehzelt, M.; Rieger, R.; Räder, J.; Rabe, J. P.; Müllen, K.; Koch, N., The impact of local work function variations on Fermi level pinning of organic semiconductors. *Journal of Physical Chemistry C* **2013,** *117* (43), 22285-22289.
1544. Wu, Z. S.; Parvez, K.; Feng, X.; Müllen, K., Graphene-based in-plane micro-supercapacitors with high power and energy densities. *Nature Communications* **2013,** *4*.
1545. Xu, Y.; Schwab, M. G.; Strudwick, A. J.; Hennig, I.; Feng, X.; Wu, Z.; Müllen, K., Screen-printable thin film supercapacitor device utilizing graphene/polyaniline inks. *Advanced Energy Materials* **2013,** *3* (8), 1035-1040.
1546. Yang, H.; Hernandez, Y.; Schlierf, A.; Felten, A.; Eckmann, A.; Johal, S.; Louette, P.; Pireaux, J. J.; Feng, X.; Mullen, K.; Palermo, V.; Casiraghi, C., A simple method for graphene production based on exfoliation of graphite in water using 1-pyrenesulfonic acid sodium salt. *Carbon* **2013,** *53*, 357-365.
1547. Yang, S.; Bachman, R. E.; Feng, X.; Müllen, K., Use of organic precursors and graphenes in the controlled synthesis of carbon-containing nanomaterials for energy storage and conversion. *Accounts of Chemical Research* **2013,** *46* (1), 116-128.
1548. Yoshida, Y.; Mawatari, Y.; Motoshige, A.; Motoshige, R.; Hiraoki, T.; Wagner, M.; Müllen, K.; Tabata, M., Accordion-like oscillation of contracted and stretched helices of polyacetylenes synchronized with the restricted rotation of side chains. *Journal of the American Chemical Society* **2013,** *135* (10), 4110-4116.
1549. Yuan, Z.; Lee, S. L.; Chen, L.; Li, C.; Mali, K. S.; De Feyter, S.; Müllen, K., Processable rylene diimide dyes up to 4 nm in length: Synthesis and STM visualization. *Chemistry - A European*

Journal **2013,** *19* (36), 11842-11846.
1550. Zhao, Y.; Chen, L.; Li, C.; Müllen, K., Effects of a bathophenanthroline exciton blocking layer on thermal annealing-free bulk heterojunction solar cells. *Synthetic Metals* **2013,** *174*, 46-49.
1551. Zöphel, L.; Berger, R.; Gao, P.; Enkelmann, V.; Baumgarten, M.; Wagner, M.; Müllen, K., Toward the peri-pentacene framework. *Chemistry - A European Journal* **2013,** *19* (52), 17821-17826.
1552. Zöphel, L.; Enkelmann, V.; Müllen, K., Tuning the HOMO-LUMO gap of pyrene effectively via donor-acceptor substitution: Positions 4,5 versus 9,10. *Organic Letters* **2013,** *15* (4), 804-807.
1553. Abbas, A. N.; Liu, G.; Narita, A.; Orosco, M.; Feng, X.; Müllen, K.; Zhou, C., Deposition, characterization, and thin-film-based chemical sensing of ultra-long chemically synthesized graphene nanoribbons. *Journal of the American Chemical Society* **2014,** *136* (21), 7555-7558.
1554. Battagliarin, G.; Puniredd, S. R.; Stappert, S.; Zajaczkowski, W.; Wang, S.; Li, C.; Pisula, W.; Müllen, K., Ortho - Vs bay-functionalization: A comparative study on tetracyano-terrylenediimides. *Advanced Functional Materials* **2014,** *24* (47), 7530-7537.
1555. Bayer, D.; Diehl, S.; Baumgarten, M.; Muellen, K.; Methfessel, T.; Elmers, H. J., Tuning the hole injection barrier in the intermolecular charge-transfer compound DTBDT-F 4 TCNQ at metal interfaces. *Physical Review B - Condensed Matter and Materials Physics* **2014,** *89* (7).
1556. Berger, R.; Giannakopoulos, A.; Ravat, P.; Wagner, M.; Beljonne, D.; Feng, X.; Müllen, K., Synthesis of Nitrogen-doped zigzag-edge peripheries: Dibenzo-9a-azaphenalene as repeating unit. *Angewandte Chemie - International Edition* **2014,** *53* (39), 10520-10524.
1557. Cai, J.; Pignedoli, C. A.; Talirz, L.; Ruffieux, P.; Söde, H.; Liang, L.; Meunier, V.; Berger, R.; Li, R.; Feng, X.; Müllen, K.; Fasel, R., Graphene nanoribbon heterojunctions. *Nature Nanotechnology* **2014,** *9* (11), 896-900.
1558. Castellani, M.; Winkler, S.; Bröker, B.; Baumgarten, M.; Müllen, K.; Koch, N., Work function increase of transparent conductive electrodes by solution processed electron acceptor molecular monolayers. *Applied Physics A: Materials Science and Processing* **2014,** *114* (2), 291-295.
1559. Chen, L.; Baumgarten, M.; Guo, X.; Li, M.; Marszalek, T.; Alsewailem, F. D.; Pisula, W.; Müllen, K., Alkyl substituted dithienothieno[2,3-d;2′,3′-d′]benzo[1, 2-b:4,5-b′]dithiophenes as solution-processable hexathiaheptacenes. *Journal of Materials Chemistry C* **2014,** *2* (18), 3625-3630.
1560. Chen, L.; Li, C.; Müllen, K., Beyond perylene diimides: Synthesis, assembly and function of higher rylene chromophores. *Journal of Materials Chemistry C* **2014,** *2* (11), 1938-1956.
1561. Chercka, D.; Yoo, S. J.; Baumgarten, M.; Kim, J. J.; Müllen, K., Pyrene based materials for exceptionally deep blue OLEDs. *Journal of Materials Chemistry C* **2014,** *2* (43), 9083-9086.
1562. Christodoulou, C.; Giannakopoulos, A.; Nardi, M. V.; Ligorio, G.; Oehzelt, M.; Chen, L.; Pasquali, L.; Timpel, M.; Giglia, A.; Nannarone, S.; Norman, P.; Linares, M.; Parvez, K.; Müllen, K.; Beljonne, D.; Koch, N., Tuning the work function of graphene-on-quartz with a high weight molecular acceptor. *Journal of Physical Chemistry C* **2014,** *118* (9), 4784-4790.
1563. Cui, K.; Ivasenko, O.; Mali, K. S.; Wu, D.; Feng, X.; Müllen, K.; De Feyter, S.; Mertens, S. F. L., Potential-driven molecular tiling of a charged polycyclic aromatic compound. *Chemical Communications* **2014,** *50* (72), 10376-10378.
1564. Cui, K.; Mali, K. S.; Ivasenko, O.; Wu, D.; Feng, X.; Walter, M.; Müllen, K.; De Feyter, S.; Mertens, S. F. L., Squeezing, then stacking: From breathing pores to three-dimensional ionic self-assembly under electrochemical control. *Angewandte Chemie - International Edition* **2014,** *53* (47), 12951-12954.
1565. Davies, M.; Rühle, B.; Li, C.; Müllen, K.; Bein, T.; Bräuchle, C., Insights into nanoscale electrophoresis of single dye molecules in highly oriented mesoporous silica channels. *Journal of Physical Chemistry C* **2014,** *118* (41), 24013-24024.
1566. Denk, R.; Hohage, M.; Zeppenfeld, P.; Cai, J.; Pignedoli, C. A.; Söde, H.; Fasel, R.; Feng, X.; Müllen, K.; Wang, S.; Prezzi, D.; Ferretti, A.; Ruini, A.; Molinari, E.; Ruffieux, P.,

Exciton-dominated optical response of ultra-narrow graphene nanoribbons. *Nature Communications* **2014,** *5*.
1567. Dienel, T.; Gómez-Díaz, J.; Seitsonen, A. P.; Widmer, R.; Iannuzzi, M.; Radican, K.; Sachdev, H.; Müllen, K.; Hutter, J.; Gröning, O., Dehalogenation and coupling of a polycyclic hydrocarbon on an atomically thin insulator. *ACS Nano* **2014,** *8* (7), 6571-6579.
1568. Dorresteijn, R.; Billecke, N.; Schwendy, M.; Pütz, S.; Bonn, M.; Parekh, S. H.; Klapper, M.; Müllen, K., Polylactide-block-polypeptide-block-polylactide copolymer nanoparticles with tunable cleavage and controlled drug release. *Advanced Functional Materials* **2014,** *24* (26), 4026-4033.
1569. Dorresteijn, R.; Nietzel, S.; Joe, D.; Gerkmann, Y.; Fink, G.; Klapper, M.; Müllen, K., Metallocene supported on porous and nonporous polyurethane particles for ethylene polymerization. *Journal of Polymer Science, Part A: Polymer Chemistry* **2014,** *52* (4), 450-459.
1570. El Gemayel, M.; Narita, A.; Dössel, L. F.; Sundaram, R. S.; Kiersnowski, A.; Pisula, W.; Hansen, M. R.; Ferrari, A. C.; Orgiu, E.; Feng, X.; Müllen, K.; Samorì, P., Graphene nanoribbon blends with P3HT for organic electronics. *Nanoscale* **2014,** *6* (12), 6301-6314.
1571. Golling, F. E.; Quernheim, M.; Wagner, M.; Nishiuchi, T.; Müllen, K., Concise synthesis of 3D π-extended polyphenylene cylinders. *Angewandte Chemie - International Edition* **2014,** *53* (6), 1525-1528.
1572. Guo, X.; Puniredd, S. R.; He, B.; Marszalek, T.; Baumgarten, M.; Pisula, W.; Müllen, K., Combination of two diketopyrrolopyrrole isomers in one polymer for ambipolar transport. *Chemistry of Materials* **2014,** *26* (12), 3595-3598.
1573. Guo, X.; Tsao, H. N.; Gao, P.; Xia, D.; An, C.; Nazeeruddin, M. K.; Baumgarten, M.; Grätzel, M.; Müllen, K., Dithieno[2,3-d;2′,3′-d′]benzo[1,2-b;4,5-b′]dithiophene based organic sensitizers for dye-sensitized solar cells. *RSC Advances* **2014,** *4* (96), 54130-54133.
1574. Hammer, B. A. G.; Baumgarten, M.; Müllen, K., Covalent attachment and release of small molecules from functional polyphenylene dendrimers. *Chemical Communications* **2014,** *50* (16), 2034-2036.
1575. Hinkel, F.; Marszalek, T.; Zajaczkowski, W.; Puniredd, S. R.; Baumgarten, M.; Pisula, W.; Müllen, K., Tuning packing and solubility of donor (D)-acceptor (A) polymers by cis - Trans isomerization within alkenyl side chains. *Chemistry of Materials* **2014,** *26* (16), 4844-4848.
1576. Howard, I. A.; Meister, M.; Baumeier, B.; Wonneberger, H.; Pschirer, N.; Sens, R.; Bruder, I.; Li, C.; Müllen, K.; Andrienko, D.; Laquai, F., Two channels of charge generation in perylene monoimide solid-state dye-sensitized solar cells. *Advanced Energy Materials* **2014,** *4* (2).
1577. Hutchison, J. A.; Uji-I, H.; Deres, A.; Vosch, T.; Rocha, S.; Müller, S.; Bastian, A. A.; Enderlein, J.; Nourouzi, H.; Li, C.; Herrmann, A.; Müllen, K.; De Schryver, F.; Hofkens, J., A surface-bound molecule that undergoes optically biased Brownian rotation. *Nature Nanotechnology* **2014,** *9* (2), 131-136.
1578. Ito, Y.; Christodoulou, C.; Nardi, M. V.; Koch, N.; Sachdev, H.; Müllen, K., Chemical vapor deposition of N-doped graphene and carbon films: The role of precursors and gas phase. *ACS Nano* **2014,** *8* (4), 3337-3346.
1579. Jensen, S. A.; Turchinovich, D.; Tielrooij, K. J.; Koppens, F.; Ulbricht, R.; Hertel, T.; Narita, A.; Fen, X.; Müllen, K.; Bonn, M. In *Terahertz carrier dynamics in graphene and graphene nanostructures*, Optics InfoBase Conference Papers, 2014.
1580. Jensen, S. A.; Turchinovich, D.; Tielrooij, K. J.; Koppens, F.; Ulbricht, R.; Hertel, T.; Narita, A.; Feng, X.; Müllen, K.; Bonn, M. In *Terahertz carrier dynamics in graphene and graphene nanostructures*, Conference on Lasers and Electro-Optics Europe - Technical Digest, 2014.
1581. Joe, D.; Golling, F. E.; Friedemann, K.; Crespy, D.; Klapper, M.; Müllen, K., Anisotropic supports in metallocene-catalyzed polymerizations: Templates to obtain polyolefin fibers. *Macromolecular Materials and Engineering* **2014,** *299* (10), 1155-1162.

1582. Kabe, R.; Feng, X.; Adachi, C.; Müllen, K., Exfoliation of graphite into graphene in polar solvents mediated by amphiphilic hexa-peri-hexabenzocoronene. *Chemistry - An Asian Journal* **2014,** *9* (11), 3125-3129.
1583. Kennes, K.; Baeten, Y.; Vosch, T.; Sempels, W.; Yordanov, S.; Stappert, S.; Chen, L.; Müllen, K.; Hofkens, J.; Van Der Auweraer, M.; Fron, E., Photophysical investigation of cyano-substituted terrylenediimide derivatives. *Journal of Physical Chemistry B* **2014,** *118* (50), 14662-14674.
1584. Klapper, M.; Joe, D.; Nietzel, S.; Krumpfer, J. W.; Müllen, K., Olefin polymerization with supported catalysts as an exercise in nanotechnology. *Chemistry of Materials* **2014,** *26* (1), 802-819.
1585. Kleimeier, N. F.; Timmer, A.; Bignardi, L.; Mönig, H.; Feng, X. L.; Müllen, K.; Chi, L. F.; Fuchs, H.; Zacharias, H., Electron dynamics in unoccupied states of spatially aligned 7-a graphene nanoribbons on Au(788). *Physical Review B - Condensed Matter and Materials Physics* **2014,** *90* (24).
1586. Lee, S. L.; Yuan, Z.; Chen, L.; Mali, K. S.; Müllen, K.; De Feyter, S., Flow-assisted 2D polymorph selection: Stabilizing metastable monolayers at the liquid-solid interface. *Journal of the American Chemical Society* **2014,** *136* (21), 7595-7598.
1587. Lee, S. L.; Yuan, Z.; Chen, L.; Mali, K. S.; Müllen, K.; De Feyter, S., Forced to align: Flow-induced long-range alignment of hierarchical molecular assemblies from 2D to 3D. *Journal of the American Chemical Society* **2014,** *136* (11), 4117-4120.
1588. Lewowska, U.; Zajaczkowski, W.; Chen, L.; Bouillière, F.; Wang, D.; Koynov, K.; Pisula, W.; Müllen, K.; Wennemers, H., Hierarchical supramolecular assembly of sterically demanding π-systems by conjugation with oligoprolines. *Angewandte Chemie - International Edition* **2014,** *53* (46), 12537-12541.
1589. Li, M.; An, C.; Pisula, W.; Müllen, K., Alignment of organic semiconductor microstripes by two-phase dip-coating. *Small* **2014,** *10* (10), 1926-1931.
1590. Liang, H. W.; Zhuang, X.; Brüller, S.; Feng, X.; Müllen, K., Hierarchically porous carbons with optimized nitrogen doping as highly active electrocatalysts for oxygen reduction. *Nature Communications* **2014,** *5*.
1591. Liu, C.; Xu, Y.; Liu, Z.; Tsao, H. N.; Müllen, K.; Minari, T.; Noh, Y. Y.; Sirringhaus, H., Improving solution-processed n-type organic field-effect transistors by transfer-printed metal/semiconductor and semiconductor/semiconductor heterojunctions. *Organic Electronics* **2014,** *15* (8), 1884-1889.
1592. Liu, J.; Ruffieux, P.; Feng, X.; Müllen, K.; Fasel, R., Cyclotrimerization of arylalkynes on au(111). *Chemical Communications* **2014,** *50* (76), 11200-11203.
1593. Liu, K.; Chen, D.; Marcozzi, A.; Zheng, L.; Su, J.; Pesce, D.; Zajaczkowski, W.; Kolbe, A.; Pisula, W.; Müllen, K.; Clark, N. A.; Herrmann, A., Thermotropic liquid crystals from biomacromolecules. *Proceedings of the National Academy of Sciences of the United States of America* **2014,** *111* (52), 18596-18600.
1594. Liu, Z.; Tonnelé, C.; Battagliarin, G.; Li, C.; Gropeanu, R. A.; Weil, T.; Surin, M.; Beljonne, D.; Lazzaroni, R.; Debliquy, M.; Renoirt, J. M.; Müllen, K., Functional layers for ZnII ion detection: From molecular design to optical fiber sensors. *Journal of Physical Chemistry B* **2014,** *118* (1), 309-314.
1595. Maibach, J.; Adermann, T.; Glaser, T.; Eckstein, R.; Mankel, E.; Pucci, A.; Müllen, K.; Lemmer, U.; Hamburger, M.; Mayer, T.; Jaegermann, W., Impact of processing on the chemical and electronic properties of phenyl-C61-butyric acid methyl ester. *Journal of Materials Chemistry C* **2014,** *2* (37), 7934-7942.
1596. Mics, Z.; Jensen, S.; Parvez, K.; Ivanov, I.; Tielrooij, K. J.; Koppens, F. H. L.; Feng, X.; Müllen, K.; Bonn, M.; Turchinovich, D. In *Nonlinear THz conductivity in graphene*, Optics InfoBase Conference Papers, 2014.

1597. Mics, Z.; Jensen, S.; Parvez, K.; Ivanov, I.; Tielrooij, K. J.; Koppens, F. H. L.; Feng, X.; Müllen, K.; Bonn, M.; Turchinovich, D. In *Nonlinear THz conductivity in graphene*, Conference on Lasers and Electro-Optics Europe - Technical Digest, 2014.
1598. Moritz, R.; Zardalidis, G.; Butt, H. J.; Wagner, M.; Müllen, K.; Floudas, G., Ion size approaching the Bjerrum length in solvents of low polarity by dendritic encapsulation. *Macromolecules* **2014,** *47* (1), 191-196.
1599. Müllen, K., Evolution of graphene molecules: Structural and functional complexity as driving forces behind nanoscience. *ACS Nano* **2014,** *8* (7), 6531-6541.
1600. Nardi, E.; Chen, L.; Clair, S.; Koudia, M.; Giovanelli, L.; Feng, X.; Müllen, K.; Abel, M., On-surface reaction between tetracarbonitrile-functionalized molecules and copper atoms. *Journal of Physical Chemistry C* **2014,** *118* (47), 27549-57553.
1601. Narita, A.; Feng, X.; Hernandez, Y.; Jensen, S. A.; Bonn, M.; Yang, H.; Verzhbitskiy, I. A.; Casiraghi, C.; Hansen, M. R.; Koch, A. H. R.; Fytas, G.; Ivasenko, O.; Li, B.; Mali, K. S.; Balandina, T.; Mahesh, S.; De Feyter, S.; Müllen, K., Synthesis of structurally well-defined and liquid-phase-processable graphene nanoribbons. *Nature Chemistry* **2014,** *6* (2), 126-132.
1602. Narita, A.; Verzhbitskiy, I. A.; Frederickx, W.; Mali, K. S.; Jensen, S. A.; Hansen, M. R.; Bonn, M.; De Feyter, S.; Casiraghi, C.; Feng, X.; Müllen, K., Bottom-up synthesis of liquid-phase-processable graphene nanoribbons with near-infrared absorption. *ACS Nano* **2014,** *8* (11), 11622-11630.
1603. Olivier, Y.; Niedzialek, D.; Lemaur, V.; Pisula, W.; Müllen, K.; Koldemir, U.; Reynolds, J. R.; Lazzaroni, R.; Cornil, J.; Beljonne, D., 25th anniversary article: High-mobility hole and electron transport conjugated polymers: How structure defines function. *Advanced Materials* **2014,** *26* (14), 2119-2136.
1604. Palma, C. A.; Diller, K.; Berger, R.; Welle, A.; Björk, J.; Cabellos, J. L.; Mowbray, D. J.; Papageorgiou, A. C.; Ivleva, N. P.; Matich, S.; Margapoti, E.; Niessner, R.; Menges, B.; Reichert, J.; Feng, X.; Räder, H. J.; Klappenberger, F.; Rubio, A.; Müllen, K.; Barth, J. V., Photoinduced C-C reactions on insulators toward photolithography of graphene nanoarchitectures. *Journal of the American Chemical Society* **2014,** *136* (12), 4651-4658.
1605. Park, K. W.; Adisoejoso, J.; Plas, J.; Hong, J.; Müllen, K.; De Feyter, S., Self-assembly behavior of alkylated isophthalic acids revisited: Concentration in control and guest-induced phase transformation. *Langmuir* **2014,** *30* (50), 15206-15211.
1606. Parvez, K.; Wu, Z. S.; Li, R.; Liu, X.; Graf, R.; Feng, X.; Müllen, K., Exfoliation of graphite into graphene in aqueous solutions of inorganic salts. *Journal of the American Chemical Society* **2014,** *136* (16), 6083-6091.
1607. Pevzner, L.; Auer, M.; Trattnig, R.; Klapper, M.; List-Kratochvil, E. J. W.; Müllen, K., Controlling polymer solubility: Polyfluorenes with branched semiperfluorinated side chains for polymer light-emitting diodes. *Israel Journal of Chemistry* **2014,** *54* (5-6), 736-747.
1608. Qin, T.; Zajaczkowski, W.; Pisula, W.; Baumgarten, M.; Chen, M.; Gao, M.; Wilson, G.; Easton, C. D.; Müllen, K.; Watkins, S. E., Tailored donor-acceptor polymers with an A-D1-A-D2 structure: Controlling intermolecular interactions to enable enhanced polymer photovoltaic devices. *Journal of the American Chemical Society* **2014,** *136* (16), 6049-6055.
1609. Quernheim, M.; Liang, H.; Su, Q.; Baumgarten, M.; Koshino, N.; Higashimura, H.; Müllen, K., Cobalt phenanthroline-indole macrocycles as highly active electrocatalysts for oxygen reduction. *Chemistry - A European Journal* **2014,** *20* (44), 14178-14183.
1610. Räder, H. J.; Nguyen, T. T. T.; Müllen, K., MALDI-TOF mass spectrometry of polyphenylene dendrimers up to the megadalton range. elucidating structural integrity of macromolecules at unrivaled high molecular weights. *Macromolecules* **2014,** *47* (4), 1240-1248.
1611. Ravat, P.; Marszalek, T.; Pisula, W.; Müllen, K.; Baumgarten, M., Positive magneto-LC

effect in conjugated spin-bearing hexabenzocoronene. *Journal of the American Chemical Society* **2014,** *136* (37), 12860-12863.
1612. Schlütter, F.; Nishiuchi, T.; Enkelmann, V.; Müllen, K., Octafunctionalized biphenylenes: Molecular precursors for isomeric graphene nanostructures. *Angewandte Chemie - International Edition* **2014,** *53* (6), 1538-1542.
1613. Schuster, T.; Krumpfer, J. W.; Schellenberger, S.; Friedrich, R.; Klapper, M.; Müllen, K., Effects of chemical structure on the dynamic and static surface tensions of short-chain, multi-arm nonionic fluorosurfactants. *Journal of Colloid and Interface Science* **2014,** *428*, 276-285.
1614. Selzer, F.; Falkenberg, C.; Hamburger, M.; Baumgarten, M.; Müllen, K.; Leo, K.; Riede, M., Improved organic p-i-n type solar cells with n-doped fluorinated hexaazatrinaphthylene derivatives HATNA-F6 and HATNA-F12 as transparent electron transport material. *Journal of Applied Physics* **2014,** *115* (5).
1615. Singh, R.; Giussani, E.; Mróz, M. M.; Di Fonzo, F.; Fazzi, D.; Cabanillas-González, J.; Oldridge, L.; Vaenas, N.; Kontos, A. G.; Falaras, P.; Grimsdale, A. C.; Jacob, J.; Müllen, K.; Keivanidis, P. E., On the role of aggregation effects in the performance of perylene-diimide based solar cells. *Organic Electronics* **2014,** *15* (7), 1347-1361.
1616. Soavi, G.; Conte, S. D.; Manzoni, C.; Scotognella, F.; Narita, A.; Feng, X.; Müllen, K.; Cerullo, G. In *Exciton-exciton annihilation and stimulated emission in graphene nanoribbons*, Optics InfoBase Conference Papers, 2014.
1617. Soavi, G.; Dal Conte, S.; Manzoni, C.; Scotognella, F.; Narita, A.; Feng, X.; Müllen, K.; Cerullo, G. In *Exciton-exciton annihilation and stimulated emission in Graphene Nanoribbons*, Optics InfoBase Conference Papers, 2014.
1618. Stangenberg, R.; Grigoriadis, C.; Butt, H. J.; Müllen, K.; Floudas, G., Switchable dielectric permittivity with temperature and Dc-bias in a semifluorinated azobenzene derivative. *Colloid and Polymer Science* **2014,** *292* (8), 1939-1948.
1619. Stangenberg, R.; Saeed, I.; Kuan, S. L.; Baumgarten, M.; Weil, T.; Klapper, M.; Müllen, K., Tuning polarity of polyphenylene dendrimers by patched surface Amphiphilicity - Precise control over size, shape, and polarity. *Macromolecular Rapid Communications* **2014,** *35* (2), 152-160.
1620. Stangenberg, R.; Türp, D.; Müllen, K., Shape persistent hybrid dendrimers from benzene and triazole via 'click chemistry'. *Tetrahedron* **2014,** *70* (19), 3178-3184.
1621. Stöttinger, S.; Hinze, G.; Diezemann, G.; Oesterling, I.; Müllen, K.; Basché, T., Impact of local compressive stress on the optical transitions of single organic dye molecules. *Nature Nanotechnology* **2014,** *9* (3), 182-186.
1622. Tabujew, I.; Freidel, C.; Krieg, B.; Helm, M.; Koynov, K.; Müllen, K.; Peneva, K., The guanidinium group as a key part of water-soluble polymer carriers for siRNA complexation and protection against degradation. *Macromolecular Rapid Communications* **2014,** *35* (13), 1191-1197.
1623. Turchinovich, D.; Mics, Z.; Jensen, S.; Parvez, K.; Ivanov, I.; Tielrooij, K. J.; Koppens, F. H. L.; Feng, X.; Müllen, K.; Bonn, M. In *Inherent resistivity of graphene to strong THz fields*, Optics InfoBase Conference Papers, 2014.
1624. Wagner, C.; Fournier, N.; Ruiz, V. G.; Li, C.; Müllen, K.; Rohlfing, M.; Tkatchenko, A.; Temirov, R.; Tautz, F. S., Non-additivity of molecule-surface van der Waals potentials from force measurements. *Nature Communications* **2014,** *5*.
1625. Wang, Y.; Chen, L.; ElShishtawy, R. M.; Aziz, S. G.; Müllen, K., Synthesis and optophysical properties of dimeric aza-BODIPY dyes with a push-pull benzodipyrrolidone core. *Chemical Communications* **2014,** *50* (78), 11540-11542.
1626. Wegener, J.; Kaltbeitzel, A.; Graf, R.; Klapper, M.; Müllen, K., Proton conductivity in doped aluminum phosphonate sponges. *ChemSusChem* **2014,** *7* (4), 1148-1154.
1627. Wei, W.; Liang, H.; Parvez, K.; Zhuang, X.; Feng, X.; Müllen, K., Nitrogen-doped carbon

nanosheets with size-defined mesopores as highly efficient metal-free catalyst for the oxygen reduction reaction. *Angewandte Chemie - International Edition* **2014,** *53* (6), 1570-1574.
1628. Weidelener, M.; Powar, S.; Kast, H.; Yu, Z.; Boix, P. P.; Li, C.; Müllen, K.; Geiger, T.; Kuster, S.; Nüesch, F.; Bach, U.; Mishra, A.; Bäuerle, P., Synthesis and characterization of organic dyes with various electron-accepting substituents for p-type dye-sensitized solar cells. *Chemistry - An Asian Journal* **2014,** *9* (11), 3251-3263.
1629. Wu, Z. S.; Chen, L.; Liu, J.; Parvez, K.; Liang, H.; Shu, J.; Sachdev, H.; Graf, R.; Feng, X.; Müllen, K., High-performance electrocatalysts for oxygen reduction derived from cobalt porphyrin-based conjugated mesoporous polymers. *Advanced Materials* **2014,** *26* (9), 1450-1455.
1630. Wu, Z. S.; Feng, X.; Müllen, K., Graphene-metal oxide hybrids for lithium ion batteries and electrochemical capacitors. In *Nanocarbon-Inorganic Hybrids: Next Generation Composites for Sustainable Energy Applications*, 2014; pp 319-339.
1631. Wu, Z. S.; Parvez, K.; Feng, X.; Müllen, K., Photolithographic fabrication of high-performance all-solid-state graphene-based planar micro-supercapacitors with different interdigital fingers. *Journal of Materials Chemistry A* **2014,** *2* (22), 8288-8293.
1632. Wu, Z. S.; Parvez, K.; Winter, A.; Vieker, H.; Liu, X.; Han, S.; Turchanin, A.; Feng, X.; Müllen, K., Layer-by-layer assembled heteroatom-doped graphene films with ultrahigh volumetric capacitance and rate capability for micro-supercapacitors. *Advanced Materials* **2014,** *26* (26), 4552-4558.
1633. Wunderlich, K.; Gölzhäuser, A.; Klapper, M.; Müllen, K., Self-assembly of polyaromatic precursors for 1D and 2D carbon structures. In *ACS Symposium Series*, 2014; Vol. 1173, pp 1-16.
1634. Wunderlich, K.; Grigoriadis, C.; Zardalidis, G.; Klapper, M.; Graf, R.; Butt, H. J.; Müllen, K.; Floudas, G., Poly(ethylene glycol)-functionalized hexaphenylbenzenes as unique amphiphiles: Supramolecular organization and ion conductivity. *Macromolecules* **2014,** *47* (16), 5691-5702.
1635. Wunderlich, K.; Larsen, A.; Marakis, J.; Fytas, G.; Klapper, M.; Müllen, K., Controlled hydrogel fiber formation: The unique case of hexaphenylbenzene-poly(ethylene glycol) amphiphiles. *Small* **2014,** *10* (10), 1914-1919.
1636. Xu, Z.; Guo, K.; Yu, J.; Sun, H.; Tang, J.; Shen, J.; Müllen, K.; Yang, W.; Yin, M., A unique perylene-based DNA intercalator: Localization in cell nuclei and inhibition of cancer cells and tumors. *Small* **2014,** *10* (20), 4087-4092.
1637. Yamashita, Y.; Tsurumi, J.; Hinkel, F.; Okada, Y.; Soeda, J.; Zaja¸czkowski, W.; Baumgarten, M.; Pisula, W.; Matsui, H.; Müllen, K.; Takeya, J., Transition between band and hopping transport in polymer field-effect transistors. *Advanced Materials* **2014,** *26* (48), 8169-8173.
1638. You, S.; Cai, Q.; Müllen, K.; Yang, W.; Yin, M., pH-sensitive unimolecular fluorescent polymeric micelles: From volume phase transition to optical response. *Chemical Communications* **2014,** *50* (7), 823-825.
1639. Zagranyarski, Y.; Chen, L.; Jänsch, D.; Gessner, T.; Li, C.; Müllen, K., Toward perylene dyes by the Hundsdiecker reaction. *Organic Letters* **2014,** *16* (11), 2814-2817.
1640. Zhang, G.; Baumgarten, M.; Auer, M.; Trattnig, R.; List-Kratochvil, E. J. W.; Müllen, K., Core-and-surface-functionalized polyphenylene dendrimers for solution-processed, pure-blue light-emitting diodes through surface-to-core energy transfer. *Macromolecular Rapid Communications* **2014,** *35* (22), 1931-1936.
1641. Zhang, H.; Franke, J. H.; Zhong, D.; Li, Y.; Timmer, A.; Arado, O. D.; Mönig, H.; Wang, H.; Chi, L.; Wang, Z.; Müllen, K.; Fuchs, H., Surface supported gold-organic hybrids: On-surface synthesis and surface directed orientation. *Small* **2014,** *10* (7), 1361-1368.
1642. Zhang, J.; You, S.; Yan, S.; Müllen, K.; Yang, W.; Yin, M., pH-responsive self-assembly of fluorophore-ended homopolymers. *Chemical Communications* **2014,** *50* (56), 7511-7513.
1643. Zhang, J.; Zhu, Z.; Tang, Y.; Müllen, K.; Feng, X., Titania nanosheet-mediated construction

of a two-dimensional titania/cadmium sulfide heterostructure for high hydrogen evolution activity. *Advanced Materials* **2014,** *26* (5), 734-738.
1644. Zhang, Y.; Zhang, Y.; Li, G.; Lu, J.; Lin, X.; Du, S.; Berger, R.; Feng, X.; Müllen, K.; Gao, H. J., Direct visualization of atomically precise nitrogen-doped graphene nanoribbons. *Applied Physics Letters* **2014,** *105* (2).
1645. Abbas, A. N.; Liu, B.; Narita, A.; Dössel, L. F.; Yang, B.; Zhang, W.; Tang, J.; Wang, K. L.; Räder, H. J.; Feng, X.; Müllen, K.; Zhou, C., Vapor-Phase Transport Deposition, Characterization, and Applications of Large Nanographenes. *Journal of the American Chemical Society* **2015,** *137* (13), 4453-4459.
1646. Auer, A. A.; Cap, S.; Antonietti, M.; Cherevko, S.; Deng, X.; Papakonstantinou, G.; Sundmacher, K.; Brüller, S.; Antonyshyn, I.; Dimitratos, N.; Davis, R. J.; Böhm, K. H.; Fechler, N.; Freakley, S.; Grin, Y.; Gunnoe, B. T.; Haj-Hariri, H.; Hutchings, G.; Liang, H.; Mayrhofer, K. J. J.; Müllen, K.; Neese, F.; Ranjan, C.; Sankar, M.; Schlögl, R.; Schüth, F.; Spanos, I.; Stratmann, M.; Tüysüz, H.; Vidakovic-Koch, T.; Yi, Y.; Zangari, G., MAXNET Energy - Focusing Research in Chemical Energy Conversion on the Electrocatlytic Oxygen Evolution. *Green* **2015,** *5* (1-6), 7-21.
1647. Basak, S.; Mohiddon, M. A.; Baumgarten, M.; Müllen, K.; Chandrasekar, R., Hierarchical multicolor nano-pixel matrices formed by coordinating luminescent metal ions to a conjugated poly(4'-octyl-2',6'-bispyrazoyl pyridine) film via contact printing. *Scientific Reports* **2015,** *5*, 8406.
1648. Basché, T.; Bottin, A.; Li, C.; Müllen, K.; Kim, J. H.; Sohn, B. H.; Prabhakaran, P.; Lee, K. S., Energy and charge transfer in nanoscale hybrid materials. *Macromolecular Rapid Communications* **2015,** *36* (11), 1026-1046.
1649. Bashir, A.; Heck, A.; Narita, A.; Feng, X.; Nefedov, A.; Rohwerder, M.; Müllen, K.; Elstner, M.; Wöll, C., Charge carrier mobilities in organic semiconductors: Crystal engineering and the importance of molecular contacts. *Physical Chemistry Chemical Physics* **2015,** *17* (34), 21988-21996.
1650. Berger, R.; Wagner, M.; Feng, X.; Müllen, K., Polycyclic aromatic azomethine ylides: A unique entry to extended polycyclic heteroaromatics. *Chemical Science* **2015,** *6* (1), 436-441.
1651. Brüller, S.; Liang, H. W.; Kramm, U. I.; Krumpfer, J. W.; Feng, X.; Müllen, K., Bimetallic porous porphyrin polymer-derived non-precious metal electrocatalysts for oxygen reduction reactions. *Journal of Materials Chemistry A* **2015,** *3* (47), 23799-23808.
1652. Brutschy, M.; Stangenberg, R.; Beer, C.; Lubczyk, D.; Baumgarten, M.; Müllen, K.; Waldvogel, S. R., The generation effect: Cavity accessibility in dense-shell polyphenylene dendrimers. *ChemPlusChem* **2015,** *80* (1), 54-56.
1653. Christodoulou, C.; Giannakopoulos, A.; Ligorio, G.; Oehzelt, M.; Timpel, M.; Niederhausen, J.; Pasquali, L.; Giglia, A.; Parvez, K.; Müllen, K.; Beljonne, D.; Koch, N.; Nardi, M. V., Tuning the Electronic Structure of Graphene by Molecular Dopants: Impact of the Substrate. *ACS Applied Materials and Interfaces* **2015,** *7* (34), 19134-19144.
1654. Cui, K.; Schlütter, F.; Ivasenko, O.; Kivala, M.; Schwab, M. G.; Lee, S. L.; Mertens, S. F. L.; Tahara, K.; Tobe, Y.; Müllen, K.; Mali, K. S.; De Feyter, S., Multicomponent self-assembly with a shape-persistent n-heterotriangulene macrocycle on au(111). *Chemistry - A European Journal* **2015,** *21* (4), 1652-1659.
1655. Dienel, T.; Kawai, S.; Söde, H.; Feng, X.; Müllen, K.; Ruffieux, P.; Fasel, R.; Gröning, O., Resolving Atomic Connectivity in Graphene Nanostructure Junctions. *Nano Letters* **2015,** *15* (8), 5185-5190.
1656. Dorresteijn, R.; Billecke, N.; Parekh, S. H.; Klapper, M.; Müllen, K., Polarity reversal of nanoparticle surfaces by the use of light-sensitive polymeric emulsifiers. *Journal of Polymer Science, Part A: Polymer Chemistry* **2015,** *53* (2), 200-205.
1657. Franz, J.; Graham, D. J.; Schmüser, L.; Baio, J. E.; Lelle, M.; Peneva, K.; Müllen, K.;

Castner, D. G.; Bonn, M.; Weidner, T., Full membrane spanning self-assembled monolayers as model systems for UHV-based studies of cell-penetrating peptides. *Biointerphases* **2015,** *10* (1).
1658. Golling, F. E.; Koch, A. H. R.; Fytas, G.; Müllen, K., Synthesis and conformation of 3,6-connected cyclohexadiene chains. *Macromolecular Rapid Communications* **2015,** *36* (10), 898-902.
1659. Golling, F. E.; Osella, S.; Quernheim, M.; Wagner, M.; Beljonne, D.; Müllen, K., π-extended [12]cycloparaphenylenes: From a hexaphenylbenzene cyclohexamer to its unexpected C2-symmetric congener. *Chemical Science* **2015,** *6* (12), 7072-7078.
1660. Goossens, K.; Prior, M.; Pacheco, V.; Willbold, D.; Müllen, K.; Enderlein, J.; Hofkens, J.; Gregor, I., Accurate Diffusion Coefficients of Organosoluble Reference Dyes in Organic Media Measured by Dual-Focus Fluorescence Correlation Spectroscopy. *ACS Nano* **2015,** *9* (7), 7360-7373.
1661. Hammer, B. A. G.; Moritz, R.; Stangenberg, R.; Baumgarten, M.; Müllen, K., The polar side of polyphenylene dendrimers. *Chemical Society Reviews* **2015,** *44* (12), 4072-4090.
1662. Hinkel, F.; Cho, D.; Pisula, W.; Baumgarten, M.; Müllen, K., Alternating donor-acceptor arrays from hexa-perihexabenzocoronene and benzothiadiazole: Synthesis, optical properties, and self-assembly. *Chemistry - A European Journal* **2015,** *21* (1), 86-90.
1663. Huang, Y.; Mai, Y.; Yang, X.; Beser, U.; Liu, J.; Zhang, F.; Yan, D.; Müllen, K.; Feng, X., Temperature-Dependent Multidimensional Self-Assembly of Polyphenylene-Based "Rod-Coil" Graft Polymers. *Journal of the American Chemical Society* **2015,** *137* (36), 11602-11605.
1664. Ito, Y.; Christodoulou, C.; Nardi, M. V.; Koch, N.; Kläui, M.; Sachdev, H.; Müllen, K., Tuning the Magnetic Properties of Carbon by Nitrogen Doping of Its Graphene Domains. *Journal of the American Chemical Society* **2015,** *137* (24), 7678-7685.
1665. Jänsch, D.; Li, C.; Chen, L.; Wagner, M.; Müllen, K., Versatile colorant syntheses by multiple condensations of acetyl anilines with perylene anhydrides. *Angewandte Chemie - International Edition* **2015,** *54* (7), 2285-2289.
1666. Koldemir, U.; Puniredd, S. R.; Wagner, M.; Tongay, S.; McCarley, T. D.; Kamenov, G. D.; Müllen, K.; Pisula, W.; Reynolds, J. R., End Capping Does Matter: Enhanced Order and Charge Transport in Conjugated Donor-Acceptor Polymers. *Macromolecules* **2015,** *48* (18), 6369-6377.
1667. Konnerth, R.; Cervetti, C.; Narita, A.; Feng, X.; Müllen, K.; Hoyer, A.; Burghard, M.; Kern, K.; Dressel, M.; Bogani, L., Tuning the deposition of molecular graphene nanoribbons by surface functionalization. *Nanoscale* **2015,** *7* (30), 12807-12811.
1668. Kuhn, M.; Ludwig, J.; Marszalek, T.; Adermann, T.; Pisula, W.; Müllen, K.; Colsmann, A.; Hamburger, M., Tertiary carbonate side chains: Easily tunable thermo-labile breaking points for controlling the solubility of conjugated polymers. *Chemistry of Materials* **2015,** *27* (7), 2678-2686.
1669. Lee, S. L.; Fang, Y.; Velpula, G.; Cometto, F. P.; Lingenfelder, M.; Müllen, K.; Mali, K. S.; De Feyter, S., Reversible Local and Global Switching in Multicomponent Supramolecular Networks: Controlled Guest Release and Capture at the Solution/Solid Interface. *ACS Nano* **2015,** *9* (12), 11608-11617.
1670. Li, M.; An, C.; Marszalek, T.; Guo, X.; Long, Y. Z.; Yin, H.; Gu, C.; Baumgarten, M.; Pisula, W.; Müllen, K., Phenanthrene condensed thiadiazoloquinoxaline donor-acceptor polymer for phototransistor applications. *Chemistry of Materials* **2015,** *27* (6), 2218-2223.
1671. Li, R.; Liu, Z.; Parvez, K.; Feng, X.; Müllen, K., High-performance deformable photoswitches with p-doped graphene as the top window electrode. *Journal of Materials Chemistry C* **2015,** *3* (1), 37-40.
1672. Liang, H. W.; Brüller, S.; Dong, R.; Zhang, J.; Feng, X.; Müllen, K., Molecular metal-Nx centres in porous carbon for electrocatalytic hydrogen evolution. *Nature Communications* **2015,** *6*.
1673. Liu, J.; Li, B. W.; Tan, Y. Z.; Giannakopoulos, A.; Sanchez-Sanchez, C.; Beljonne, D.; Ruffieux, P.; Fasel, R.; Feng, X.; Müllen, K., Toward Cove-Edged Low Band Gap Graphene Nanoribbons. *Journal of the American Chemical Society* **2015,** *137* (18), 6097-6103.

1674. Liu, J.; Ravat, P.; Wagner, M.; Baumgarten, M.; Feng, X.; Müllen, K., Tetrabenzo[a,f,j,o]perylene: A Polycyclic Aromatic Hydrocarbon with An Open-Shell Singlet Biradical Ground State. *Angewandte Chemie - International Edition* **2015,** *54* (42), 12442-12446.
1675. Liu, K.; Pesce, D.; Ma, C.; Tuchband, M.; Shuai, M.; Chen, D.; Su, J.; Liu, Q.; Gerasimov, J. Y.; Kolbe, A.; Zajaczkowski, W.; Pisula, W.; Müllen, K.; Clark, N. A.; Herrmann, A., Solvent-free liquid crystals and liquids based on genetically engineered supercharged polypeptides with high elasticity. *Advanced Materials* **2015,** *27* (15), 2459-2465.
1676. Liu, K.; Shuai, M.; Chen, D.; Tuchband, M.; Gerasimov, J. Y.; Su, J.; Liu, Q.; Zajaczkowski, W.; Pisula, W.; Müllen, K.; Clark, N. A.; Herrmann, A., Solvent-free Liquid Crystals and Liquids from DNA. *Chemistry - A European Journal* **2015,** *21* (13), 4898-4903.
1677. Liu, S.; Gordiichuk, P.; Wu, Z. S.; Liu, Z.; Wei, W.; Wagner, M.; Mohamed-Noriega, N.; Wu, D.; Mai, Y.; Herrmann, A.; Müllen, K.; Feng, X., Patterning two-dimensional free-standing surfaces with mesoporous conducting polymers. *Nature Communications* **2015,** *6*.
1678. Liu, Z.; Parvez, K.; Li, R.; Dong, R.; Feng, X.; Müllen, K., Transparent conductive electrodes from graphene/PEDOT:PSS hybrid inks for ultrathin organic photodetectors. *Advanced Materials* **2015,** *27* (4), 669-675.
1679. Ma, Y.; Marszalek, T.; Yuan, Z.; Stangenberg, R.; Pisula, W.; Chen, L.; Müllen, K., A crown ether decorated dibenzocoronene tetracarboxdiimide chromophore: Synthesis, sensing, and self-organization. *Chemistry - An Asian Journal* **2015,** *10* (1), 139-143.
1680. Maghsoumi, A.; Brambilla, L.; Castiglioni, C.; Müllen, K.; Tommasini, M., Overtone and combination features of G and D peaks in resonance Raman spectroscopy of the C78H26 polycyclic aromatic hydrocarbon. *Journal of Raman Spectroscopy* **2015,** *46* (9), 757-764.
1681. Mics, Z.; Tielrooij, K. J.; Parvez, K.; Jensen, S. A.; Ivanov, I.; Feng, X.; Müllen, K.; Bonn, M.; Turchinovich, D., Thermodynamic picture of ultrafast charge transport in graphene. *Nature Communications* **2015,** *6*.
1682. Moritz, R.; Wagner, M.; Schollmeyer, D.; Baumgarten, M.; Müllen, K., Hydrophobic encapsulated phosphonium salts - Synthesis of weakly coordinating cations and their application in wittig reactions. *Chemistry - A European Journal* **2015,** *21* (25), 9119-9125.
1683. Mueller, A.; Schwab, M. G.; Encinas, N.; Vollmer, D.; Sachdev, H.; Müllen, K., Generation of nitrile groups on graphites in a nitrogen RF-plasma discharge. *Carbon* **2015,** *84* (1), 426-433.
1684. Müllen, K., Chemistry in a Materials World. *Angewandte Chemie - International Edition* **2015,** *54* (35), 10040-10042.
1685. Müllen, K.; Pisula, W., Donor-acceptor polymers. *Journal of the American Chemical Society* **2015,** *137* (30), 9503-9505.
1686. Narayana, Y. S. L. V.; Baumgarten, M.; Müllen, K.; Chandrasekar, R., Tuning the Solid State Emission of Thin Films/Microspheres Obtained from Alternating Oligo(3-octylthiophenes) and 2,6-Bis(pyrazole)pyridine Copolymers by Varying Conjugation Length and Eu3+/Tb3+ Metal Coordination. *Macromolecules* **2015,** *48* (14), 4801-4812.
1687. Narita, A.; Feng, X.; Müllen, K., Bottom-up synthesis of chemically precise graphene nanoribbons. *Chemical Record* **2015,** *15* (1), 295-309.
1688. Narita, A.; Wang, X. Y.; Feng, X.; Müllen, K., New advances in nanographene chemistry. *Chemical Society Reviews* **2015,** *44* (18), 6616-6643.
1689. Nietzel, S.; Joe, D.; Krumpfer, J. W.; Schellenberger, F.; Alsaygh, A. A.; Fink, G.; Klapper, M.; Müllen, K., Organic Nanoparticles as Fragmentable support for Ziegler-Natta catalysts. *Journal of Polymer Science, Part A: Polymer Chemistry* **2015,** *53* (1), 15-22.
1690. Okuno, M.; Mezger, M.; Stangenberg, R.; Baumgarten, M.; Müllen, K.; Bonn, M.; Backus, E. H. G., Interaction of a patterned amphiphilic polyphenylene dendrimer with a lipid monolayer: Electrostatic interactions dominate. *Langmuir* **2015,** *31* (6), 1980-1987.

1691. Palma, C. A.; Awasthi, M.; Hernandez, Y.; Feng, X.; Müllen, K.; Niehaus, T. A.; Barth, J. V., Sub-Nanometer Width Armchair Graphene Nanoribbon Energy Gap Atlas. *Journal of Physical Chemistry Letters* **2015,** *6* (16), 3228-3235.
1692. Parvez, K.; Li, R.; Müllen, K., Graphene as Transparent Electrodes for Solar Cells. In *Nanocarbons for Advanced Energy Conversion*, 2015; pp 249-280.
1693. Parvez, K.; Yang, S.; Feng, X.; Müllen, K., Exfoliation of graphene via wet chemical routes. *Synthetic Metals* **2015,** *210*, 123-132.
1694. Pathipati, S. R.; Pavlica, E.; Parvez, K.; Feng, X.; Müllen, K.; Bratina, G., Graphene flakes at the SiO2/organic-semiconductor interface for high-mobility field-effect transistors. *Organic Electronics* **2015,** *27*, 221-226.
1695. Pfeffermann, M.; Dong, R.; Graf, R.; Zajaczkowski, W.; Gorelik, T.; Pisula, W.; Narita, A.; Müllen, K.; Feng, X., Free-Standing Monolayer Two-Dimensional Supramolecular Organic Framework with Good Internal Order. *Journal of the American Chemical Society* **2015,** *137* (45), 14525-14532.
1696. Quernheim, M.; Golling, F. E.; Zhang, W.; Wagner, M.; Räder, H. J.; Nishiuchi, T.; Müllen, K., The Precise Synthesis of Phenylene-Extended Cyclic Hexa-peri-hexabenzocoronenes from Polyarylated [n]Cycloparaphenylenes by the Scholl Reaction. *Angewandte Chemie - International Edition* **2015,** *54* (35), 10341-10346.
1697. Rein, M.; Richter, N.; Parvez, K.; Feng, X.; Sachdev, H.; Kläui, M.; Müllen, K., Magnetoresistance and charge transport in graphene governed by nitrogen dopants. *ACS Nano* **2015,** *9* (2), 1360-1366.
1698. Rudloff, M.; Ackermann, K.; Huth, M.; Jeschke, H. O.; Tomic, M.; Valentí, R.; Wolfram, B.; Bröring, M.; Bolte, M.; Chercka, D.; Baumgarten, M.; Müllen, K., Charge transfer tuning by chemical substitution and uniaxial pressure in the organic complex tetramethoxypyrene-tetracyanoquinodimethane. *Physical Chemistry Chemical Physics* **2015,** *17* (6), 4118-4126.
1699. Samal, S. K.; Dash, M.; Dubruel, P.; Müllen, K.; Rajadas, J., Cationic polymers as carriers through the blood-brain barrier. In *RSC Polymer Chemistry Series*, 2015; Vol. 2015-January, pp 539-556.
1700. Sánchez-Sánchez, C.; Brüller, S.; Sachdev, H.; Müllen, K.; Krieg, M.; Bettinger, H. F.; Nicolaï, A.; Meunier, V.; Talirz, L.; Fasel, R.; Ruffieux, P., On-Surface Synthesis of BN-Substituted Heteroaromatic Networks. *ACS Nano* **2015,** *9* (9), 9228-9235.
1701. Schelkle, K. M.; Becht, S.; Faraji, S.; Petzoldt, M.; Müllen, K.; Buckup, T.; Dreuw, A.; Motzkus, M.; Hamburger, M., Emission turn-on and solubility turn-off in conjugated polymers: One- and two-photon-induced removal of fluorescence-quenching solubilizing groups. *Macromolecular Rapid Communications* **2015,** *36* (1), 31-37.
1702. Schelkle, K. M.; Bender, M.; Jeltsch, K.; Buckup, T.; Müllen, K.; Hamburger, M.; Bunz, U. H. F., Light-Induced Solubility Modulation of Polyfluorene to Enhance the Performance of OLEDs. *Angewandte Chemie - International Edition* **2015,** *54* (48), 14545-14548.
1703. Schuster, T.; Golling, F. E.; Krumpfer, J. W.; Wagner, M.; Graf, R.; Alsaygh, A. A.; Klapper, M.; Müllen, K., Poly(isobutylene) nanoparticles via cationic polymerization in nonaqueous emulsions. *Macromolecular Rapid Communications* **2015,** *36* (2), 204-210.
1704. Schwab, M. G.; Narita, A.; Osella, S.; Hu, Y.; Maghsoumi, A.; Mavrinsky, A.; Pisula, W.; Castiglioni, C.; Tommasini, M.; Beljonne, D.; Feng, X.; Müllen, K., Bottom-Up Synthesis of Necklace-Like Graphene Nanoribbons. *Chemistry - An Asian Journal* **2015,** *10* (10), 2134-2138.
1705. Schwab, M. G.; Takase, M.; Mavrinsky, A.; Pisula, W.; Feng, X.; Gámez, J. A.; Thiel, W.; Mali, K. S.; De Feyter, S.; Müllen, K., Torands revisited: Metal sequestration and self-assembly of cyclo-2,9-tris-1,10-phenanthroline hexaaza macrocycles. *Chemistry - A European Journal* **2015,** *21* (23), 8426-8434.

1706. Soavi, G.; Dal Conte, S.; Manzoni, C.; Scotognella, F.; Narita, A.; Feng, X.; Müllen, K.; Cerullo, G. In *Exciton-exciton annihilation and stimulated emission in graphene nanoribbons*, Proceedings 2015 European Conference on Lasers and Electro-Optics - European Quantum Electronics Conference, CLEO/Europe-EQEC 2015, 2015.
1707. Söde, H.; Talirz, L.; Gröning, O.; Pignedoli, C. A.; Berger, R.; Feng, X.; Müllen, K.; Fasel, R.; Ruffieux, P., Electronic band dispersion of graphene nanoribbons via Fourier-transformed scanning tunneling spectroscopy. *Physical Review B - Condensed Matter and Materials Physics* **2015,** *91* (4).
1708. Squillaci, M. A.; Ferlauto, L.; Zagranyarski, Y.; Milita, S.; Müllen, K.; Samorì, P., Self-assembly of an amphiphilic π-conjugated dyad into fibers: Ultrafast and ultrasensitive humidity sensor. *Advanced Materials* **2015,** *27* (20), 3170-3174.
1709. Stalder, R.; Mavrinskiy, A.; Grand, C.; Imaram, W.; Angerhofer, A.; Pisula, W.; Müllen, K.; Reynolds, J. R., Electrochromic and liquid crystalline polycarbonates based on telechelic oligothiophenes. *Polymer Chemistry* **2015,** *6* (8), 1230-1235.
1710. Stangenberg, R.; Wu, Y.; Hedrich, J.; Kurzbach, D.; Wehner, D.; Weidinger, G.; Kuan, S. L.; Jansen, M. I.; Jelezko, F.; Luhmann, H. J.; Hinderberger, D.; Weil, T.; Müllen, K., A polyphenylene dendrimer drug transporter with precisely positioned amphiphilic surface patches. *Advanced healthcare materials* **2015,** *4* (3), 377-384.
1711. Strudwick, A. J.; Weber, N. E.; Schwab, M. G.; Kettner, M.; Weitz, R. T.; Wünsch, J. R.; Müllen, K.; Sachdev, H., Chemical vapor deposition of high quality graphene films from carbon dioxide atmospheres. *ACS Nano* **2015,** *9* (1), 31-42.
1712. Tan, Y. Z.; Osella, S.; Liu, Y.; Yang, B.; Beljonne, D.; Feng, X.; Müllen, K., Sulfur-annulated hexa-peri-hexabenzocoronene decorated with phenylthio groups at the periphery. *Angewandte Chemie - International Edition* **2015,** *54* (10), 2927-2931.
1713. Tironi, C. N.; Graf, R.; Lieberwirth, I.; Klapper, M.; Müllen, K., Synthesis and Selective Loading of Polyhydroxyethyl Methacrylate-l-Polysulfone Amphiphilic Polymer Conetworks. *ACS Macro Letters* **2015,** *4* (11), 1302-1306.
1714. Turchinovich, D.; Mics, Z.; Jensen, S.; Parvez, K.; Ivanov, I.; Tielrooij, K. J.; Koppens, F. H. L.; Feng, X.; Müllen, K.; Bonn, M. In *Inherent resistivity of graphene to strong THz fields*, Springer Proceedings in Physics, 2015; pp 623-625.
1715. Tüysüz, H.; Schüth, F.; Zhi, L.; Müllen, K.; Comotti, M., Ammonia decomposition over iron phthalocyanine-based materials. *ChemCatChem* **2015,** *7* (9), 1453-1459.
1716. Wang, G.; Sun, Y.; Li, D.; Liang, H. W.; Dong, R.; Feng, X.; Müllen, K., Controlled Synthesis of N-Doped Carbon Nanospheres with Tailored Mesopores through Self-Assembly of Colloidal Silica. *Angewandte Chemie - International Edition* **2015,** *54* (50), 15191-15196.
1717. Wang, X. Y.; Narita, A.; Feng, X.; Müllen, K., B2N2-Dibenzo[a,e]pentalenes: Effect of the BN Orientation Pattern on Antiaromaticity and Optoelectronic Properties. *Journal of the American Chemical Society* **2015,** *137* (24), 7668-7671.
1718. Wei, W.; Wang, G.; Yang, S.; Feng, X.; Müllen, K., Efficient oupling of nanoparticles to electrochemically exfoliated graphene. *Journal of the American Chemical Society* **2015,** *137* (16), 5576-5581.
1719. Wu, Z. S.; Liu, Z.; Parvez, K.; Feng, X.; Müllen, K., Ultrathin Printable Graphene Supercapacitors with AC Line-Filtering Performance. *Advanced Materials* **2015,** *27* (24), 3669-3675.
1720. Wu, Z. S.; Parvez, K.; Li, S.; Yang, S.; Liu, Z.; Liu, S.; Feng, X.; Müllen, K., Alternating Stacked Graphene-Conducting Polymer Compact Films with Ultrahigh Areal and Volumetric Capacitances for High-Energy Micro-Supercapacitors. *Advanced Materials* **2015,** *27* (27), 4054-4061.
1721. Wu, Z. S.; Yang, S.; Zhang, L.; Wagner, J. B.; Feng, X.; Müllen, K., Binder-free activated graphene compact films for all-solid-state micro-supercapacitors with high areal and volumetric

capacitances. *Energy Storage Materials* **2015,** *1*, 119-126.
1722. Xia, D.; Gehrig, D.; Guo, X.; Baumgarten, M.; Laquai, F.; Müllen, K., A spiro-bifluorene based 3D electron acceptor with dicyanovinylene substitution for solution-processed non-fullerene organic solar cells. *Journal of Materials Chemistry A* **2015,** *3* (20), 11086-11092.
1723. Xia, D.; Marszalek, T.; Li, M.; Guo, X.; Baumgarten, M.; Pisula, W.; Müllen, K., Solution-Processable n-Type Organic Semiconductors Based on Angular-Shaped 2-(12 H -Dibenzofluoren-12-ylidene)malononitrilediimide. *Organic Letters* **2015,** *17* (12), 3074-3077.
1724. Yang, S.; Brüller, S.; Wu, Z. S.; Liu, Z.; Parvez, K.; Dong, R.; Richard, F.; Samorì, P.; Feng, X.; Müllen, K., Organic Radical-Assisted Electrochemical Exfoliation for the Scalable Production of High-Quality Graphene. *Journal of the American Chemical Society* **2015,** *137* (43), 13927-13932.
1725. Zhang, H.; Lin, H.; Sun, K.; Chen, L.; Zagranyarski, Y.; Aghdassi, N.; Duhm, S.; Li, Q.; Zhong, D.; Li, Y.; Müllen, K.; Fuchs, H.; Chi, L., On-surface synthesis of rylene-type graphene nanoribbons. *Journal of the American Chemical Society* **2015,** *137* (12), 4022-4025.
1726. Zhang, J.; Liu, K.; Müllen, K.; Yin, M., Self-assemblies of amphiphilic homopolymers: Synthesis, morphology studies and biomedical applications. *Chemical Communications* **2015,** *51* (58), 11541-11555.
1727. Zhang, W.; Andersson, J. T.; Räder, H. J.; Müllen, K., Molecular characterization of large polycyclic aromatic hydrocarbons in solid petroleum pitch and coal tar pitch by high resolution MALDI ToF MS and insights from ion mobility separation. *Carbon* **2015,** *95*, 672-680.
1728. Zhang, Y.; Zhang, Y.; Li, G.; Lu, J.; Lin, X.; Tan, Y.; Feng, X.; Du, S.; Müllen, K.; Gao, H. J., Construction of single-crystalline supramolecular networks of perchlorinated hexa-peri-hexabenzocoronene on Au(111). *Journal of Chemical Physics* **2015,** *142* (10).
1729. Zickler, M. F.; Feist, F. A.; Jacob, J.; Müllen, K.; Basché, T., Single molecule studies of a ladder type conjugated polymer: Vibronic spectra, line widths, and energy transfer. *Macromolecular Rapid Communications* **2015,** *36* (11), 1096-1102.
1730. Zschieschang, U.; Klauk, H.; Müeller, I. B.; Strudwick, A. J.; Hintermann, T.; Schwab, M. G.; Narita, A.; Feng, X.; Müellen, K.; Weitz, R. T., Electrical Characteristics of Field-Effect Transistors based on Chemically Synthesized Graphene Nanoribbons. *Advanced Electronic Materials* **2015,** *1* (3).
1731. Abdulkarim, A.; Hinkel, F.; Jänsch, D.; Freudenberg, J.; Golling, F. E.; Müllen, K., A New Solution to an Old Problem: Synthesis of Unsubstituted Poly(para-phenylene). *Journal of the American Chemical Society* **2016,** *138* (50), 16208-16211.
1732. Antonietti, M.; Müllen, K., *Chemical synthesis and applications of graphene and carbon materials*. 2016; p 1-256.
1733. Auer-Berger, M.; Trattnig, R.; Qin, T.; Schlesinger, R.; Nardi, M. V.; Ligorio, G.; Christodoulou, C.; Koch, N.; Baumgarten, M.; Müllen, K.; List-Kratochvil, E. J. W., All-solution-processed multilayer polymer/dendrimer light emitting diodes. *Organic Electronics* **2016,** *35*, 164-170.
1734. Baudisch, B.; Keerthi, A.; Reiner, A.; Reschauer, J.; Müllen, K.; Riedle, E. In *Pyrene dynamics: Covalently linked dimers accelerate the kinetics from NS to PS and produce excimers*, Optics InfoBase Conference Papers, 2016.
1735. Beser, U.; Kastler, M.; Maghsoumi, A.; Wagner, M.; Castiglioni, C.; Tommasini, M.; Narita, A.; Feng, X.; Müllen, K., A C216-Nanographene Molecule with Defined Cavity as Extended Coronoid. *Journal of the American Chemical Society* **2016,** *138* (13), 4322-4325.
1736. Bragança, A. M.; Greenwood, J.; Ivasenko, O.; Phan, T. H.; Müllen, K.; De Feyter, S., The impact of grafted surface defects and their controlled removal on supramolecular self-assembly. *Chemical Science* **2016,** *7* (12), 7028-7033.
1737. Chen, Z.; Zhang, W.; Palma, C. A.; Lodi Rizzini, A.; Liu, B.; Abbas, A.; Richter, N.; Martini, L.; Wang, X. Y.; Cavani, N.; Lu, H.; Mishra, N.; Coletti, C.; Berger, R.;

Klappenberger, F.; Kläui, M.; Candini, A.; Affronte, M.; Zhou, C.; De Renzi, V.; Del Pennino, U.; Barth, J. V.; Räder, H. J.; Narita, A.; Feng, X.; Müllen, K., Synthesis of Graphene Nanoribbons by Ambient-Pressure Chemical Vapor Deposition and Device Integration. *Journal of the American Chemical Society* **2016,** *138* (47), 15488-15496.
1738. Conti, S.; Del Rosso, M. G.; Ciesielski, A.; Weippert, J.; Böttcher, A.; Shin, Y.; Melinte, G.; Ersen, O.; Casiraghi, C.; Feng, X.; Müllen, K.; Kappes, M. M.; Samorì, P.; Cecchini, M., Perchlorination of Coronene Enhances its Propensity for Self-Assembly on Graphene. *ChemPhysChem* **2016,** *17* (3), 352-357.
1739. Duan, R.; Cui, Y.; Zhao, Y.; Li, C.; Chen, L.; Hou, J.; Wagner, M.; Baumgarten, M.; He, C.; Müllen, K., The Importance of End Groups for Solution-Processed Small-Molecule Bulk-Heterojunction Photovoltaic Cells. *ChemSusChem* **2016,** *9* (9), 973-980.
1740. Dumslaff, T.; Yang, B.; Maghsoumi, A.; Velpula, G.; Mali, K. S.; Castiglioni, C.; De Feyter, S.; Tommasini, M.; Narita, A.; Feng, X.; Müllen, K., Adding Four Extra K-Regions to Hexa-peri-hexabenzocoronene. *Journal of the American Chemical Society* **2016,** *138* (14), 4726-4729.
1741. El-Shishtawy, R. M.; Elroby, S. A.; Asiri, A. M.; Müllen, K., Optical absorption spectra and electronic properties of symmetric and asymmetric squaraine dyes for use in DSSC solar cells: DFT and TD-DFT studies. *International Journal of Molecular Sciences* **2016,** *17* (4), 1-12.
1742. Elliott, A. B. S.; Horvath, R.; Sun, X. Z.; Gardiner, M. G.; Müllen, K.; Lucas, N. T.; George, M. W.; Gordon, K. C., Long-Lived Charge Transfer Excited States in HBC-Polypyridyl Complex Hybrids. *Inorganic Chemistry* **2016,** *55* (10), 4710-4719.
1743. Fantuzzi, P.; Martini, L.; Candini, A.; Corradini, V.; Del Pennino, U.; Hu, Y.; Feng, X.; Müllen, K.; Narita, A.; Affronte, M., Fabrication of three terminal devices by ElectroSpray deposition of graphene nanoribbons. *Carbon* **2016,** *104*, 112-118.
1744. Freudensprung, I.; Joe, D.; Nietzel, S.; Vollmer, D.; Klapper, M.; Müllen, K., Spherical Polyolefin Particles from Olefin Polymerization in the Confined Geometry of Porous Hollow Silica Particles. *Macromolecular Rapid Communications* **2016,** *37* (20), 1651-1656.
1745. Freudensprung, I.; Klapper, M.; Müllen, K., Triblock Terpolymers by Simultaneous Tandem Block Polymerization (STBP). *Macromolecular Rapid Communications* **2016,** *37* (3), 209-214.
1746. Grand, C.; Baek, S.; Lai, T. H.; Deb, N.; Zajaczkowski, W.; Stalder, R.; Müllen, K.; Pisula, W.; Bucknall, D. G.; So, F.; Reynolds, J. R., Structure-Property Relationships Directing Transport and Charge Separation in Isoindigo Polymers. *Macromolecules* **2016,** *49* (11), 4008-4022.
1747. Hammer, B. A. G.; Müllen, K., Dimensional evolution of polyphenylenes: Expanding in all directions. *Chemical Reviews* **2016,** *116* (4), 2103-21040.
1748. Hillebrandt, S.; Adermann, T.; Alt, M.; Schinke, J.; Glaser, T.; Mankel, E.; Hernandez-Sosa, G.; Jaegermann, W.; Lemmer, U.; Pucci, A.; Kowalsky, W.; Müllen, K.; Lovrincic, R.; Hamburger, M., Naphthalene Tetracarboxydiimide-Based n-Type Polymers with Removable Solubility via Thermally Cleavable Side Chains. *ACS Applied Materials and Interfaces* **2016,** *8* (7), 4940-4945.
1749. Huang, Y.; Mai, Y.; Beser, U.; Teyssandier, J.; Velpula, G.; Van Gorp, H.; Straasø, L. A.; Hansen, M. R.; Rizzo, D.; Casiraghi, C.; Yang, R.; Zhang, G.; Wu, D.; Zhang, F.; Yan, D.; De Feyter, S.; Müllen, K.; Feng, X., Poly(ethylene oxide) Functionalized Graphene Nanoribbons with Excellent Solution Processability. *Journal of the American Chemical Society* **2016,** *138* (32), 10136-10139.
1750. Ivanov, I.; Hu, Y.; Beser, U.; Narita, A.; Mullen, K.; Bonn, M.; Turchinovich, D. In *Terahertz carrier dynamics in graphene nanoribbons with different peripherial functional groups*, 2016 Conference on Lasers and Electro-Optics, CLEO 2016, 2016.
1751. Janasz, L.; Chlebosz, D.; Gradzka, M.; Zajaczkowski, W.; Marszalek, T.; Müllen, K.; Ulanski, J.; Kiersnowski, A.; Pisula, W., Improved charge carrier transport in ultrathin poly(3-hexylthiophene) films via solution aggregation. *Journal of Materials Chemistry C* **2016,** *4* (48),

11488-11498.
1752. Kaloyanova, S.; Zagranyarski, Y.; Ritz, S.; Hanulová, M.; Koynov, K.; Vonderheit, A.; Müllen, K.; Peneva, K., Water-Soluble NIR-Absorbing Rylene Chromophores for Selective Staining of Cellular Organelles. *Journal of the American Chemical Society* **2016,** *138* (9), 2881-2884.
1753. Kawai, S.; Benassi, A.; Gnecco, E.; Söde, H.; Pawlak, R.; Feng, X.; Müllen, K.; Passerone, D.; Pignedoli, C. A.; Ruffieux, P.; Fasel, R.; Meyer, E., Superlubricity of graphene nanoribbons on gold surfaces. *Science* **2016,** *351* (6276), 957-961.
1754. Keerthi, A.; An, C.; Li, M.; Marszalek, T.; Ricciardulli, A. G.; Radha, B.; Alsewailem, F. D.; Müllen, K.; Baumgarten, M., Dithieno[2,3-d;2′,3′-d]benzo[2,1-b;3,4-b']dithiophene: A novel building-block for a planar copolymer. *Polymer Chemistry* **2016,** *7* (8), 1545-1548.
1755. Kennes, K.; Baeten, Y.; Stappert, S.; Müllen, K.; Hofkens, J.; Van Der Auweraer, M.; Vosch, T.; Fron, E., Synthesis, Ensemble, and Single Molecule Characterization of a Diphenyl-Acetylene Linked Terrylenediimide Dimer. *Journal of Physical Chemistry B* **2016,** *120* (9), 2333-2342.
1756. Lewandowska, U.; Zajaczkowski, W.; Pisula, W.; Ma, Y.; Li, C.; Müllen, K.; Wennemers, H., Effect of Structural Modifications on the Self-Assembly of Oligoprolines Conjugated with Sterically Demanding Chromophores. *Chemistry - A European Journal* **2016,** *22* (11), 3804-3809.
1757. Li, M.; An, C.; Marszalek, T.; Baumgarten, M.; Müllen, K.; Pisula, W., Impact of Interfacial Microstructure on Charge Carrier Transport in Solution-Processed Conjugated Polymer Field-Effect Transistors. *Advanced Materials* **2016,** *28* (11), 2245-2252.
1758. Li, M.; An, C.; Marszalek, T.; Baumgarten, M.; Yan, H.; Müllen, K.; Pisula, W., Controlling the Surface Organization of Conjugated Donor–Acceptor Polymers by their Aggregation in Solution. *Advanced Materials* **2016,** *28* (42), 9430-9438.
1759. Li, M.; Hinkel, F.; Müllen, K.; Pisula, W., Self-assembly and charge carrier transport of solution-processed conjugated polymer monolayers on dielectric surfaces with controlled sub-nanometer roughness. *Nanoscale* **2016,** *8* (17), 9211-9216.
1760. Li, M.; Marszalek, T.; Müllen, K.; Pisula, W., Role of Sub-Nanometer Dielectric Roughness on Microstructure and Charge Carrier Transport in α,ω-Dihexylsexithiophene Field-Effect Transistors. *ACS Applied Materials and Interfaces* **2016,** *8* (25), 16200-16206.
1761. Li, M.; Marszalek, T.; Zheng, Y.; Lieberwirth, I.; Müllen, K.; Pisula, W., Modulation of Domain Size in Polycrystalline n-Type Dicyanoperylene Mono- and Bilayer Transistors. *ACS Nano* **2016,** *10* (4), 4268-4273.
1762. Li, P.; Zhang, M.; Sun, X.; Guan, S.; Zhang, G.; Baumgarten, M.; Müllen, K., A dendrimer-based highly sensitive and selective fluorescence-quenching sensor for Fe3+ both in solution and as film. *Biosensors and Bioelectronics* **2016,** *85*, 785-791.
1763. Liu, J.; Dienel, T.; Liu, J.; Groening, O.; Cai, J.; Feng, X.; Müllen, K.; Ruffieux, P.; Fasel, R., Building Pentagons into Graphenic Structures by On-Surface Polymerization and Aromatic Cyclodehydrogenation of Phenyl-Substituted Polycyclic Aromatic Hydrocarbons. *Journal of Physical Chemistry C* **2016,** *120* (31), 17588-17593.
1764. Liu, J.; Narita, A.; Osella, S.; Zhang, W.; Schollmeyer, D.; Beljonne, D.; Feng, X.; Müllen, K., Unexpected Scholl Reaction of 6,7,13,14-Tetraarylbenzo[k]tetraphene: Selective Formation of Five-Membered Rings in Polycyclic Aromatic Hydrocarbons. *Journal of the American Chemical Society* **2016,** *138* (8), 2602-2608.
1765. Liu, J.; Osella, S.; Ma, J.; Berger, R.; Beljonne, D.; Schollmeyer, D.; Feng, X.; Müllen, K., Fused Dibenzo[a,m]rubicene: A New Bowl-Shaped Subunit of C70 Containing Two Pentagons. *Journal of the American Chemical Society* **2016,** *138* (27), 8364-8367.
1766. Liu, Y.; Marszalek, T.; Müllen, K.; Pisula, W.; Feng, X., Derivatizing Tribenzothiophene-Fused Hexa-peri-hexabenzocoronenes with Tunable Optoelectronic Properties. *Chemistry - An Asian Journal* **2016,** *11* (15), 2107-2112.

1767. Liu, Y.; Narita, A.; Teyssandier, J.; Wagner, M.; De Feyter, S.; Feng, X.; Müllen, K., A Shape-Persistent Polyphenylene Spoked Wheel. *Journal of the American Chemical Society* **2016,** *138* (48), 15539-15542.
1768. Liu, Z.; Wu, Z. S.; Yang, S.; Dong, R.; Feng, X.; Müllen, K., Ultraflexible In-Plane Micro-Supercapacitors by Direct Printing of Solution-Processable Electrochemically Exfoliated Graphene. *Advanced Materials* **2016,** *28* (11), 2217-2222.
1769. Lorbach, D.; Keerthi, A.; Figueira-Duarte, T. M.; Baumgarten, M.; Wagner, M.; Müllen, K., Cyclization of Pyrene Oligomers: Cyclohexa-1,3-pyrenylene. *Angewandte Chemie - International Edition* **2016,** *55* (1), 418-421.
1770. Ma, Y.; Chen, L.; Li, C.; Müllen, K., A fishing rod-like conjugated polymer bearing pillar[5]arenes. *Chemical Communications* **2016,** *52* (40), 6662-6664.
1771. Maghsoumi, A.; Narita, A.; Dong, R.; Feng, X.; Castiglioni, C.; Müllen, K.; Tommasini, M., Edge chlorination of hexa-: Peri -hexabenzocoronene investigated by density functional theory and vibrational spectroscopy. *Physical Chemistry Chemical Physics* **2016,** *18* (17), 11869-11878.
1772. Marakis, J.; Wunderlich, K.; Klapper, M.; Vlassopoulos, D.; Fytas, G.; Müllen, K., Strong Physical Hydrogels from Fibrillar Supramolecular Assemblies of Poly(ethylene glycol) Functionalized Hexaphenylbenzenes. *Macromolecules* **2016,** *49* (9), 3516-3525.
1773. Markevich, A.; Kurasch, S.; Lehtinen, O.; Reimer, O.; Feng, X.; Müllen, K.; Turchanin, A.; Khlobystov, A. N.; Kaiser, U.; Besley, E., Electron beam controlled covalent attachment of small organic molecules to graphene. *Nanoscale* **2016,** *8* (5), 2711-2719.
1774. Meissner, M.; Sojka, F.; Matthes, L.; Bechstedt, F.; Feng, X.; Müllen, K.; Mannsfeld, S. C. B.; Forker, R.; Fritz, T., Flexible 2D Crystals of Polycyclic Aromatics Stabilized by Static Distortion Waves. *ACS Nano* **2016,** *10* (7), 6474-6483.
1775. Mics, Z.; Tielrooij, K. J.; Ivanov, I.; Feng, X.; Mullen, K.; Bonn, M.; Turchinovich, D. In *Thermodynamic picture of terahertz conduction in graphene*, International Conference on Infrared, Millimeter, and Terahertz Waves, IRMMW-THz, 2016.
1776. Müllen, K., Molecular defects in organic materials. *Nature Reviews Materials* **2016,** *1* (2).
1777. Niederhausen, J.; Kersell, H. R.; Christodoulou, C.; Heimel, G.; Wonneberger, H.; Müllen, K.; Rabe, J. P.; Hla, S. W.; Koch, N., Monolayer Phases of a Dipolar Perylene Derivative on Au(111) and Surface Potential Build-Up in Multilayers. *Langmuir* **2016,** *32* (15), 3587-3600.
1778. Nölle, J. M.; Primpke, S.; Müllen, K.; Vana, P.; Wöll, D., Diffusion of single molecular and macromolecular probes during the free radical bulk polymerization of MMA-towards a better understanding of the Trommsdorff effect on a molecular level. *Polymer Chemistry* **2016,** *7* (24), 4100-4105.
1779. Ruffieux, P.; Wang, S.; Yang, B.; Sanchez-Sanchez, C.; Liu, J.; Dienel, T.; Talirz, L.; Shinde, P.; Pignedoli, C. A.; Passerone, D.; Dumslaff, T.; Feng, X.; Müllen, K.; Fasel, R., On-surface synthesis of graphene nanoribbons with zigzag edge topology. *Nature* **2016,** *531* (7595), 489-492.
1780. Sánchez-Sánchez, C.; Dienel, T.; Deniz, O.; Ruffieux, P.; Berger, R.; Feng, X.; Müllen, K.; Fasel, R., Purely Armchair or Partially Chiral: Noncontact Atomic Force Microscopy Characterization of Dibromo-Bianthryl-Based Graphene Nanoribbons Grown on Cu(111). *ACS Nano* **2016,** *10* (8), 8006-8011.
1781. Schelkle, K. M.; Bender, M.; Beck, S.; Jeltsch, K. F.; Stolz, S.; Zimmermann, J.; Weitz, R. T.; Pucci, A.; Müllen, K.; Hamburger, M.; Bunz, U. H. F., Photo-Cross-Linkable Polymeric Optoelectronics Based on the [2 + 2] Cycloaddition Reaction of Cinnamic Acid. *Macromolecules* **2016,** *49* (5), 1518-1522.
1782. Schultz, T.; Schlesinger, R.; Niederhausen, J.; Henneberger, F.; Sadofev, S.; Blumstengel, S.; Vollmer, A.; Bussolotti, F.; Yang, J. P.; Kera, S.; Parvez, K.; Ueno, N.; Müllen, K.; Koch, N., Tuning the work function of GaN with organic molecular acceptors. *Physical Review*

B **2016,** *93* (12).
1783. Shi, L.; Li, X.; Jia, Y.; Kong, D.; He, H.; Wagner, M.; Müllen, K.; Zhi, L., Continuous carbon nanofiber bundles with tunable pore structures and functions for weavable fibrous supercapacitors. *Energy Storage Materials* **2016,** *5*, 43-49.
1784. Soavi, G.; Dal Conte, S.; Manzoni, C.; Viola, D.; Narita, A.; Hu, Y.; Feng, X.; Hohenester, U.; Molinari, E.; Prezzi, D.; Müllen, K.; Cerullo, G., Exciton-exciton annihilation and biexciton stimulated emission in graphene nanoribbons. *Nature Communications* **2016,** *7*.
1785. Stalder, R.; Puniredd, S. R.; Hansen, M. R.; Koldemir, U.; Grand, C.; Zajaczkowski, W.; Müllen, K.; Pisula, W.; Reynolds, J. R., Ambipolar Charge Transport in Isoindigo-Based Donor-Acceptor Polymers. *Chemistry of Materials* **2016,** *28* (5), 1286-1297.
1786. Stappert, S.; Li, C.; Müllen, K.; Basché, T., Synthesis of an Acceptor-Donor-Acceptor Multichromophore Consisting of Terrylene and Perylene Diimides for Multistep Energy Transfer Studies. *Chemistry of Materials* **2016,** *28* (3), 906-914.
1787. Sun, M.; Müllen, K.; Yin, M., Water-soluble perylenediimides: Design concepts and biological applications. *Chemical Society Reviews* **2016,** *45* (6), 1513-1528.
1788. Tomar, M.; Ashar, A. Z.; Narayan, K. S.; Müllen, K.; Jacob, J., Tuning the HOMO energy levels in quinoline and biquinoline based donor-acceptor polymers. *Journal of Polymer Research* **2016,** *23* (3), 1-9.
1789. Verzhbitskiy, I. A.; De Corato, M.; Ruini, A.; Molinari, E.; Narita, A.; Hu, Y.; Schwab, M. G.; Bruna, M.; Yoon, D.; Milana, S.; Feng, X.; Müllen, K.; Ferrari, A. C.; Casiraghi, C.; Prezzi, D., Raman Fingerprints of Atomically Precise Graphene Nanoribbons. *Nano Letters* **2016,** *16* (6), 3442-3447.
1790. Wang, G.; Sun, Y.; Li, D.; Wei, W.; Feng, X.; Müllen, K., Constructing Hierarchically Hollow Core–Shell MnO2/C Hybrid Spheres for High-Performance Lithium Storage. *Small* **2016**, 3914-3919.
1791. Wang, P. I.; Pisula, W.; Müllen, K.; Liaw, D. J., Structurally defined nanographene-containing conjugated polymers for high quality dispersions and optoelectronic applications. *Polymer Chemistry* **2016,** *7* (40), 6211-6219.
1792. Wang, S.; Talirz, L.; Pignedoli, C. A.; Feng, X.; Müllen, K.; Fasel, R.; Ruffieux, P., Giant edge state splitting at atomically precise graphene zigzag edges. *Nature Communications* **2016,** *7*.
1793. Wang, X.; Zhang, F.; Schellhammer, K. S.; Machata, P.; Ortmann, F.; Cuniberti, G.; Fu, Y.; Hunger, J.; Tang, R.; Popov, A. A.; Berger, R.; Müllen, K.; Feng, X., Synthesis of NBN-Type Zigzag-Edged Polycyclic Aromatic Hydrocarbons: 1,9-Diaza-9a-boraphenalene as a Structural Motif. *Journal of the American Chemical Society* **2016,** *138* (36), 11606-11615.
1794. Wang, X. Y.; Narita, A.; Zhang, W.; Feng, X.; Müllen, K., Synthesis of Stable Nanographenes with OBO-Doped Zigzag Edges Based on Tandem Demethylation-Electrophilic Borylation. *Journal of the American Chemical Society* **2016,** *138* (29), 9021-9024.
1795. Wang, X. Y.; Wang, X. C.; Narita, A.; Wagner, M.; Cao, X. Y.; Feng, X.; Müllen, K., Synthesis, Structure, and Chiroptical Properties of a Double [7]Heterohelicene. *Journal of the American Chemical Society* **2016,** *138* (39), 12783-12786.
1796. Wieghold, S.; Li, J.; Simon, P.; Krause, M.; Avlasevich, Y.; Li, C.; Garrido, J. A.; Heiz, U.; Samorì, P.; Müllen, K.; Esch, F.; Barth, J. V.; Palma, C. A., Photoresponse of supramolecular self-assembled networks on graphene-diamond interfaces. *Nature Communications* **2016,** *7*.
1797. Wudarczyk, J.; Papamokos, G.; Margaritis, V.; Schollmeyer, D.; Hinkel, F.; Baumgarten, M.; Floudas, G.; Müllen, K., Hexasubstituted Benzenes with Ultrastrong Dipole Moments. *Angewandte Chemie - International Edition* **2016,** *55* (9), 3220-3223.
1798. Xia, D.; Guo, X.; Chen, L.; Baumgarten, M.; Keerthi, A.; Müllen, K., Layered electron acceptors by dimerization of acenes end- capped with 1,2,5-thiadiazoles. *Angewandte Chemie - International Edition* **2016,** *55* (3), 941-944.

1799. Xia, D.; Wang, X. Y.; Guo, X.; Baumgarten, M.; Li, M.; Müllen, K., Fused Bis-Benzothiadiazoles as Electron Acceptors. *Crystal Growth and Design* **2016,** *16* (12), 7124-7129.
1800. Yamashita, Y.; Hinkel, F.; Marszalek, T.; Zajaczkowski, W.; Pisula, W.; Baumgarten, M.; Matsui, H.; Müllen, K.; Takeya, J., Mobility Exceeding 10 cm2/(V·s) in Donor-Acceptor Polymer Transistors with Band-like Charge Transport. *Chemistry of Materials* **2016,** *28* (2), 420-424.
1801. Yang, S.; Lohe, M. R.; Müllen, K.; Feng, X., New-Generation Graphene from Electrochemical Approaches: Production and Applications. *Advanced Materials* **2016,** *28* (29), 6213-6221.
1802. Yuan, Z.; Ma, Y.; Geßner, T.; Li, M.; Chen, L.; Eustachi, M.; Weitz, R. T.; Li, C.; Müllen, K., Core-fluorinated naphthalene diimides: Synthesis, characterization, and application in n-type organic field-effect transistors. *Organic Letters* **2016,** *18* (3), 456-459.
1803. Zagranyarski, Y.; Skabeev, A.; Ma, Y.; Müllen, K.; Li, C., Facile synthesis of annulated heterocyclic benzo[: Kl] acridine derivatives via one-pot N-H/C-H coupling. *Organic Chemistry Frontiers* **2016,** *3* (11), 1520-1523.
1804. Zhang, H.; Gong, Z.; Sun, K.; Duan, R.; Ji, P.; Li, L.; Li, C.; Müllen, K.; Chi, L., Two-Dimensional Chirality Transfer via On-Surface Reaction. *Journal of the American Chemical Society* **2016,** *138* (36), 11743-11748.
1805. Zhang, W.; Quernheim, M.; Räder, H. J.; Müllen, K., Collision-Induced Dissociation Ion Mobility Mass Spectrometry for the Elucidation of Unknown Structures in Strained Polycyclic Aromatic Hydrocarbon Macrocycles. *Analytical Chemistry* **2016,** *88* (1), 952-959.
1806. Zhao, Y.; Schwab, M. G.; Kiersnowski, A.; Pisula, W.; Baumgarten, M.; Chen, L.; Müllen, K.; Li, C., Trifluoromethyl-functionalized bathocuproine for polymer solar cells. *Journal of Materials Chemistry C* **2016,** *4* (21), 4640-4646.
1807. Broza, Y. Y.; Har-Shai, L.; Jeries, R.; Cancilla, J. C.; Glass-Marmor, L.; Lejbkowicz, I.; Torrecilla, J. S.; Yao, X.; Feng, X.; Narita, A.; Müllen, K.; Miller, A.; Haick, H., Exhaled Breath Markers for Nonimaging and Noninvasive Measures for Detection of Multiple Sclerosis. *ACS Chemical Neuroscience* **2017,** *8* (11), 2402-2413.
1808. Candini, A.; Martini, L.; Chen, Z.; Mishra, N.; Convertino, D.; Coletti, C.; Narita, A.; Feng, X.; Müllen, K.; Affronte, M., High Photoresponsivity in Graphene Nanoribbon Field-Effect Transistor Devices Contacted with Graphene Electrodes. *Journal of Physical Chemistry C* **2017,** *121* (19), 10620-10625.
1809. Chamberlain, T. W.; Biskupek, J.; Skowron, S. T.; Markevich, A. V.; Kurasch, S.; Reimer, O.; Walker, K. E.; Rance, G. A.; Feng, X.; Müllen, K.; Turchanin, A.; Lebedeva, M. A.; Majouga, A. G.; Nenajdenko, V. G.; Kaiser, U.; Besley, E.; Khlobystov, A. N., Stop-Frame Filming and Discovery of Reactions at the Single-Molecule Level by Transmission Electron Microscopy. *ACS Nano* **2017,** *11* (3), 2509-2520.
1810. Chen, Y.; Marszalek, T.; Fritz, T.; Baumgarten, M.; Wagner, M.; Pisula, W.; Chen, L.; Müllen, K., Contorted polycyclic aromatic hydrocarbons with cove regions and zig-zag edges. *Chemical Communications* **2017,** *53* (60), 8474-8477.
1811. Chen, Z.; Berger, R.; Müllen, K.; Narita, A., On-surface synthesis of graphene nanoribbons through solution-processing of monomers. *Chemistry Letters* **2017,** *46* (10), 1476-1478.
1812. Chen, Z.; Wang, H. I.; Bilbao, N.; Teyssandier, J.; Prechtl, T.; Cavani, N.; Tries, A.; Biagi, R.; De Renzi, V.; Feng, X.; Kläui, M.; De Feyter, S.; Bonn, M.; Narita, A.; Müllen, K., Lateral Fusion of Chemical Vapor Deposited N = 5 Armchair Graphene Nanoribbons. *Journal of the American Chemical Society* **2017,** *139* (28), 9483-9486.
1813. Chen, Z.; Wang, H. I.; Teyssandier, J.; Mali, K. S.; Dumslaff, T.; Ivanov, I.; Zhang, W.; Ruffieux, P.; Fasel, R.; Räder, H. J.; Turchinovich, D.; De Feyter, S.; Feng, X.; Kläui, M.; Narita, A.; Bonn, M.; Müllen, K., Chemical Vapor Deposition Synthesis and Terahertz Photoconductivity of Low-Band-Gap N = 9 Armchair Graphene Nanoribbons. *Journal of the American Chemical Society*

2017, *139* (10), 3635-3638.
1814. Coles, D. M.; Chen, Q.; Flatten, L. C.; Smith, J. M.; Müllen, K.; Narita, A.; Lidzey, D. G., Strong Exciton-Photon Coupling in a Nanographene Filled Microcavity. *Nano Letters* **2017,** *17* (9), 5521-5525.
1815. Cui, K.; Mali, K. S.; Wu, D.; Feng, X.; Müllen, K.; Walter, M.; De Feyter, S.; Mertens, S. F. L., Reversible Anion-Driven Switching of an Organic 2D Crystal at a Solid–Liquid Interface. *Small* **2017,** *13* (46).
1816. Deniz, O.; Sánchez-Sánchez, C.; Dumslaff, T.; Feng, X.; Narita, A.; Müllen, K.; Kharche, N.; Meunier, V.; Fasel, R.; Ruffieux, P., Revealing the Electronic Structure of Silicon Intercalated Armchair Graphene Nanoribbons by Scanning Tunneling Spectroscopy. *Nano Letters* **2017,** *17* (4), 2197-2203.
1817. Denk, R.; Lodi-Rizzini, A.; Wang, S.; Hohage, M.; Zeppenfeld, P.; Cai, J.; Fasel, R.; Ruffieux, P.; Berger, R. F. J.; Chen, Z.; Narita, A.; Feng, X.; Müllen, K.; Biagi, R.; De Renzi, V.; Prezzi, D.; Ruini, A.; Ferretti, A., Probing optical excitations in chevron-like armchair graphene nanoribbons. *Nanoscale* **2017,** *9* (46), 18326-18333.
1818. Dong, R.; Pfeffermann, M.; Skidin, D.; Wang, F.; Fu, Y.; Narita, A.; Tommasini, M.; Moresco, F.; Cuniberti, G.; Berger, R.; Müllen, K.; Feng, X., Persulfurated Coronene: A New Generation of "Sulflower". *Journal of the American Chemical Society* **2017,** *139* (6), 2168-2171.
1819. Dumslaff, B.; Reuss, A. N.; Wagner, M.; Feng, X.; Narita, A.; Fytas, G.; Müllen, K., Covalently Interlocked Cyclohexa-m-phenylenes and Their Assembly: En Route to Supramolecular 3D Carbon Nanostructures. *Angewandte Chemie - International Edition* **2017,** *56* (35), 10602-10606.
1820. Gobbi, M.; Bonacchi, S.; Lian, J. X.; Liu, Y.; Wang, X. Y.; Stoeckel, M. A.; Squillaci, M. A.; D'Avino, G.; Narita, A.; Müllen, K.; Feng, X.; Olivier, Y.; Beljonne, D.; Samorì, P.; Orgiu, E., Periodic potentials in hybrid van der Waals heterostructures formed by supramolecular lattices on graphene. *Nature Communications* **2017,** *8*.
1821. Grand, C.; Zajaczkowski, W.; Deb, N.; Lo, C. K.; Hernandez, J. L.; Bucknall, D. G.; Müllen, K.; Pisula, W.; Reynolds, J. R., Morphology Control in Films of Isoindigo Polymers by Side-Chain and Molecular Weight Effects. *ACS Applied Materials and Interfaces* **2017,** *9* (15), 13357-13368.
1822. Hammer, B. A. G.; Wu, Y.; Fischer, S.; Liu, W.; Weil, T.; Müllen, K., Controlling Cellular Uptake and Toxicity of Polyphenylene Dendrimers by Chemical Functionalization. *ChemBioChem* **2017,** *18* (10), 960-964.
1823. Hofmann, O. T.; Glowatzki, H.; Bürker, C.; Rangger, G. M.; Bröker, B.; Niederhausen, J.; Hosokai, T.; Salzmann, I.; Blum, R. P.; Rieger, R.; Vollmer, A.; Rajput, P.; Gerlach, A.; Müllen, K.; Schreiber, F.; Zojer, E.; Koch, N.; Duhm, S., Orientation-dependent work-function modification using substituted pyrene-based acceptors. *Journal of Physical Chemistry C* **2017,** *121* (39).
1824. Hu, Y.; Dössel, L. F.; Wang, X. Y.; Mahesh, S.; Pisula, W.; De Feyter, S.; Feng, X.; Müllen, K.; Narita, A., Synthesis, Photophysical Characterization, and Self-Assembly of Hexa-peri-hexabenzocoronene/Benzothiadiazole Donor–Acceptor Structure. *ChemPlusChem* **2017,** *82* (7), 1030-1033.
1825. Hu, Y.; Wang, X. Y.; Peng, P. X.; Wang, X. C.; Cao, X. Y.; Feng, X.; Müllen, K.; Narita, A., Benzo-Fused Double [7]Carbohelicene: Synthesis, Structures, and Physicochemical Properties. *Angewandte Chemie - International Edition* **2017,** *56* (12), 3374-3378.
1826. Ivanov, I.; Hu, Y.; Osella, S.; Beser, U.; Wang, H. I.; Beljonne, D.; Narita, A.; Müllen, K.; Turchinovich, D.; Bonn, M., Role of Edge Engineering in Photoconductivity of Graphene Nanoribbons. *Journal of the American Chemical Society* **2017,** *139* (23), 7982-7988.
1827. Jänsch, D.; Ivanov, I.; Zagranyarski, Y.; Duznovic, I.; Baumgarten, M.; Turchinovich, D.; Li, C.; Bonn, M.; Müllen, K., Ultra-Narrow Low-Bandgap Graphene Nanoribbons from Bromoperylenes—Synthesis and Terahertz-Spectroscopy. *Chemistry - A European Journal* **2017,** *23* (20),

4870-4875.
1828. Karagöz, F.; Dorresteijn, R.; Müllen, K.; Klapper, M., Biocompatible nanoparticles for selective drug release at cancer cells. In *ACS Symposium Series*, 2017; Vol. 1271, pp 231-247.
1829. Keerthi, A.; Radha, B.; Rizzo, D.; Lu, H.; Diez Cabanes, V.; Hou, I. C. Y.; Beljonne, D.; Cornil, J.; Casiraghi, C.; Baumgarten, M.; Müllen, K.; Narita, A., Edge Functionalization of Structurally Defined Graphene Nanoribbons for Modulating the Self-Assembled Structures. *Journal of the American Chemical Society* **2017,** *139* (46), 16454-16457.
1830. Krumpfer, J. W.; Giebel, E.; Frank, E.; Müller, A.; Ackermann, L. M.; Tironi, C. N.; Mourgas, G.; Unold, J.; Klapper, M.; Buchmeiser, M. R.; Müllen, K., Poly(Methyl Vinyl Ketone) as a Potential Carbon Fiber Precursor. *Chemistry of Materials* **2017,** *29* (2), 780-788.
1831. Lelle, M.; Freidel, C.; Kaloyanova, S.; Tabujew, I.; Schramm, A.; Musheev, M.; Niehrs, C.; Müllen, K.; Peneva, K., Overcoming drug resistance by cell-penetrating peptide-mediated delivery of a doxorubicin dimer with high DNA-binding affinity. *European Journal of Medicinal Chemistry* **2017,** *130*, 336-345.
1832. Lewandowska, U.; Zajaczkowski, W.; Corra, S.; Tanabe, J.; Borrmann, R.; Benetti, E. M.; Stappert, S.; Watanabe, K.; Ochs, N. A. K.; Schaeublin, R.; Li, C.; Yashima, E.; Pisula, W.; Müllen, K.; Wennemers, H., A triaxial supramolecular weave. *Nature Chemistry* **2017,** *9* (11), 1068-1072.
1833. Lin, W.; Nietzel, S.; Klapper, M.; Müllen, K.; Klein, J., Normal and shear forces between surfaces bearing phosphocholinated polystyrene nanoparticles. *Polymers for Advanced Technologies* **2017,** *28* (5), 600-605.
1834. Liu, J.; Berger, R.; Müllen, K.; Feng, X., Nanographenes and Graphene Nanoribbons with Zigzag-Edged Structures. In *Advances in Polymer Science*, 2017; Vol. 278, pp 1-32.
1835. Liu, J.; Ma, J.; Zhang, K.; Ravat, P.; Machata, P.; Avdoshenko, S.; Hennersdorf, F.; Komber, H.; Pisula, W.; Weigand, J. J.; Popov, A. A.; Berger, R.; Müllen, K.; Feng, X., π-Extended and Curved Antiaromatic Polycyclic Hydrocarbons. *Journal of the American Chemical Society* **2017,** *139* (22), 7513-7521.
1836. Liu, Z.; Liu, S.; Dong, R.; Yang, S.; Lu, H.; Narita, A.; Feng, X.; Müllen, K., High Power In-Plane Micro-Supercapacitors Based on Mesoporous Polyaniline Patterned Graphene. *Small* **2017,** *13* (14).
1837. Liu, Z.; Wang, H. I.; Narita, A.; Chen, Q.; Mics, Z.; Turchinovich, D.; Kläui, M.; Bonn, M.; Müllen, K., Photoswitchable Micro-Supercapacitor Based on a Diarylethene-Graphene Composite Film. *Journal of the American Chemical Society* **2017,** *139* (28), 9443-9446.
1838. Llinas, J. P.; Fairbrother, A.; Borin Barin, G.; Shi, W.; Lee, K.; Wu, S.; Yong Choi, B.; Braganza, R.; Lear, J.; Kau, N.; Choi, W.; Chen, C.; Pedramrazi, Z.; Dumslaff, T.; Narita, A.; Feng, X.; Müllen, K.; Fischer, F.; Zettl, A.; Ruffieux, P.; Yablonovitch, E.; Crommie, M.; Fasel, R.; Bokor, J., Short-channel field-effect transistors with 9-atom and 13-atom wide graphene nanoribbons. *Nature Communications* **2017,** *8* (1).
1839. Lü, B.; You, S.; Li, P.; Li, C.; Müllen, K.; Yin, M., Kinetically Trapped Supramolecular Assembly of Perylene Dianhydride Derivative in Methanol: Optical Spectra, Morphology, and Mechanisms. *Chemistry - A European Journal* **2017,** *23* (2), 397-401.
1840. Ma, J.; Liu, J.; Baumgarten, M.; Fu, Y.; Tan, Y. Z.; Schellhammer, K. S.; Ortmann, F.; Cuniberti, G.; Komber, H.; Berger, R.; Müllen, K.; Feng, X., A Stable Saddle-Shaped Polycyclic Hydrocarbon with an Open-Shell Singlet Ground State. *Angewandte Chemie - International Edition* **2017,** *56* (12), 3280-3284.
1841. Ma, Y.; Zhang, X.; Stappert, S.; Yuan, Z.; Li, C.; Müllen, K., (O -Phenyleno)naphthalene diimides: A pink fluorescent chromophore. *Chemical Communications* **2017,** *53* (38), 5310-5313.
1842. Müllen, K.; Feng, X., *Chemistry of carbon nanostructures*. 2017; p 1-319.
1843. Paternò, G. M.; Chen, Q.; Wang, X. Y.; Liu, J.; Motti, S. G.; Petrozza, A.; Feng, X.;

Lanzani, G.; Müllen, K.; Narita, A.; Scotognella, F., Synthesis of Dibenzo[hi,st]ovalene and Its Amplified Spontaneous Emission in a Polystyrene Matrix. *Angewandte Chemie - International Edition* **2017,** *56* (24), 6753-6757.
1844. Pfadler, T.; Palumbiny, C. M.; Pisula, W.; Hesse, H. C.; Feng, X.; Müllen, K.; Müller-Buschbaum, P.; Schmidt-Mende, L., Controlled morphologies by molecular design and nano-imprint lithography. In *Advances in Polymer Science*, 2017; Vol. 272, pp 215-242.
1845. Pfeffermann, M.; Wuttke, M.; Feng, X.; Narita, A.; Müllen, K., Shape-Persistent Graphite Replica of Metal Wires. *Advanced Materials* **2017,** *29* (4).
1846. Pipertzis, A.; Zardalidis, G.; Wunderlich, K.; Klapper, M.; Müllen, K.; Floudas, G., Ionic Conduction in Poly(ethylene glycol)-Functionalized Hexa-peri-hexabenzocoronene Amphiphiles. *Macromolecules* **2017,** *50* (5), 1981-1990.
1847. Richter, M.; Schellhammer, K. S.; MacHata, P.; Cuniberti, G.; Popov, A.; Ortmann, F.; Berger, R.; Müllen, K.; Feng, X., Polycyclic heteroaromatic hydrocarbons containing a benzoisoindole core. *Organic Chemistry Frontiers* **2017,** *4* (5), 847-852.
1848. Richter, N.; Chen, Z.; Braatz, M. L.; Musseau, F.; Weber, N. E.; Narita, A.; Müllen, K.; Kläui, M., Dimensional Confinement in Carbon-based Structures – From 3D to 1D. *Annalen der Physik* **2017,** *529* (11).
1849. Richter, N.; Hernandez, Y. R.; Schweitzer, S.; Kim, J. S.; Patra, A. K.; Englert, J.; Lieberwirth, I.; Liscio, A.; Palermo, V.; Feng, X.; Hirsch, A.; Müllen, K.; Kläui, M., Robust Two-Dimensional Electronic Properties in Three-Dimensional Microstructures of Rotationally Stacked Turbostratic Graphene. *Physical Review Applied* **2017,** *7* (2).
1850. Sánchez-Sánchez, C.; Nicolaï, A.; Rossel, F.; Cai, J.; Liu, J.; Feng, X.; Müllen, K.; Ruffieux, P.; Fasel, R.; Meunier, V., On-Surface Cyclization of ortho-Dihalotetracenes to Four- and Six-Membered Rings. *Journal of the American Chemical Society* **2017,** *139* (48), 17617-17623.
1851. Sun, K.; Ji, P.; Zhang, H.; Niu, K.; Li, L.; Chen, A.; Li, Q.; Müllen, K.; Chi, L., A new on-surface synthetic pathway to 5-armchair graphene nanoribbons on Cu(111) surfaces. *Faraday Discussions* **2017,** *204*, 297-305.
1852. Talirz, L.; Söde, H.; Dumslaff, T.; Wang, S.; Sanchez-Valencia, J. R.; Liu, J.; Shinde, P.; Pignedoli, C. A.; Liang, L.; Meunier, V.; Plumb, N. C.; Shi, M.; Feng, X.; Narita, A.; Müllen, K.; Fasel, R.; Ruffieux, P., On-Surface Synthesis and Characterization of 9-Atom Wide Armchair Graphene Nanoribbons. *ACS Nano* **2017,** *11* (2), 1380-1388.
1853. Uersfeld, D.; Stappert, S.; Li, C.; Müllen, K., Practical Syntheses of Terrylene Chromophores from Naphthalene and Perylene Building Blocks. *Advanced Synthesis and Catalysis* **2017,** *359* (23), 4184-4189.
1854. Wang, H. I.; Braatz, M. L.; Richter, N.; Tielrooij, K. J.; Mics, Z.; Lu, H.; Weber, N. E.; Müllen, K.; Turchinovich, D.; Kläui, M.; Bonn, M., Reversible Photochemical Control of Doping Levels in Supported Graphene. *Journal of Physical Chemistry C* **2017,** *121* (7), 4083-4091.
1855. Wang, S.; Kharche, N.; Costa Girão, E.; Feng, X.; Müllen, K.; Meunier, V.; Fasel, R.; Ruffieux, P., Quantum Dots in Graphene Nanoribbons. *Nano Letters* **2017,** *17* (7), 4277-4283.
1856. Wang, X. Y.; Dienel, T.; Di Giovannantonio, M.; Barin, G. B.; Kharche, N.; Deniz, O.; Urgel, J. I.; Widmer, R.; Stolz, S.; De Lima, L. H.; Muntwiler, M.; Tommasini, M.; Meunier, V.; Ruffieux, P.; Feng, X.; Fasel, R.; Müllen, K.; Narita, A., Heteroatom-Doped Perihexacene from a Double Helicene Precursor: On-Surface Synthesis and Properties. *Journal of the American Chemical Society* **2017,** *139* (13), 4671-4674.
1857. Wang, X. Y.; Richter, M.; He, Y.; Björk, J.; Riss, A.; Rajesh, R.; Garnica, M.; Hennersdorf, F.; Weigand, J. J.; Narita, A.; Berger, R.; Feng, X.; Auwärter, W.; Barth, J. V.; Palma, C. A.; Müllen, K., Exploration of pyrazine-embedded antiaromatic polycyclic hydrocarbons generated by solution and on-surface azomethine ylide homocoupling. *Nature Communications* **2017,** *8*

(1).
1858. Wang, Z.; Li, R.; Chen, Y.; Tan, Y. Z.; Tu, Z.; Gao, X. J.; Dong, H.; Yi, Y.; Zhang, Y.; Hu, W.; Müllen, K.; Chen, L., A novel angularly fused bistetracene: facile synthesis, crystal packing and single-crystal field effect transistors. *Journal of Materials Chemistry C* **2017,** *5* (6), 1308-1312.
1859. Wu, Z. S.; Tan, Y. Z.; Zheng, S.; Wang, S.; Parvez, K.; Qin, J.; Shi, X.; Sun, C.; Bao, X.; Feng, X.; Müllen, K., Bottom-Up Fabrication of Sulfur-Doped Graphene Films Derived from Sulfur-Annulated Nanographene for Ultrahigh Volumetric Capacitance Micro-Supercapacitors. *Journal of the American Chemical Society* **2017,** *139* (12), 4506-4512.
1860. Wu, Z. S.; Zheng, Y.; Zheng, S.; Wang, S.; Sun, C.; Parvez, K.; Ikeda, T.; Bao, X.; Müllen, K.; Feng, X., Stacked-Layer Heterostructure Films of 2D Thiophene Nanosheets and Graphene for High-Rate All-Solid-State Pseudocapacitors with Enhanced Volumetric Capacitance. *Advanced Materials* **2017,** *29* (3).
1861. Wudarczyk, J.; Papamokos, G.; Marszalek, T.; Nevolianis, T.; Schollmeyer, D.; Pisula, W.; Floudas, G.; Baumgarten, M.; Müllen, K., Dicyanobenzothiadiazole Derivatives Possessing Switchable Dielectric Permittivities. *ACS Applied Materials and Interfaces* **2017,** *9* (24), 20527-20535.
1862. Wunderlich, K.; Müllen, K.; Fytas, G., Shape persistence in polymers and supramolecular assemblies. In *Conjugated Polymers And Oligomers: Structural And Soft Matter Aspects*, 2017; pp 1-28.
1863. Xia, D.; Guo, X.; Wagner, M.; Baumgarten, M.; Schollmeyer, D.; Müllen, K., Cruciform Electron Acceptors Based on Tetraindeno-Fused Spirofluorene. *Crystal Growth and Design* **2017,** *17* (5), 2816-2821.
1864. Yang, S.; Ricciardulli, A. G.; Liu, S.; Dong, R.; Lohe, M. R.; Becker, A.; Squillaci, M. A.; Samorì, P.; Müllen, K.; Feng, X., Ultrafast Delamination of Graphite into High-Quality Graphene Using Alternating Currents. *Angewandte Chemie - International Edition* **2017,** *56* (23), 6669-6675.
1865. Yoshida, Y.; Mawatari, Y.; Sasaki, T.; Hiraoki, T.; Wagner, M.; Müllen, K.; Tabata, M., Strictly Alternating Sequences When Copolymerizing Racemic and Chiral Acetylene Monomers with an Organo-Rhodium Catalyst. *Macromolecules* **2017,** *50* (4), 1291-1301.
1866. Zhang, W.; Abdulkarim, A.; Golling, F. E.; Räder, H. J.; Müllen, K., Cycloparaphenylenes and Their Catenanes: Complex Macrocycles Unveiled by Ion Mobility Mass Spectrometry. *Angewandte Chemie - International Edition* **2017,** *56* (10), 2645-2648.
1867. Zhang, W.; Chen, Z.; Yang, B.; Wang, X. Y.; Berger, R.; Narita, A.; Barin, G. B.; Ruffieux, P.; Fasel, R.; Feng, X.; Räder, H. J.; Müllen, K., Monitoring the On-Surface Synthesis of Graphene Nanoribbons by Mass Spectrometry. *Analytical Chemistry* **2017,** *89* (14), 7485-7492.
1868. Zhang, Y. F.; Zhang, Y.; Li, G.; Lu, J.; Que, Y.; Chen, H.; Berger, R.; Feng, X.; Müllen, K.; Lin, X.; Zhang, Y. Y.; Du, S.; Pantelides, S. T.; Gao, H. J., Sulfur-doped graphene nanoribbons with a sequence of distinct band gaps. *Nano Research* **2017,** *10* (10), 3377-3384.
1869. Zhao, S.; Borin Barin, G.; Rondin, L.; Raynaud, C.; Fairbrother, A.; Dumslaff, T.; Campidelli, S.; Müllen, K.; Narita, A.; Voisin, C.; Ruffieux, P.; Fasel, R.; Lauret, J. S., Optical Investigation of On-Surface Synthesized Armchair Graphene Nanoribbons. *Physica Status Solidi (B) Basic Research* **2017,** *254* (11).
1870. Zhao, S.; Rondin, L.; Delport, G.; Voisin, C.; Beser, U.; Hu, Y.; Feng, X.; Müllen, K.; Narita, A.; Campidelli, S.; Lauret, J. S., Fluorescence from graphene nanoribbons of well-defined structure. *Carbon* **2017,** *119*, 235-240.
1871. Ackermann, M.; Freudenberg, J.; Jänsch, D.; Rominger, F.; Bunz, U. H. F.; Müllen, K., Palladium-Catalyzed Dimerization of Bis(2-biphenylyl)acetylene toward Sterically Hindered Acephenanthrylene. *Organic Letters* **2018,** *20* (13), 3758-3761.
1872. Ahrens, L.; Schlisske, S.; Strunk, K. P.; Hinkel, F.; Melzer, C.; Bunz, U. H. F.; Lemmer, U.; Hernandez-Sosa, G.; Jänsch, D.; Freudenberg, J.; Müllen, K., Solubility modulation of polyfluorene emitters by thermally induced (retro)-diels-alder cross-linking of cyclopentadienyl

substituents. *Chemistry of Materials* **2018,** *30* (12), 4157-4167.
1873. Ajayakumar, M. R.; Fu, Y.; Ma, J.; Hennersdorf, F.; Komber, H.; Weigand, J. J.; Alfonsov, A.; Popov, A. A.; Berger, R.; Liu, J.; Müllen, K.; Feng, X., Toward Full Zigzag-Edged Nanographenes: Peri-Tetracene and Its Corresponding Circumanthracene. *Journal of the American Chemical Society* **2018,** *140* (20), 6240-6244.
1874. Bauer, M.; Li, C.; Müllen, K.; Basché, T.; Hinze, G., State transition identification in multivariate time series (STIMTS) applied to rotational jump trajectories from single molecules. *Journal of Chemical Physics* **2018,** *149* (16).
1875. Benneckendorf, F. S.; Hillebrandt, S.; Ullrich, F.; Rohnacher, V.; Hietzschold, S.; Jänsch, D.; Freudenberg, J.; Beck, S.; Mankel, E.; Jaegermann, W.; Pucci, A.; Bunz, U. H. F.; Müllen, K., Structure-Property Relationship of Phenylene-Based Self-Assembled Monolayers for Record Low Work Function of Indium Tin Oxide. *Journal of Physical Chemistry Letters* **2018,** *9* (13), 3731-3737.
1876. Chen, G.; Zhang, J.; Wang, F.; Wang, L.; Liao, Z.; Zschech, E.; Müllen, K.; Feng, X., Cobalt-Based Metal–Organic Framework Nanoarrays as Bifunctional Oxygen Electrocatalysts for Rechargeable Zn-Air Batteries. *Chemistry - A European Journal* **2018,** *24* (69), 18413-18418.
1877. Chen, Q.; Brambilla, L.; Daukiya, L.; Mali, K. S.; De Feyter, S.; Tommasini, M.; Müllen, K.; Narita, A., Synthesis of Triply Fused Porphyrin-Nanographene Conjugates. *Angewandte Chemie - International Edition* **2018,** *57* (35), 11233-11237.
1878. Deniz, O.; Sánchez-Sánchez, C.; Jaafar, R.; Kharche, N.; Liang, L.; Meunier, V.; Feng, X.; Müllen, K.; Fasel, R.; Ruffieux, P., Electronic characterization of silicon intercalated chevron graphene nanoribbons on Au(111). *Chemical Communications* **2018,** *54* (13), 1619-1622.
1879. Di Giovannantonio, M.; Deniz, O.; Urgel, J. I.; Widmer, R.; Dienel, T.; Stolz, S.; Sánchez-Sánchez, C.; Muntwiler, M.; Dumslaff, T.; Berger, R.; Narita, A.; Feng, X.; Müllen, K.; Ruffieux, P.; Fasel, R., On-Surface Growth Dynamics of Graphene Nanoribbons: The Role of Halogen Functionalization. *ACS Nano* **2018,** *12* (1), 74-81.
1880. Di Giovannantonio, M.; Urgel, J. I.; Beser, U.; Yakutovich, A. V.; Wilhelm, J.; Pignedoli, C. A.; Ruffieux, P.; Narita, A.; Müllen, K.; Fasel, R., On-Surface Synthesis of Indenofluorene Polymers by Oxidative Five-Membered Ring Formation. *Journal of the American Chemical Society* **2018,** *140* (10), 3532-3536.
1881. Duan, R.; Schollmeyer, D.; Müllen, K.; Li, C., From anthraquinone to heterocoronene as stable red chromophore. *Journal of Materials Chemistry C* **2018,** *6* (6), 1334-1337.
1882. Duan, R.; Wagner, M.; Müllen, K.; Li, C., D1-A-D2-A-D1-type constitutional π-conjugated small molecular isomers bearing benzodithiophene, benzothiadiazole, and thiophene. *Dyes and Pigments* **2018,** *151*, 54-63.
1883. Dumslaff, B.; Wagner, M.; Schollmeyer, D.; Narita, A.; Müllen, K., A Phenylene-Bridged Cyclohexa-meta-phenylene as Hexa-peri-hexabenzocoronene Precursor. *Chemistry - A European Journal* **2018,** *24* (46), 11908-11910.
1884. Gröning, O.; Wang, S.; Yao, X.; Pignedoli, C. A.; Borin Barin, G.; Daniels, C.; Cupo, A.; Meunier, V.; Feng, X.; Narita, A.; Müllen, K.; Ruffieux, P.; Fasel, R., Engineering of robust topological quantum phases in graphene nanoribbons. *Nature* **2018,** *560* (7717), 209-213.
1885. Hafez, H. A.; Kovalev, S.; Deinert, J. C.; Mics, Z.; Green, B.; Awari, N.; Chen, M.; Germanskiy, S.; Lehnert, U.; Teichert, J.; Wang, Z.; Tielrooij, K. J.; Liu, Z.; Chen, Z.; Narita, A.; Müllen, K.; Bonn, M.; Gensch, M.; Turchinovich, D., Extremely efficient terahertz high-harmonic generation in graphene by hot Dirac fermions. *Nature* **2018,** *561* (7724), 507-511.
1886. Hafez, H. A.; Kovalev, S.; Deinert, J. C.; Mics, Z.; Green, B.; Awari, N.; Chen, M.; Germanskiy, S.; Wang, Z.; Tielrooij, K. J.; Liu, Z.; Chen, Z.; Narita, A.; Mu¨llen, K.; Bonn, M.; Gensch, M.; Turchinovich, D. In *Room-temperature THz high harmonics generation in graphene*, Optics InfoBase Conference Papers, 2018.

1887. Hafez, H. A.; Kovalev, S.; Deinert, J. C.; Mics, Z.; Green, B.; Awari, N.; Chen, M.; Germanskiy, S.; Wang, Z.; Tielrooij, K. J.; Liu, Z.; Chen, Z.; Narita, A.; Müllen, K.; Bonn, M.; Gensch, M.; Turchinovich, D. In *Room-temperature THz High Harmonics Generation in Graphene*, 2018 Conference on Lasers and Electro-Optics, CLEO 2018 - Proceedings, 2018.
1888. Hammer, B. A. G.; Müllen, K., Expanding the limits of synthetic macromolecular chemistry through Polyphenylene Dendrimers. *Journal of Nanoparticle Research* **2018,** *20* (10).
1889. Hammud, H. H.; El Hamaoui, B.; Noubani, N. H.; Feng, X.; Wu, Z. S.; Müllen, K.; Ayub, K., Carbon-cobalt nanostructures as an efficient adsorbent of malachite green. *Nanoscience and Nanotechnology - Asia* **2018,** *8* (2), 263-280.
1890. Heidler, J.; Yang, S.; Feng, X.; Müllen, K.; Asadi, K., Ferroelectric field-effect transistors based on solution-processed electrochemically exfoliated graphene. *Solid-State Electronics* **2018,** *144*, 90-94.
1891. Hinaut, A.; Meier, T.; Pawlak, R.; Feund, S.; Jöhr, R.; Kawai, S.; Glatzel, T.; Decurtins, S.; Müllen, K.; Narita, A.; Liu, S. X.; Meyer, E., Electrospray deposition of structurally complex molecules revealed by atomic force microscopy. *Nanoscale* **2018,** *10* (3), 1337-1344.
1892. Hinkel, F.; Kim, Y. M.; Zagraniarsky, Y.; Schlütter, F.; Andrienko, D.; Müllen, K.; Laquai, F., Efficiency-limiting processes in cyclopentadithiophene-bridged donor-acceptor-type dyes for solid-state dye-sensitized solar cells. *Journal of Chemical Physics* **2018,** *148* (4).
1893. Hou, I. C. Y.; Hu, Y.; Narita, A.; Müllen, K., Diels-Alder polymerization: A versatile synthetic method toward functional polyphenylenes, ladder polymers and graphene nanoribbons. *Polymer Journal* **2018,** *50* (1), 3-20.
1894. Hu, Y.; Wang, D.; Baumgarten, M.; Schollmeyer, D.; Müllen, K.; Narita, A., Spiro-fused bis-hexa-: Peri -hexabenzocoronene. *Chemical Communications* **2018,** *54* (96), 13575-13578.
1895. Hu, Y.; Xie, P.; De Corato, M.; Ruini, A.; Zhao, S.; Meggendorfer, F.; Straasø, L. A.; Rondin, L.; Simon, P.; Li, J.; Finley, J. J.; Hansen, M. R.; Lauret, J. S.; Molinari, E.; Feng, X.; Barth, J. V.; Palma, C. A.; Prezzi, D.; Müllen, K.; Narita, A., Bandgap Engineering of Graphene Nanoribbons by Control over Structural Distortion. *Journal of the American Chemical Society* **2018,** *140* (25), 7803-7809.
1896. Huang, Y.; Xu, F.; Ganzer, L.; Camargo, F. V. A.; Nagahara, T.; Teyssandier, J.; Van Gorp, H.; Basse, K.; Straasø, L. A.; Nagyte, V.; Casiraghi, C.; Hansen, M. R.; De Feyter, S.; Yan, D.; Müllen, K.; Feng, X.; Cerullo, G.; Mai, Y., Intrinsic Properties of Single Graphene Nanoribbons in Solution: Synthetic and Spectroscopic Studies. *Journal of the American Chemical Society* **2018,** *140* (33), 10416-10420.
1897. Keerthi, A.; Waliszewski, W.; An, C.; Jaber, A.; Xia, D.; Müllen, K.; Pisula, W.; Marszalek, T.; Baumgarten, M., Molecular Ordering of Dithieno[2,3- d;2′,3′- d]benzo[2,1- b:3,4- b′]dithiophenes for Field-Effect Transistors. *ACS Omega* **2018,** *3* (6), 6513-6522.
1898. Khatib, M.; Hinkel, F.; Müllen, K.; Haick, H. In *High-mobility polymer field-effect transistor based-sensor array for selective discrimination between multiple isomers*, 2018 International Symposium on VLSI Technology, Systems and Application, VLSI-TSA 2018, 2018; pp 1-2.
1899. Kumar, A.; Hertel, B.; Müllen, K., Self-Assembly and Responsive Behavior of Poly(peptide)-Based Copolymers. *Macromolecular Chemistry and Physics* **2018,** *219* (11).
1900. Kumar, A.; Pisula, W.; Müllen, K., Molecular self-assembly and morphology induction in high-performance aromatic phosphonated block copolymers. *Journal of Applied Polymer Science* **2018,** *135* (41).
1901. Kumar, A.; Pisula, W.; Sieber, C.; Klapper, M.; Müllen, K., Anhydrous proton conduction in self-assembled and disassembled ionic molecules. *Journal of Materials Chemistry A* **2018,** *6* (14), 6074-6084.
1902. Lelle, M.; Freidel, C.; Kaloyanova, S.; Müllen, K.; Peneva, K., Multivalency: Key Feature in

Overcoming Drug Resistance with a Cleavable Cell-Penetrating Peptide-Doxorubicin Conjugate. *International Journal of Peptide Research and Therapeutics* **2018,** *24* (3), 355-367.
1903. Lewandowska, U.; Corra, S.; Zajaczkowski, W.; Ochs, N. A. K.; Shoshan, M. S.; Tanabe, J.; Stappert, S.; Li, C.; Yashima, E.; Pisula, W.; Müllen, K.; Wennemers, H., Positional Isomers of Chromophore–Peptide Conjugates Self-Assemble into Different Morphologies. *Chemistry - A European Journal* **2018,** *24* (48), 12623-12629.
1904. Li, M.; An, C.; Pisula, W.; Müllen, K., Cyclopentadithiophene-Benzothiadiazole Donor-Acceptor Polymers as Prototypical Semiconductors for High-Performance Field-Effect Transistors. *Accounts of Chemical Research* **2018,** *51* (5), 1196-1205.
1905. Li, M.; Mangalore, D. K.; Zhao, J.; Carpenter, J. H.; Yan, H.; Ade, H.; Yan, H.; Müllen, K.; Blom, P. W. M.; Pisula, W.; De Leeuw, D. M.; Asadi, K., Integrated circuits based on conjugated polymer monolayer. *Nature Communications* **2018,** *9* (1).
1906. Limburg, B.; Thomas, J. O.; Holloway, G.; Sadeghi, H.; Sangtarash, S.; Hou, I. C. Y.; Cremers, J.; Narita, A.; Müllen, K.; Lambert, C. J.; Briggs, G. A. D.; Mol, J. A.; Anderson, H. L., Anchor Groups for Graphene-Porphyrin Single-Molecule Transistors. *Advanced Functional Materials* **2018,** *28* (45).
1907. Liu, Y. M.; Hou, H.; Zhou, Y. Z.; Zhao, X. J.; Tang, C.; Tan, Y. Z.; Müllen, K., Nanographenes as electron-deficient cores of donor-acceptor systems /639/638/298/918 /639/638/298/398 /639/638/439/943 /639/638/541/966 /145 /140/131 /140/58 article. *Nature Communications* **2018,** *9* (1).
1908. Mishra, S.; Lohr, T. G.; Pignedoli, C. A.; Liu, J.; Berger, R.; Urgel, J. I.; Müllen, K.; Feng, X.; Ruffieux, P.; Fasel, R., Tailoring Bond Topologies in Open-Shell Graphene Nanostructures. *ACS Nano* **2018,** *12* (12), 11917-11927.
1909. Morant-Miñana, M. C.; Heidler, J.; Glasser, G.; Lu, H.; Berger, R.; Gil-Gonzalez, N.; Müllen, K.; De Leeuw, D. M.; Asadi, K., Spatially resolved solid-state reduction of graphene oxide thin films. *Materials Horizons* **2018,** *5* (6), 1176-1184.
1910. Müllen, K., Das Unbehagen der Chemie. *Nachrichten aus der Chemie* **2018,** *66* (1), 53-54.
1911. Papamokos, G.; Wudarczyk, J.; Graf, R.; Schollmeyer, D.; Baumgarten, M.; Müllen, K.; Floudas, G., Dipolar Relaxation in Functionalized Poly- p-phenylenes Bearing Ultrastrong Dipoles Perpendicular to the Backbone. *Macromolecules* **2018,** *51* (9), 3330-3339.
1912. Paternò, G. M.; Nicoli, L.; Chen, Q.; Müllen, K.; Narita, A.; Lanzani, G.; Scotognella, F., Modulation of the Nonlinear Optical Properties of Dibenzo[hi, st]ovalene by Peripheral Substituents. *Journal of Physical Chemistry C* **2018,** *122* (43), 25007-25013.
1913. Skabeev, A.; Zschieschang, U.; Zagranyarski, Y.; Klauk, H.; Müllen, K.; Li, C., Carbonyl-Functionalized Cyclazines as Colorants and Air-Stable n-Type Semiconductors. *Organic Letters* **2018,** *20* (5), 1409-1412.
1914. Slota, M.; Keerthi, A.; Myers, W. K.; Tretyakov, E.; Baumgarten, M.; Ardavan, A.; Sadeghi, H.; Lambert, C. J.; Narita, A.; Müllen, K.; Bogani, L., Erratum to: Magnetic edge states and coherent manipulation of graphene nanoribbons (Nature, (2018), 557, 7707, (691-695), 10.1038/s41586-018-0154-7). *Nature* **2018,** *561* (7723), E31.
1915. Slota, M.; Keerthi, A.; Myers, W. K.; Tretyakov, E.; Baumgarten, M.; Ardavan, A.; Sadeghi, H.; Lambert, C. J.; Narita, A.; Müllen, K.; Bogani, L., Magnetic edge states and coherent manipulation of graphene nanoribbons. *Nature* **2018,** *557* (7707), 691-695.
1916. Sun, K.; Chen, A.; Liu, M.; Zhang, H.; Duan, R.; Ji, P.; Li, L.; Li, Q.; Li, C.; Zhong, D.; Müllen, K.; Chi, L., Surface-Assisted Alkane Polymerization: Investigation on Structure-Reactivity Relationship. *Journal of the American Chemical Society* **2018,** *140* (14), 4820-4825.
1917. Vattikunta, R.; Venkatakrishnarao, D.; Sahoo, C.; Naraharisetty, S. R. G.; Narayana Rao, D.; Müllen, K.; Chandrasekar, R., Photonic Microresonators from Charge Transfer in Polymer Particles:

Toward Enhanced and Tunable Two-Photon Emission. *ACS Applied Materials and Interfaces* **2018,** *10* (19), 16723-16730.
1918. Velpula, G.; Li, M.; Hu, Y.; Zagranyarski, Y.; Pisula, W.; Müllen, K.; Mali, K. S.; De Feyter, S., Hydrogen-Bonded Donor–Acceptor Arrays at the Solution–Graphite Interface. *Chemistry - A European Journal* **2018,** *24* (46), 12071-12077.
1919. Wang, G.; Wang, F.; Zhang, P.; Zhang, J.; Zhang, T.; Müllen, K.; Feng, X., Polarity-Switchable Symmetric Graphite Batteries with High Energy and High Power Densities. *Advanced Materials* **2018,** *30* (39).
1920. Wang, G.; Yu, M.; Wang, J.; Li, D.; Tan, D.; Löffler, M.; Zhuang, X.; Müllen, K.; Feng, X., Self-Activating, Capacitive Anion Intercalation Enables High-Power Graphite Cathodes. *Advanced Materials* **2018,** *30* (20).
1921. Wang, G.; Zhang, J.; Yang, S.; Wang, F.; Zhuang, X.; Müllen, K.; Feng, X., Vertically Aligned MoS2 Nanosheets Patterned on Electrochemically Exfoliated Graphene for High-Performance Lithium and Sodium Storage. *Advanced Energy Materials* **2018,** *8* (8).
1922. Wang, X. Y.; Urgel, J. I.; Barin, G. B.; Eimre, K.; Di Giovannantonio, M.; Milani, A.; Tommasini, M.; Pignedoli, C. A.; Ruffieux, P.; Feng, X.; Fasel, R.; Müllen, K.; Narita, A., Bottom-Up Synthesis of Heteroatom-Doped Chiral Graphene Nanoribbons. *Journal of the American Chemical Society* **2018,** *140* (29), 9104-9107.
1923. Weippert, J.; Hauns, J.; Bachmann, J.; Böttcher, A.; Yao, X.; Yang, B.; Narita, A.; Müllen, K.; Kappes, M. M., A TPD-based determination of the graphite interlayer cohesion energy. *Journal of Chemical Physics* **2018,** *149* (19).
1924. Wunderlich, K.; Müllen, K.; Fytas, G., Shape persistence in polymers and supramolecular assemblies. In *Materials and Energy*, 2018; Vol. 9, pp 1-28.
1925. Yang, S.; Zhang, K.; Ricciardulli, A. G.; Zhang, P.; Liao, Z.; Lohe, M. R.; Zschech, E.; Blom, P. W. M.; Pisula, W.; Müllen, K.; Feng, X., A Delamination Strategy for Thinly Layered Defect-Free High-Mobility Black Phosphorus Flakes. *Angewandte Chemie - International Edition* **2018,** *57* (17), 4677-4681.
1926. Yao, X.; Zhang, K.; Müllen, K.; Wang, X. Y., Direct C−H Borylation at the 2- and 2,7-Positions of Pyrene Leading to Brightly Blue- and Green-Emitting Chromophores. *Asian Journal of Organic Chemistry* **2018,** *7* (11), 2233-2238.
1927. Zhang, G.; Baumgarten, M.; Schollmeyer, D.; Müllen, K., Tailoring the Emission of Fluorinated Bipyridine-Chelated Iridium Complexes. *ACS Omega* **2018,** *3* (10), 13808-13816.
1928. Zhang, J.; Chen, G.; Müllen, K.; Feng, X., Carbon-Rich Nanomaterials: Fascinating Hydrogen and Oxygen Electrocatalysts. *Advanced Materials* **2018,** *30* (40).
1929. Zhang, J.; Zhuang, X.; Müllen, K.; Feng, X., Designing porous structures and active sites in carbon-based electrocatalysts. In *Carbon-Based Metal-Free Catalysts: Design and Applications*, 2018; Vol. 1-2, pp 77-99.
1930. Zhao, S.; Lavie, J.; Rondin, L.; Orcin-Chaix, L.; Diederichs, C.; Roussignol, P.; Chassagneux, Y.; Voisin, C.; Müllen, K.; Narita, A.; Campidelli, S.; Lauret, J. S., Single photon emission from graphene quantum dots at room temperature. *Nature Communications* **2018,** *9* (1).
1931. Zhou, F.; Huang, H.; Xiao, C.; Zheng, S.; Shi, X.; Qin, J.; Fu, Q.; Bao, X.; Feng, X.; Müllen, K.; Wu, Z. S., Electrochemically Scalable Production of Fluorine-Modified Graphene for Flexible and High-Energy Ionogel-Based Microsupercapacitors. *Journal of the American Chemical Society* **2018,** *140* (26), 8198-8205.
1932. Abdulkarim, A.; Strunk, K. P.; Bäuerle, R.; Beck, S.; Makowska, H.; Marszalek, T.; Pucci, A.; Melzer, C.; Jänsch, D.; Freudenberg, J.; Bunz, U. H. F.; Müllen, K., Small change, big impact: The shape of precursor polymers governs poly-p-phenylene synthesis. *Macromolecules* **2019,** *52* (12), 4458-4463.

1933. Balawi, A. H.; Stappert, S.; Gorenflot, J.; Li, C.; Müllen, K.; Andrienko, D.; Laquai, F., Direct and Energy-Transfer-Mediated Charge-Transfer State Formation and Recombination in Triangulene-Spacer-Perylenediimide Multichromophores: Lessons for Photovoltaic Applications. *Journal of Physical Chemistry C* **2019,** *123* (27), 16602-16613.
1934. Beyer, D.; Wang, S.; Pignedoli, C. A.; Melidonie, J.; Yuan, B.; Li, C.; Wilhelm, J.; Ruffieux, P.; Berger, R.; Müllen, K.; Fasel, R.; Feng, X., Correction to: Graphene nanoribbons derived from zigzag edge-encased poly(para-2,9-dibenzo[bc, kl]coronenylene) polymer chains (Journal of the American Chemical Society (2019) 141:7 (2843-2846) DOI: 10.1021/jacs.8b10407). *Journal of the American Chemical Society* **2019,** *141* (10), 4488.
1935. Beyer, D.; Wang, S.; Pignedoli, C. A.; Melidonie, J.; Yuan, B.; Li, C.; Wilhelm, J.; Ruffieux, P.; Berger, R.; Müllen, K.; Fasel, R.; Feng, X., Graphene Nanoribbons Derived from Zigzag Edge-Encased Poly(para-2,9-dibenzo[bc, kl]coronenylene) Polymer Chains. *Journal of the American Chemical Society* **2019**.
1936. Blair, V. E.; Celebi, K.; Müllen, K.; Vermant, J., Electrically Conductive Thin Films Derived from Bulk Graphite and Liquid–Liquid Interface Assembly. *Advanced Materials Interfaces* **2019,** *6* (4).
1937. Borin Barin, G.; Fairbrother, A.; Rotach, L.; Bayle, M.; Paillet, M.; Liang, L.; Meunier, V.; Hauert, R.; Dumslaff, T.; Narita, A.; Müllen, K.; Sahabudeen, H.; Berger, R.; Feng, X.; Fasel, R.; Ruffieux, P., Surface-Synthesized Graphene Nanoribbons for Room Temperature Switching Devices: Substrate Transfer and ex Situ Characterization. *ACS Applied Nano Materials* **2019,** *2* (4), 2184-2192.
1938. Casutt, M.; Dittmar, B.; Makowska, H.; Marszalek, T.; Kushida, S.; Bunz, U. H. F.; Freudenberg, J.; Jänsch, D.; Müllen, K., A Diketopyrrolopyrrole-Based Dimer as a Blue Pigment. *Chemistry - A European Journal* **2019,** *25* (11), 2723-2728.
1939. Casutt, M.; Ruscello, M.; Strobel, N.; Koser, S.; Bunz, U. H. F.; Jänsch, D.; Freudenberg, J.; Hernandez-Sosa, G.; Müllen, K., Diketopyrrolopyrrole-Polymer Meets Thiol-Ene Click Chemistry: A Cross-Linked Acceptor for Thermally Stable Near-Infrared Photodetectors. *Chemistry of Materials* **2019,** *31* (18), 7657-7665.
1940. Chen, M. T.; Hofmann, O. T.; Gerlach, A.; Bröker, B.; Bürker, C.; Niederhausen, J.; Hosokai, T.; Zegenhagen, J.; Vollmer, A.; Rieger, R.; Müllen, K.; Schreiber, F.; Salzmann, I.; Koch, N.; Zojer, E.; Duhm, S., Energy-level alignment at strongly coupled organic-metal interfaces. *Journal of Physics Condensed Matter* **2019,** *31* (19).
1941. Chen, Q.; Schollmeyer, D.; Müllen, K.; Narita, A., Synthesis of Circumpyrene by Alkyne Benzannulation of Brominated Dibenzo[hi, st]ovalene. *Journal of the American Chemical Society* **2019,** *141* (51), 19994-19999.
1942. Chen, Q.; Thoms, S.; Stöttinger, S.; Schollmeyer, D.; Müllen, K.; Narita, A.; Basché, T., Dibenzo[hi, st]ovalene as Highly Luminescent Nanographene: Efficient Synthesis via Photochemical Cyclodehydroiodination, Optoelectronic Properties, and Single-Molecule Spectroscopy. *Journal of the American Chemical Society* **2019,** *141* (41), 16439-16449.
1943. Chen, Q.; Wang, D.; Baumgarten, M.; Schollmeyer, D.; Müllen, K.; Narita, A., Regioselective Bromination and Functionalization of Dibenzo[hi,st]ovalene as Highly Luminescent Nanographene with Zigzag Edges. *Chemistry - An Asian Journal* **2019,** *14* (10), 1703-1707.
1944. Chen, Q.; Zajaczkowski, W.; Seibel, J.; De Feyter, S.; Pisula, W.; Müllen, K.; Narita, A., Synthesis and helical supramolecular organization of discotic liquid crystalline dibenzo[: Hi, st] ovalene. *Journal of Materials Chemistry C* **2019,** *7* (41), 12898-12906.
1945. Di Giovannantonio, M.; Eimre, K.; Yakutovich, A. V.; Chen, Q.; Mishra, S.; Urgel, J. I.; Pignedoli, C. A.; Ruffieux, P.; Müllen, K.; Narita, A.; Fasel, R., On-Surface Synthesis of Antiaromatic and Open-Shell Indeno[2,1- b]fluorene Polymers and Their Lateral Fusion into Porous Ribbons. *Journal of the American Chemical Society* **2019,** *141* (31), 12346-12354.

1946. Dreier, L. B.; Liu, Z.; Narita, A.; Van Zadel, M. J.; Müllen, K.; Tielrooij, K. J.; Backus, E. H. G.; Bonn, M., Surface-Specific Spectroscopy of Water at a Potentiostatically Controlled Supported Graphene Monolayer. *Journal of Physical Chemistry C* **2019,** *123* (39), 24031-24038.
1947. Fantuzzi, P.; Candini, A.; Chen, Q.; Yao, X.; Dumslaff, T.; Mishra, N.; Coletti, C.; Müllen, K.; Narita, A.; Affronte, M., Color Sensitive Response of Graphene/Graphene Quantum Dot Phototransistors. *Journal of Physical Chemistry C* **2019,** *123* (43), 26490-26497.
1948. Gigli, L.; Kawai, S.; Guerra, R.; Manini, N.; Pawlak, R.; Feng, X.; Müllen, K.; Ruffieux, P.; Fasel, R.; Tosatti, E.; Meyer, E.; Vanossi, A., Detachment Dynamics of Graphene Nanoribbons on Gold. *ACS Nano* **2019,** *13* (1), 689-697.
1949. Han, P.; Hou, I. C. Y.; Lu, H.; Wang, X. Y.; Müllen, K.; Bonn, M.; Narita, A.; Cánovas, E., Chemisorption of Atomically Precise 42-Carbon Graphene Quantum Dots on Metal Oxide Films Greatly Accelerates Interfacial Electron Transfer. *Journal of Physical Chemistry Letters* **2019,** *10* (7), 1431-1436.
1950. Hassanpour Amiri, M.; Heidler, J.; Hasnain, A.; Anwar, S.; Lu, H.; Müllen, K.; Asadi, K., Doping free transfer of graphene using aqueous ammonia flow. *RSC Advances* **2019,** *10* (2), 1127-1131.
1951. Hou, I. C. Y.; Diez-Cabanes, V.; Galanti, A.; Valášek, M.; Mayor, M.; Cornil, J.; Narita, A.; Samorì, P.; Müllen, K., Photomodulation of Two-Dimensional Self-Assembly of Azobenzene-Hexa-peri-hexabenzocoronene-Azobenzene Triads. *Chemistry of Materials* **2019,** *31* (17), 6979-6985.
1952. Hu, Y.; Paternò, G. M.; Wang, X. Y.; Wang, X. C.; Guizzardi, M.; Chen, Q.; Schollmeyer, D.; Cao, X. Y.; Cerullo, G.; Scotognella, F.; Müllen, K.; Narita, A., π-Extended Pyrene-Fused Double [7]Carbohelicene as a Chiral Polycyclic Aromatic Hydrocarbon. *Journal of the American Chemical Society* **2019,** *141* (32), 12797-12803.
1953. Ji, C.; Cheng, W.; Yuan, Q.; Müllen, K.; Yin, M., From Dyestuff Chemistry to Cancer Theranostics: The Rise of Rylenecarboximides. *Accounts of Chemical Research* **2019,** *52* (8), 2266-2277.
1954. Jia, X.; Hu, M.; Soundarapandian, K.; Yu, X.; Liu, Z.; Chen, Z.; Narita, A.; Müllen, K.; Koppens, F. H. L.; Jiang, J.; Tielrooij, K. J.; Bonn, M.; Wang, H. I., Kinetic Ionic Permeation and Interfacial Doping of Supported Graphene. *Nano Letters* **2019,** *19* (12), 9029-9036.
1955. Khatib, M.; Huynh, T. P.; Sun, J. J.; Do, T. T.; Sonar, P.; Hinkel, F.; Müllen, K.; Haick, H., Organic Transistor Based on Cyclopentadithiophene-Benzothiadiazole Donor–Acceptor Copolymer for the Detection and Discrimination between Multiple Structural Isomers. *Advanced Functional Materials* **2019,** *29* (9).
1956. Klapper, M.; Karagöz, F.; Parekh, S. H.; Dorresteijn, R.; Müllen, K., Session 4: Cell-Material Interaction. *Biomedizinische Technik. Biomedical engineering* **2019,** *64* (s1), 30-35.
1957. Kumar, A.; Pisula, W.; Müllen, K., Effect of humidity and temperature on proton conduction in phosphonated copolymers. *Materials Today Communications* **2019,** *20*.
1958. Kumar, A.; Pisula, W.; Müllen, K., One Dimensional Enhanced Anhydrous Proton Conduction in Well Defined Molecular Columns Induced by Non-Covalent Interactions. *ChemPhysChem* **2019,** *20* (5), 651-654.
1959. Liu, C.; Zhang, S.; Li, J.; Wei, J.; Müllen, K.; Yin, M., A Water-Soluble, NIR-Absorbing Quaterrylenediimide Chromophore for Photoacoustic Imaging and Efficient Photothermal Cancer Therapy. *Angewandte Chemie - International Edition* **2019,** *58* (6), 1638-1642.
1960. Liu, D.; Dai, L.; Lin, X.; Chen, J. F.; Zhang, J.; Feng, X.; Müllen, K.; Zhu, X.; Dai, S., Chemical Approaches to Carbon-Based Metal-Free Catalysts. *Advanced Materials* **2019,** *31* (13).
1961. Liu, J.; Mishra, S.; Pignedoli, C. A.; Passerone, D.; Urgel, J. I.; Fabrizio, A.; Lohr, T. G.; Ma, J.; Komber, H.; Baumgarten, M.; Corminboeuf, C.; Berger, R.; Ruffieux, P.; Müllen, K.; Fasel, R.; Feng, X., Open-Shell Nonbenzenoid Nanographenes Containing Two Pairs of Pentagonal and Heptagonal Rings. *Journal of the American Chemical Society* **2019,** *141* (30), 12011-12020.
1962. Lombardi, F.; Lodi, A.; Ma, J.; Liu, J.; Slota, M.; Narita, A.; Myers, W. K.; Müllen, K.; Feng, X.; Bogani, L., Quantum units from the topological engineering of molecular graphenoids. *Science*

2019, *366* (6469), 1107-1110.
1963. Lü, B.; Chen, Y.; Li, P.; Wang, B.; Müllen, K.; Yin, M., Stable radical anions generated from a porous perylenediimide metal-organic framework for boosting near-infrared photothermal conversion. *Nature Communications* **2019,** *10* (1).
1964. Martini, L.; Chen, Z.; Mishra, N.; Barin, G. B.; Fantuzzi, P.; Ruffieux, P.; Fasel, R.; Feng, X.; Narita, A.; Coletti, C.; Müllen, K.; Candini, A., Structure-dependent electrical properties of graphene nanoribbon devices with graphene electrodes. *Carbon* **2019,** *146*, 36-43.
1965. Mishra, S.; Beyer, D.; Eimre, K.; Liu, J.; Berger, R.; Gröning, O.; Pignedoli, C. A.; Müllen, K.; Fasel, R.; Feng, X.; Ruffieux, P., Synthesis and Characterization of π-Extended Triangulene. *Journal of the American Chemical Society* **2019,** *141* (27), 10621-10625.
1966. Narita, A.; Chen, Z.; Chen, Q.; Müllen, K., Solution and on-surface synthesis of structurally defined graphene nanoribbons as a new family of semiconductors. *Chemical Science* **2019,** *10* (4), 964-975.
1967. Niu, W.; Liu, J.; Mai, Y.; Müllen, K.; Feng, X., Synthetic Engineering of Graphene Nanoribbons with Excellent Liquid-Phase Processability. *Trends in Chemistry* **2019,** *1* (6), 549-558.
1968. Ochs, N. A. K.; Lewandowska, U.; Zajaczkowski, W.; Corra, S.; Reger, S.; Herdlitschka, A.; Schmid, S.; Pisula, W.; Müllen, K.; Bäuerle, P.; Wennemers, H., Oligoprolines guide the self-assembly of quaterthiophenes. *Chemical Science* **2019,** *10* (20), 5391-5396.
1969. Overbeck, J.; Barin, G. B.; Daniels, C.; Perrin, M. L.; Braun, O.; Sun, Q.; Darawish, R.; De Luca, M.; Wang, X. Y.; Dumslaff, T.; Narita, A.; Müllen, K.; Ruffieux, P.; Meunier, V.; Fasel, R.; Calame, M., A Universal Length-Dependent Vibrational Mode in Graphene Nanoribbons. *ACS Nano* **2019,** *13* (11), 13083-13091.
1970. Overbeck, J.; Borin Barin, G.; Daniels, C.; Perrin, M. L.; Liang, L.; Braun, O.; Darawish, R.; Burkhardt, B.; Dumslaff, T.; Wang, X. Y.; Narita, A.; Müllen, K.; Meunier, V.; Fasel, R.; Calame, M.; Ruffieux, P., Optimized Substrates and Measurement Approaches for Raman Spectroscopy of Graphene Nanoribbons. *Physica Status Solidi (B) Basic Research* **2019,** *256* (12).
1971. Paternò, G. M.; Moretti, L.; Barker, A. J.; Chen, Q.; Müllen, K.; Narita, A.; Cerullo, G.; Scotognella, F.; Lanzani, G., Pump–Push–Probe for Ultrafast All-Optical Switching: The Case of a Nanographene Molecule. *Advanced Functional Materials* **2019,** *29* (21).
1972. Prechtl, T.; Müllen, K., Precision and purity of conjugated polymers - to be ensured before processing. In *Solution-Processable Components for Organic Electronic Devices*, 2019; pp 1-55.
1973. Preis, T.; Kick, C.; Lex, A.; Weiss, D.; Eroms, J.; Narita, A.; Hu, Y.; Müllen, K.; Watanabe, K.; Taniguchi, T., Graphene nanoribbons on hexagonal boron nitride: Deposition and transport characterization. *Applied Physics Letters* **2019,** *114* (17).
1974. Ratha, R.; Singh, A.; Afroz, M. A.; Gupta, R. K.; Baumgarten, M.; Müllen, K.; Iyer, P. K., 6,7-Di(thiophen-2-yl)naphtho[2,3-c][1,2,5]thiadiazole and 4,6,7,9-tetra (thiophen-2-yl)naphtho[2,3-c][1,2,5]thiadiazole as new acceptor units for D-A type co-polymer for polymer solar cells. *Synthetic Metals* **2019,** *252*, 113-121.
1975. Reiser, P.; Benneckendorf, F. S.; Barf, M. M.; Müller, L.; Bäuerle, R.; Hillebrandt, S.; Beck, S.; Lovrincic, R.; Mankel, E.; Freudenberg, J.; Jänsch, D.; Kowalsky, W.; Pucci, A.; Jaegermann, W.; Bunz, U. H. F.; Müllen, K., N-Type Doping of Organic Semiconductors: Immobilization via Covalent Anchoring. *Chemistry of Materials* **2019,** *31* (11), 4213-4221.
1976. Rizzo, D.; Prezzi, D.; Ruini, A.; Nagyte, V.; Keerthi, A.; Narita, A.; Beser, U.; Xu, F.; Mai, Y.; Feng, X.; Müllen, K.; Molinari, E.; Casiraghi, C., Multiwavelength Raman spectroscopy of ultranarrow nanoribbons made by solution-mediated bottom-up approach. *Physical Review B* **2019,** *100* (4).
1977. Sánchez-Sánchez, C.; Dienel, T.; Nicolaï, A.; Kharche, N.; Liang, L.; Daniels, C.; Meunier, V.; Liu, J.; Feng, X.; Müllen, K.; Sánchez-Valencia, J. R.; Gröning, O.; Ruffieux, P.;

Fasel, R., On-Surface Synthesis and Characterization of Acene-Based Nanoribbons Incorporating Four-Membered Rings. *Chemistry - A European Journal* **2019,** *25* (52), 12074-12082.
1978. Spanos, I.; Tesch, M. F.; Yu, M.; Tüysüz, H.; Zhang, J.; Feng, X.; Müllen, K.; Schlögl, R.; Mechler, A. K., Facile Protocol for Alkaline Electrolyte Purification and Its Influence on a Ni-Co Oxide Catalyst for the Oxygen Evolution Reaction. *ACS Catalysis* **2019,** *9* (9), 8165-8170.
1979. Strunk, K. P.; Abdulkarim, A.; Beck, S.; Marszalek, T.; Bernhardt, J.; Koser, S.; Pisula, W.; Jänsch, D.; Freudenberg, J.; Pucci, A.; Bunz, U. H. F.; Melzer, C.; Müllen, K., Pristine Poly(para-phenylene): Relating Semiconducting Behavior to Kinetics of Precursor Conversion. *ACS Applied Materials and Interfaces* **2019,** *11* (21), 19481-19488.
1980. Talirz, L.; Söde, H.; Kawai, S.; Ruffieux, P.; Meyer, E.; Feng, X.; Müllen, K.; Fasel, R.; Pignedoli, C. A.; Passerone, D., Band Gap of Atomically Precise Graphene Nanoribbons as a Function of Ribbon Length and Termination. *ChemPhysChem* **2019,** *20* (18), 2348-2353.
1981. Urgel, J. I.; Di Giovannantonio, M.; Gandus, G.; Chen, Q.; Liu, X.; Hayashi, H.; Ruffieux, P.; Decurtins, S.; Narita, A.; Passerone, D.; Yamada, H.; Liu, S. X.; Müllen, K.; Pignedoli, C. A.; Fasel, R., Overcoming Steric Hindrance in Aryl-Aryl Homocoupling via On-Surface Copolymerization. *ChemPhysChem* **2019,** *20* (18), 2360-2366.
1982. Wang, G.; Oswald, S.; Löffler, M.; Müllen, K.; Feng, X., Beyond Activated Carbon: Graphite-Cathode-Derived Li-Ion Pseudocapacitors with High Energy and High Power Densities. *Advanced Materials* **2019,** *31* (14).
1983. Wang, X. Y.; Yao, X.; Müllen, K., Polycyclic aromatic hydrocarbons in the graphene era. *Science China Chemistry* **2019,** *62* (9), 1099-1144.
1984. Wang, X. Y.; Yao, X.; Narita, A.; Müllen, K., Heteroatom-Doped Nanographenes with Structural Precision. *Accounts of Chemical Research* **2019,** *52* (9), 2491-2505.
1985. Wegner, B.; Grubert, L.; Dennis, C.; Opitz, A.; Röttger, A.; Zhang, Y.; Barlow, S.; Marder, S. R.; Hecht, S.; Müllen, K.; Koch, N., Predicting the yield of ion pair formation in molecular electrical doping: Redox-potentials: Versus ionization energy/electron affinity. *Journal of Materials Chemistry C* **2019,** *7* (44), 13839-13848.
1986. Weippert, J.; Hauns, J.; Bachmann, J.; Böttcher, A.; Yao, X.; Yang, B.; Narita, A.; Müllen, K.; Kappes, M. M., Erratum: A TPD-based determination of the graphite interlayer cohesion energy (Journal of Chemical Physics (2018) 149 (194701) DOI: 10.1063/1.5052728). *Journal of Chemical Physics* **2019,** *150* (22).
1987. Wu, Y.; Li, L.; Frank, L.; Wagner, J.; Andreozzi, P.; Hammer, B.; D'Alicarnasso, M.; Pelliccia, M.; Liu, W.; Chakrabortty, S.; Krol, S.; Simon, J.; Landfester, K.; Kuan, S. L.; Stellacci, F.; Müllen, K.; Kreppel, F.; Weil, T., Patchy Amphiphilic Dendrimers Bind Adenovirus and Control Its Host Interactions and in Vivo Distribution. *ACS Nano* **2019,** *13* (8), 8749-8759.
1988. Wu, Z.; Ji, C.; Zhao, X.; Han, Y.; Müllen, K.; Pan, K.; Yin, M., Green-Light-Triggered Phase Transition of Azobenzene Derivatives toward Reversible Adhesives. *Journal of the American Chemical Society* **2019,** *141* (18), 7385-7390.
1989. Xia, D.; Duan, C.; Liu, S.; Ding, D.; Baumgarten, M.; Wagner, M.; Schollmeyer, D.; Xu, H.; Müllen, K., Oligofluorene with multiple spiro-connections: Its and their use in blue and white OLEDs. *New Journal of Chemistry* **2019,** *43* (9), 3788-3792.
1990. Xiao, Z.; Huang, X.; Zhao, K.; Song, Q.; Guo, R.; Zhang, X.; Zhou, S.; Kong, D.; Wagner, M.; Müllen, K.; Zhi, L., Band Structure Engineering of Schiff-Base Microporous Organic Polymers for Enhanced Visible-Light Photocatalytic Performance. *Small* **2019,** *15* (34).
1991. Xu, K.; Urgel, J. I.; Eimre, K.; Di Giovannantonio, M.; Keerthi, A.; Komber, H.; Wang, S.; Narita, A.; Berger, R.; Ruffieux, P.; Pignedoli, C. A.; Liu, J.; Müllen, K.; Fasel, R.; Feng, X., On-Surface Synthesis of a Nonplanar Porous Nanographene. *Journal of the American Chemical Society* **2019,** *141* (19), 7726-7730.

1992. Yao, X.; Wang, X. Y.; Simpson, C.; Paternò, G. M.; Guizzardi, M.; Wagner, M.; Cerullo, G.; Scotognella, F.; Watson, M. D.; Narita, A.; Müllen, K., Regioselective Hydrogenation of a 60-Carbon Nanographene Molecule toward a Circumbiphenyl Core. *Journal of the American Chemical Society* **2019,** *141* (10), 4230-4234.
1993. Ye, S.; Janasz, L.; Zajaczkowski, W.; Manion, J. G.; Mondal, A.; Marszalek, T.; Andrienko, D.; Müllen, K.; Pisula, W.; Seferos, D. S., Self-Organization and Charge Transport Properties of Selenium and Tellurium Analogues of Polythiophene. *Macromolecular Rapid Communications* **2019,** *40* (1).
1994. Zhang, G.; Hermerschmidt, F.; Pramanik, A.; Schollmeyer, D.; Baumgarten, M.; Sarkar, P.; List-Kratochvil, E. J. W.; Müllen, K., Bulky, dendronized iridium complexes and their photoluminescence. *Journal of Materials Chemistry C* **2019,** *7* (48), 15252-15258.
1995. Zhong, Q.; Hu, Y.; Niu, K.; Zhang, H.; Yang, B.; Ebeling, D.; Tschakert, J.; Cheng, T.; Schirmeisen, A.; Narita, A.; Müllen, K.; Chi, L., Benzo-Fused Periacenes or Double Helicenes? Different Cyclodehydrogenation Pathways on Surface and in Solution. *Journal of the American Chemical Society* **2019,** *141* (18), 7399-7406.
1996. Zhou, Z.; Wang, X. Y.; Wei, Z.; Müllen, K.; Petrukhina, M. A., Charging OBO-Fused Double [5]Helicene with Electrons. *Angewandte Chemie - International Edition* **2019,** *58* (42), 14969-14973.
1997. Abd-El-Aziz, A. S.; Antonietti, M.; Barner-Kowollik, C.; Binder, W. H.; Böker, A.; Boyer, C.; Buchmeiser, M. R.; Cheng, S. Z. D.; D'Agosto, F.; Floudas, G.; Frey, H.; Galli, G.; Genzer, J.; Hartmann, L.; Hoogenboom, R.; Ishizone, T.; Kaplan, D. L.; Leclerc, M.; Lendlein, A.; Liu, B.; Long, T. E.; Ludwigs, S.; Lutz, J. F.; Matyjaszewski, K.; Meier, M. A. R.; Müllen, K.; Müllner, M.; Rieger, B.; Russell, T. P.; Savin, D. A.; Schlüter, A. D.; Schubert, U. S.; Seiffert, S.; Severing, K.; Soares, J. B. P.; Staffilani, M.; Sumerlin, B. S.; Sun, Y.; Tang, B. Z.; Tang, C.; Théato, P.; Tirelli, N.; Tsui, O. K. C.; Unterlass, M. M.; Vana, P.; Voit, B.; Vyazovkin, S.; Weder, C.; Wiesner, U.; Wong, W. Y.; Wu, C.; Yagci, Y.; Yuan, J.; Zhang, G., The Next 100 Years of Polymer Science. *Macromolecular Chemistry and Physics* **2020,** *221* (16).
1998. Amiri, M. H.; Heidler, J.; Müllen, K.; Asadi, K., Design rules for memories based on graphene ferroelectric field-effect transistors. *ACS Applied Electronic Materials* **2020,** *2* (1), 2-8.
1999. Barf, M. M.; Benneckendorf, F. S.; Reiser, P.; Bäuerle, R.; Köntges, W.; Müller, L.; Pfannmöller, M.; Beck, S.; Mankel, E.; Freudenberg, J.; Jänsch, D.; Tisserant, J. N.; Lovrincic, R.; Schröder, R. R.; Bunz, U. H. F.; Pucci, A.; Jaegermann, W.; Kowalsky, W.; Müllen, K., Compensation of Oxygen Doping in p-Type Organic Field-Effect Transistors Utilizing Immobilized n-Dopants. *Advanced Materials Technologies* **2020**.
2000. Baun, A.; Wang, Z.; Morsbach, S.; Qiu, Z.; Narita, A.; Fytas, G.; Müllen, K., Rigidification of poly(p-phenylene)s through ortho-phenyl substitution. *Macromolecules* **2020**.
2001. Benneckendorf, F. S.; Rohnacher, V.; Sauter, E.; Hillebrandt, S.; Münch, M.; Wang, C.; Casalini, S.; Ihrig, K.; Beck, S.; Jänsch, D.; Freudenberg, J.; Jaegermann, W.; Samorì, P.; Pucci, A.; Bunz, U. H. F.; Zharnikov, M.; Müllen, K., Tetrapodal Diazatriptycene Enforces Orthogonal Orientation in Self-Assembled Monolayers. *ACS Applied Materials and Interfaces* **2020,** *12* (5), 6565-6572.
2002. Burmeister, D.; Ahrens, L.; Opitz, A.; Ligorio, G.; Hermerschmidt, F.; Jänsch, D.; Freudenberg, J.; Bunz, U. H. F.; Müllen, K.; List-Kratochvil, E. J. W., Utilizing Diels-Alder "click" chemistry to functionalize the organic-organic interface of semiconducting polymers. *Journal of Materials Chemistry C* **2020,** *8* (10), 3302-3307.
2003. Cai, Y.; Ni, D.; Cheng, W.; Ji, C.; Wang, Y.; Müllen, K.; Su, Z.; Liu, Y.; Chen, C.; Yin, M., Enzyme-Triggered Disassembly of Perylene Monoimide-based Nanoclusters for Activatable and Deep Photodynamic Therapy. *Angewandte Chemie - International Edition* **2020,** *59* (33), 14014-14018.
2004. Cavani, N.; De Corato, M.; Ruini, A.; Prezzi, D.; Molinari, E.; Lodi Rizzini, A.; Rosi, A.;

Biagi, R.; Corradini, V.; Wang, X. Y.; Feng, X.; Narita, A.; Müllen, K.; De Renzi, V., Vibrational signature of the graphene nanoribbon edge structure from high-resolution electron energy-loss spectroscopy. *Nanoscale* **2020,** *12* (38), 19681-19688.
2005. Chang, H.; Liu, H.; Dmitrieva, E.; Chen, Q.; Ma, J.; He, P.; Liu, P.; Popov, A. A.; Cao, X. Y.; Wang, X. Y.; Zou, Y.; Narita, A.; Müllen, K.; Peng, H.; Hu, Y., Furan-containing double tetraoxa[7]helicene and its radical cation. *Chemical Communications* **2020,** *56* (96), 15181-15184.
2006. Chen, Z.; Narita, A.; Müllen, K., Graphene Nanoribbons: On-Surface Synthesis and Integration into Electronic Devices. *Advanced Materials* **2020,** *32* (45).
2007. Cui, K.; Mali, K. S.; Wu, D.; Feng, X.; Müllen, K.; Walter, M.; De Feyter, S.; Mertens, S. F. L., Ambient Bistable Single Dipole Switching in a Molecular Monolayer. *Angewandte Chemie - International Edition* **2020,** *59* (33), 14049-14053.
2008. Di Giovannantonio, M.; Chen, Q.; Urgel, J. I.; Ruffieux, P.; Pignedoli, C. A.; Müllen, K.; Narita, A.; Fasel, R., On-Surface Synthesis of Oligo(indenoindene). *Journal of the American Chemical Society* **2020,** *142* (30), 12925-12929.
2009. Di Giovannantonio, M.; Keerthi, A.; Urgel, J. I.; Baumgarten, M.; Feng, X.; Ruffieux, P.; Narita, A.; Fasel, R.; Müllen, K., On-Surface Dehydro-Diels-Alder Reaction of Dibromo-bis(phenylethynyl)benzene. *Journal of the American Chemical Society* **2020,** *142* (4), 1721-1725.
2010. Di Giovannantonio, M.; Yao, X.; Eimre, K.; Urgel, J. I.; Ruffieux, P.; Pignedoli, C. A.; Müllen, K.; Fasel, R.; Narita, A., Large-Cavity Coronoids with Different Inner and Outer Edge Structures. *Journal of the American Chemical Society* **2020,** *142* (28), 12046-12050.
2011. Dillenburger, M.; Qiu, Z.; Ju, C. W.; Müller, B.; Morsbach, S.; Schollmeyer, D.; Narita, A.; Müllen, K., Erratum: From hexaphenylbenzene to 1,2,3,4,5,6-hexacyclohexylcyclohexane (Journal of the American Chemical Society (2020) 142:30 (12916-12920) DOI: 10.1021/jacs.0c04956). *Journal of the American Chemical Society* **2020,** *142* (41), 17810.
2012. Dillenburger, M.; Qiu, Z.; Ju, C. W.; Müller, B.; Morsbach, S.; Schollmeyer, D.; Narita, A.; Müllen, K., From Hexaphenylbenzene to 1,2,3,4,5,6-Hexacyclohexylcyclohexane. *Journal of the American Chemical Society* **2020,** *142* (30), 12916-12920.
2013. Dumslaff, T.; Gu, Y.; Paternò, G. M.; Qiu, Z.; Maghsoumi, A.; Tommasini, M.; Feng, X.; Scotognella, F.; Narita, A.; Müllen, K., Hexa-: Peri -benzocoronene with two extra K-regions in an ortho -configuration. *Chemical Science* **2020,** *11* (47), 12816-12821.
2014. El Abbassi, M.; Perrin, M. L.; Barin, G. B.; Sangtarash, S.; Overbeck, J.; Braun, O.; Lambert, C. J.; Sun, Q.; Prechtl, T.; Narita, A.; Müllen, K.; Ruffieux, P.; Sadeghi, H.; Fasel, R.; Calame, M., Controlled Quantum Dot Formation in Atomically Engineered Graphene Nanoribbon Field-Effect Transistors. *ACS Nano* **2020,** *14* (5), 5754-5762.
2015. Han, P.; Yao, X.; Müllen, K.; Narita, A.; Bonn, M.; Cánovas, E., Size-dependent electron transfer from atomically defined nanographenes to metal oxide nanoparticles. *Nanoscale* **2020,** *12* (30), 16046-16052.
2016. Hassanpour Amiri, M.; Heidler, J.; Müllen, K.; Gkoupidenis, P.; Asadi, K., Designing Multi-Level Resistance States in Graphene Ferroelectric Transistors. *Advanced Functional Materials* **2020,** *30* (34).
2017. Hou, H.; Zhao, X. J.; Tang, C.; Ju, Y. Y.; Deng, Z. Y.; Wang, X. R.; Feng, L. B.; Lin, D. H.; Hou, X.; Narita, A.; Müllen, K.; Tan, Y. Z., Synthesis and assembly of extended quintulene. *Nature Communications* **2020,** *11* (1).
2018. Hou, I. C. Y.; Berger, F.; Narita, A.; Müllen, K.; Hecht, S., Proton-Gated Ring-Closure of a Negative Photochromic Azulene-Based Diarylethene. *Angewandte Chemie - International Edition* **2020,** *59* (42), 18532-18536.
2019. Hou, I. C. Y.; Narita, A.; Müllen, K., Stepwise Lateral Extension of Phenyl-Substituted Linear

Polyphenylenes. *Macromolecular Chemistry and Physics* **2020,** *221* (1).
2020. Hou, I. C. Y.; Sun, Q.; Eimre, K.; Di Giovannantonio, M.; Urgel, J. I.; Ruffieux, P.; Narita, A.; Fasel, R.; Müllen, K., On-Surface Synthesis of Unsaturated Carbon Nanostructures with Regularly Fused Pentagon-Heptagon Pairs. *Journal of the American Chemical Society* **2020,** *142* (23), 10291-10296.
2021. Huang, H.; Zhou, F.; Lu, P.; Li, X.; Das, P.; Feng, X.; Müllen, K.; Wu, Z. S., Design and construction of few-layer graphene cathode for ultrafast and high-capacity aluminum-ion batteries. *Energy Storage Materials* **2020,** *27*, 396-404.
2022. Keerthi, A.; Sánchez-Sánchez, C.; Deniz, O.; Ruffieux, P.; Schollmeyer, D.; Feng, X.; Narita, A.; Fasel, R.; Müllen, K., On-surface Synthesis of a Chiral Graphene Nanoribbon with Mixed Edge Structure. *Chemistry - An Asian Journal* **2020,** *15* (22), 3807-3811.
2023. Kim, C.; Kim, T. W.; Kim, S.; Oh, I.; Wonneberger, H.; Yoon, K.; Kwak, M.; Kim, J.; Kim, J.; Li, C.; Müllen, K.; Ihee, H., Molecular-Level Understanding of Excited States of N-Annulated Rylene Dye for Dye-Sensitized Solar Cells. *Journal of Physical Chemistry C* **2020,** *124* (42), 22993-23003.
2024. Li, M.; Zajaczkowski, W.; Velpula, G.; Jänsch, D.; Graf, R.; Marszalek, T.; Parekh, S. H.; Zagranyarski, Y.; Mali, K.; Wagner, M.; De Feyter, S.; Li, C.; Müllen, K.; Pisula, W., Transformation from helical to layered supramolecular organization of asymmetric perylene diimidesviamultiple intermolecular hydrogen bonding. *Chemical Science* **2020,** *11* (19), 4960-4968.
2025. Liu, X.; Chen, S. Y.; Chen, Q.; Yao, X.; Gelléri, M.; Ritz, S.; Kumar, S.; Cremer, C.; Landfester, K.; Müllen, K.; Parekh, S. H.; Narita, A.; Bonn, M., Nanographenes: Ultrastable, Switchable, and Bright Probes for Super-Resolution Microscopy. *Angewandte Chemie - International Edition* **2020,** *59* (1), 496-502.
2026. Liu, Z.; Chen, Z.; Wang, C.; Wang, H. I.; Wuttke, M.; Wang, X. Y.; Bonn, M.; Chi, L.; Narita, A.; Müllen, K., Bottom-Up, On-Surface-Synthesized Armchair Graphene Nanoribbons for Ultra-High-Power Micro-Supercapacitors. *Journal of the American Chemical Society* **2020,** *142* (42), 17881-17886.
2027. Liu, Z.; Qiu, H.; Wang, C.; Chen, Z.; Zyska, B.; Narita, A.; Ciesielski, A.; Hecht, S.; Chi, L.; Müllen, K.; Samorì, P., Photomodulation of Charge Transport in All-Semiconducting 2D–1D van der Waals Heterostructures with Suppressed Persistent Photoconductivity Effect. *Advanced Materials* **2020,** *32* (26).
2028. Lü, B.; Li, P.; Li, P.; Zhang, Y.; Müllen, K.; Yin, M., Highly fluorescent free-standing films assembled from perylenediimide microcrystals for boosting aniline sensing. *Journal of Materials Chemistry C* **2020,** *8* (4), 1421-1426.
2029. Mishra, S.; Beyer, D.; Berger, R.; Liu, J.; Gröning, O.; Urgel, J. I.; Müllen, K.; Ruffieux, P.; Feng, X.; Fasel, R., Topological Defect-Induced Magnetism in a Nanographene. *Journal of the American Chemical Society* **2020,** *142* (3), 1147-1152.
2030. Mishra, S.; Beyer, D.; Eimre, K.; Kezilebieke, S.; Berger, R.; Gröning, O.; Pignedoli, C. A.; Müllen, K.; Liljeroth, P.; Ruffieux, P.; Feng, X.; Fasel, R., Publisher Correction: Topological frustration induces unconventional magnetism in a nanographene (Nature Nanotechnology, (2020), 15, 1, (22-28), 10.1038/s41565-019-0577-9). *Nature Nanotechnology* **2020,** *15* (1), 81.
2031. Mishra, S.; Beyer, D.; Eimre, K.; Kezilebieke, S.; Berger, R.; Gröning, O.; Pignedoli, C. A.; Müllen, K.; Liljeroth, P.; Ruffieux, P.; Feng, X.; Fasel, R., Topological frustration induces unconventional magnetism in a nanographene. *Nature Nanotechnology* **2020,** *15* (1), 22-28.
2032. Nathusius, M.; Ejlli, B.; Rominger, F.; Freudenberg, J.; Bunz, U. H. F.; Müllen, K., Chrysene-Based Blue Emitters. *Chemistry - A European Journal* **2020,** *26* (66), 15089-15093.
2033. Qiu, Z.; Asako, S.; Hu, Y.; Ju, C. W.; Liu, T.; Rondin, L.; Schollmeyer, D.; Lauret, J. S.; Müllen, K.; Narita, A., Negatively curved nanographene with heptagonal and [5]helicene units. *Journal of the American Chemical Society* **2020,** *142* (35), 14814-14819.

2034. Qiu, Z.; Hammer, B. A. G.; Müllen, K., Conjugated polymers – Problems and promises. *Progress in Polymer Science* **2020,** *100*.
2035. Richter, N.; Chen, Z.; Tries, A.; Prechtl, T.; Narita, A.; Müllen, K.; Asadi, K.; Bonn, M.; Kläui, M., Charge transport mechanism in networks of armchair graphene nanoribbons. *Scientific Reports* **2020,** *10* (1).
2036. Riss, A.; Richter, M.; Paz, A. P.; Wang, X. Y.; Raju, R.; He, Y.; Ducke, J.; Corral, E.; Wuttke, M.; Seufert, K.; Garnica, M.; Rubio, A.; Barth, J. V.; Narita, A.; Müllen, K.; Berger, R.; Feng, X.; Palma, C. A.; Auwärter, W., Author Correction: Polycyclic aromatic chains on metals and insulating layers by repetitive [3+2] cycloadditions (Nature Communications, (2020), 11, 1, (1490), 10.1038/s41467-020-15210-2). *Nature Communications* **2020,** *11* (1).
2037. Riss, A.; Richter, M.; Paz, A. P.; Wang, X. Y.; Raju, R.; He, Y.; Ducke, J.; Corral, E.; Wuttke, M.; Seufert, K.; Garnica, M.; Rubio, A.; V. Barth, J.; Narita, A.; Müllen, K.; Berger, R.; Feng, X.; Palma, C. A.; Auwärter, W., Polycyclic aromatic chains on metals and insulating layers by repetitive [3+2] cycloadditions. *Nature Communications* **2020,** *11* (1).
2038. Sonnenschein, C.; Ender, C. P.; Wang, F.; Schollmeyer, D.; Feng, X.; Narita, A.; Müllen, K., Oligophenyls with Multiple Disulfide Bridges as Higher Homologues of Dibenzo[c,e][1,2]dithiin: Synthesis and Application in Lithium-Ion Batteries. *Chemistry - A European Journal* **2020,** *26* (36), 8007-8011.
2039. Sun, Q.; Yao, X.; Gröning, O.; Eimre, K.; Pignedoli, C. A.; Müllen, K.; Narita, A.; Fasel, R.; Ruffieux, P., Coupled Spin States in Armchair Graphene Nanoribbons with Asymmetric Zigzag Edge Extensions. *Nano Letters* **2020,** *20* (9), 6429-6436.
2040. Tries, A.; Richter, N.; Chen, Z.; Narita, A.; Müllen, K.; Wang, H. I.; Bonn, M.; Klauï, M., Hysteresis in graphene nanoribbon field-effect devices. *Physical Chemistry Chemical Physics* **2020,** *22* (10), 5667-5672.
2041. Urgel, J. I.; Di Giovannantonio, M.; Eimre, K.; Lohr, T. G.; Liu, J.; Mishra, S.; Sun, Q.; Kinikar, A.; Widmer, R.; Stolz, S.; Bommert, M.; Berger, R.; Ruffieux, P.; Pignedoli, C. A.; Müllen, K.; Feng, X.; Fasel, R., On-Surface Synthesis of Cumulene-Containing Polymers via Two-Step Dehalogenative Homocoupling of Dibromomethylene-Functionalized Tribenzoazulene. *Angewandte Chemie - International Edition* **2020,** *59* (32), 13281-13287.
2042. Vattikunta, R.; Annadhasan, M.; Jada, R.; Prasad, M. D.; Mitetelo, N.; Zhdanova, K.; Mamonov, E.; Müllen, K.; Murzina, T.; Chandrasekar, R., Multifunctional Chiral π-Conjugated Polymer Microspheres: Production and Confinement of NLO signal, Detection of Circularly Polarized Light, and Display of Laser-Triggered NLO Emission Shifts. *Advanced Optical Materials* **2020,** *8* (13).
2043. Wagner, J.; Dillenburger, M.; Simon, J.; Oberländer, J.; Landfester, K.; Mailänder, V.; Ng, D. Y. W.; Müllen, K.; Weil, T., Amphiphilic dendrimers control protein binding and corona formation on liposome nanocarriers. *Chemical Communications* **2020,** *56* (61), 8663-8666.
2044. Wagner, J.; Li, L.; Simon, J.; Krutzke, L.; Landfester, K.; Mailänder, V.; Müllen, K.; Ng, D. Y. W.; Wu, Y.; Weil, T., Amphiphilic Polyphenylene Dendron Conjugates for Surface Remodeling of Adenovirus 5. *Angewandte Chemie - International Edition* **2020,** *59* (14), 5712-5720.
2045. Weippert, J.; Hauns, J.; Bachmann, J.; Greisch, J. F.; Narita, A.; Müllen, K.; Böttcher, A.; Kappes, M. M., Oligomerization of Dehydrogenated Polycyclic Aromatic Hydrocarbons on Highly Oriented Pyrolytic Graphite. *Journal of Physical Chemistry C* **2020,** *124* (15), 8236-8246.
2046. Xu, X.; Müllen, K.; Narita, A., Syntheses and characterizations of functional polycyclic aromatic hydrocarbons and graphene nanoribbons. *Bulletin of the Chemical Society of Japan* **2020,** *93* (4), 490-506.
2047. Yuan, W.; Cheng, J.; Li, X.; Wu, M.; Han, Y.; Yan, C.; Zou, G.; Müllen, K.; Chen, Y., 5,6,12,13-Tetraazaperopyrenes as Unique Photonic and Mechanochromic Fluorophores. *Angewandte Chemie - International Edition* **2020,** *59* (25), 9940-9945.

2048. Zhang, G.; Rocha, S.; Lu, G.; Yuan, H.; Uji-I, H.; Floudas, G. A.; Müllen, K.; Xiao, L.; Hofkens, J.; Debroye, E., Spatially and temporally resolved heterogeneities in a miscible polymer blend. *ACS Omega* **2020,** *5* (37), 23931-23939.
2049. Zhang, W.; Müllen, K., Analyzing solid fossil-fuel pitches by a combination of Soxhlet extraction and Fourier transform ion cyclotron resonance mass spectrometry. *Carbon* **2020,** *167*, 414-421.
2050. Zhang, X.; Wang, D.; Qiu, X.; Ma, Y.; Kong, D.; Müllen, K.; Li, X.; Zhi, L., Stable high-capacity and high-rate silicon-based lithium battery anodes upon two-dimensional covalent encapsulation. *Nature Communications* **2020,** *11* (1).
2051. Zhao, S.; Barin, G. B.; Cao, T.; Overbeck, J.; Darawish, R.; Lyu, T.; Drapcho, S.; Wang, S.; Dumslaff, T.; Narita, A.; Calame, M.; Müllen, K.; Louie, S. G.; Ruffieux, P.; Fasel, R.; Wang, F., Optical Imaging and Spectroscopy of Atomically Precise Armchair Graphene Nanoribbons. *Nano Letters* **2020,** *20* (2), 1124-1130.
2052. Zhou, Y.; Tao, X.; Chen, G.; Lu, R.; Wang, D.; Chen, M. X.; Jin, E.; Yang, J.; Liang, H. W.; Zhao, Y.; Feng, X.; Narita, A.; Müllen, K., Multilayer stabilization for fabricating high-loading single-atom catalysts. *Nature Communications* **2020,** *11* (1).
2053. Zhou, Z.; Fu, L.; Hu, Y.; Wang, X. Y.; Wei, Z.; Narita, A.; Müllen, K.; Petrukhina, M. A., Compressing Double [7]Helicene by Successive Charging with Electrons. *Angewandte Chemie - International Edition* **2020,** *59* (37), 15923-15927.
2054. Abdulkarim, A.; Nathusius, M.; Bäuerle, R.; Strunk, K. P.; Beck, S.; Räder, H. J.; Pucci, A.; Melzer, C.; Jänsch, D.; Freudenberg, J.; Bunz, U. H. F.; Müllen, K., Beyond p-Hexaphenylenes: Synthesis of Unsubstituted p-Nonaphenylene by a Precursor Protocol. *Chemistry - A European Journal* **2021,** *27* (1), 281-288.
2055. Bragança, A. M.; Minoia, A.; Steeno, R.; Seibel, J.; Hirsch, B. E.; Verstraete, L.; Ivasenko, O.; Müllen, K.; Mali, K. S.; Lazzaroni, R.; De Feyter, S., Detection and Stabilization of a Previously Unknown Two-Dimensional (Pseudo)polymorph using Lateral Nanoconfinement. *Journal of the American Chemical Society* **2021**.
2056. Chen, Q.; Baumgarten, M.; Wagner, M.; Hu, Y.; Hou, I. C. Y.; Narita, A.; Müllen, K., Dicyclopentaannelated Hexa-peri-hexabenzocoronenes with a Singlet Biradical Ground State. *Angewandte Chemie - International Edition* **2021**.
2057. Dworak, L.; Bottin, A.; Roth, S.; Trinh, P. T.; Müllen, K.; Basche, T.; Wachtveitl, J., Photodynamics at the CdSe quantum dot-perylene diimide interface: Unraveling the excitation energy and electron transfer pathways. *Journal of Physical Chemistry C* **2021,** *125* (6), 3277-3284.
2058. Ejlli, B.; Nußbaum, P.; Rominger, F.; Freudenberg, J.; Bunz, U. H. F.; Müllen, K., Benzo-fused Tri[8]annulenes as Molecular Models of Cubic Graphite. *Angewandte Chemie - International Edition* **2021**.
2059. Hong, J.; Xiao, X.; Liu, H.; Fu, L.; Wang, X. C.; Zhou, L.; Wang, X. Y.; Qiu, Z.; Cao, X. Y.; Narita, A.; Müllen, K.; Hu, Y., X-shaped thiadiazole-containing double [7]heterohelicene with strong chiroptical response and π-stacked homochiral assembly. *Chemical Communications* **2021,** *57* (45), 5566-5569.
2060. Jin, E.; Yang, Q.; Ju, C. W.; Chen, Q.; Landfester, K.; Bonn, M.; Müllen, K.; Liu, X.; Narita, A., A Highly Luminescent Nitrogen-Doped Nanographene as an Acid- And Metal-Sensitive Fluorophore for Optical Imaging. *Journal of the American Chemical Society* **2021,** *143* (27), 10403-10412.
2061. Jin, L.; Bilbao, N.; Lv, Y.; Wang, X. Y.; Soltani, P.; Mali, K. S.; Narita, A.; De Feyter, S.; Müllen, K.; Chen, Z., 2D self-assembly and electronic characterization of oxygen-boron-oxygen-doped chiral graphene nanoribbons. *Chemical Communications* **2021,** *57* (49), 6031-6034.
2062. Liu, P.; Chen, X. Y.; Cao, J.; Ruppenthal, L.; Gottfried, J. M.; Müllen, K.; Wang, X. Y., Revisiting Acepleiadylene: Two-Step Synthesis and π-Extension toward Nonbenzenoid Nanographene. *Journal of the American Chemical Society* **2021,** *143* (14), 5314-5318.

2063. Maghsoumi, A.; Beser, U.; Feng, X.; Narita, A.; Müllen, K.; Castiglioni, C.; Tommasini, M., Raman spectroscopy of holey nanographene C216. *Journal of Raman Spectroscopy* **2021**.
2064. Mishra, S.; Yao, X.; Chen, Q.; Eimre, K.; Gröning, O.; Ortiz, R.; Di Giovannantonio, M.; Sancho-García, J. C.; Fernández-Rossier, J.; Pignedoli, C. A.; Müllen, K.; Ruffieux, P.; Narita, A.; Fasel, R., Large magnetic exchange coupling in rhombus-shaped nanographenes with zigzag periphery. *Nature Chemistry* **2021,** *13* (6), 581-586.
2065. Qiu, Z.; Ju, C. W.; Frédéric, L.; Hu, Y.; Schollmeyer, D.; Pieters, G.; Müllen, K.; Narita, A., Amplification of Dissymmetry Factors in π-Extended [7]- And [9]Helicenes. *Journal of the American Chemical Society* **2021,** *143* (12), 4661-4667.
2066. Qiu, Z.; Narita, A.; Müllen, K., Spiers Memorial Lecture: Carbon nanostructures by macromolecular design-from branched polyphenylenes to nanographenes and graphene nanoribbons. *Faraday Discussions* **2021,** *227*, 8-45.
2067. Rohnacher, V.; Benneckendorf, F. S.; Münch, M.; Sauter, E.; Asyuda, A.; Barf, M. M.; Tisserant, J. N.; Hillebrandt, S.; Rominger, F.; Jänsch, D.; Freudenberg, J.; Kowalsky, W.; Jaegermann, W.; Bunz, U. H. F.; Pucci, A.; Zharnikov, M.; Müllen, K., Functionalized Tetrapodal Diazatriptycenes for Electrostatic Dipole Engineering in n-Type Organic Thin Film Transistors. *Advanced Materials Technologies* **2021,** *6* (2).
2068. Rohnacher, V.; Benneckendorf, F. S.; Münch, M.; Sauter, E.; Asyuda, A.; Barf, M. M.; Tisserant, J. N.; Hillebrandt, S.; Rominger, F.; Jänsch, D.; Freudenberg, J.; Kowalsky, W.; Jaegermann, W.; Bunz, U. H. F.; Pucci, A.; Zharnikov, M.; Müllen, K., Functionalized Tetrapodal Diazatriptycenes for Electrostatic Dipole Engineering in n-Type Organic Thin Film Transistors. *Advanced Materials Technologies* **2021,** *6* (2).
2069. Shinde, P. P.; Liu, J.; Dienel, T.; Gröning, O.; Dumslaff, T.; Mühlinghaus, M.; Narita, A.; Müllen, K.; Pignedoli, C. A.; Fasel, R.; Ruffieux, P.; Passerone, D., Graphene nanoribbons with mixed cove-cape-zigzag edge structure. *Carbon* **2021,** *175*, 50-59.
2070. Theodoridis, A.; Papamokos, G.; Wiesenfeldt, M. P.; Wollenburg, M.; Müllen, K.; Glorius, F.; Floudas, G., Polarity Matters: Dielectric Relaxation in All-cis-Multifluorinated Cycloalkanes. *The journal of physical chemistry. B* **2021,** *125* (14), 3700-3709.
2071. Weippert, J.; Huber, P.; Hauns, J.; Narita, A.; Müllen, K.; Amsharov, K. Y.; Böttcher, A.; Kappes, M. M., Comparative Study of Direct and Graphite-Mediated Oxidation of Large PAHs. *Journal of Physical Chemistry C* **2021,** *125* (15), 8163-8176.
2072. Wu, Y.; Li, L.; Frank, L.; Wagner, J.; Andreozzi, P.; Hammer, B.; D'Alicarnasso, M.; Pelliccia, M.; Liu, W.; Chakrabortty, S.; Krol, S.; Simon, J.; Landfester, K.; Kuan, S. L.; Stellacci, F.; Müllen, K.; Kreppel, F.; Weil, T., Erratum: Patchy amphiphilic dendrimers bind adenovirus and control its host interactions and in vivo distribution (ACS Nano (2019) 13:8 (8749-8759) DOI: 10.1021/acsnano.9b01484). *ACS Nano* **2021,** *15* (1), 1893.
2073. Xu, X.; Di Giovannantonio, M.; Urgel, J. I.; Pignedoli, C. A.; Ruffieux, P.; Müllen, K.; Fasel, R.; Narita, A., On-surface activation of benzylic C-H bonds for the synthesis of pentagon-fused graphene nanoribbons. *Nano Research* **2021**.
2074. Xu, X.; Kinikar, A.; Di Giovannantonio, M.; Ruffieux, P.; Müllen, K.; Fasel, R.; Narita, A., On-surface synthesis of dibenzohexacenohexacene and dibenzopentaphenoheptaphene. *Bulletin of the Chemical Society of Japan* **2021,** *94* (3), 997-999.
2075. Yao, X.; Zheng, W.; Osella, S.; Qiu, Z.; Fu, S.; Schollmeyer, D.; Müller, B.; Beljonne, D.; Bonn, M.; Wang, H. I.; Müllen, K.; Narita, A., Synthesis of Nonplanar Graphene Nanoribbon with Fjord Edges. *Journal of the American Chemical Society* **2021,** *143* (15), 5654-5658.
2076. Zeng, C.; Wang, B.; Zhang, H.; Sun, M.; Huang, L.; Gu, Y.; Qiu, Z.; Müllen, K.; Gu, C.; Ma, Y., Electrochemical synthesis, deposition, and doping of polycyclic aromatic hydrocarbon films. *Journal of the American Chemical Society* **2021,** *143* (7), 2682-2687.

2077. Zhang, Z.; Gao, Y.; Li, Z.; Qiao, L.; Xiong, Q.; Deng, L.; Zhang, Z.; Long, R.; Zhou, Q.; Du, Y.; Lan, Z.; Zhao, Y.; Li, C.; Müllen, K.; Gao, P., Marked Passivation Effect of Naphthalene-1,8-Dicarboximides in High-Performance Perovskite Solar Cells. *Advanced Materials* **2021,** *33* (31).
2078. Zhou, Y.; Chen, G.; Wang, Q.; Wang, D.; Tao, X.; Zhang, T.; Feng, X.; Müllen, K., Fe-N-C Electrocatalysts with Densely Accessible Fe-N4 Sites for Efficient Oxygen Reduction Reaction. *Advanced Functional Materials* **2021**.