

## List of publications (August 2021)

### **1988 - 1990**

1. H. Komber, G. Großmann, A. Kretschmer  
<sup>1</sup>H-, <sup>13</sup>C- und <sup>31</sup>P-NMR-spektroskopische Untersuchungen an Bis(dialkoxythio-phosphoryl)- und - (dialkoxyphosphoryl)-sulfanen und -polysulfanen  
Phosphorus and Sulfur **35**, 335 - 343 (1988)
2. H. Komber, G. Großmann  
Bestimmung des Vorzeichens der Hyperfeinstruktur-Kopplungskonstante  $a_p$  in Dialkoxy-dithiophosphoryl-Radikalen mittels <sup>31</sup>P- und <sup>13</sup>C-CIDNP  
Zeitschrift für Chemie **29**, 24 - 25 (1989)
3. G. Großmann, H. Komber, H. Kroschwitz, D. G. Pobedimskii, N. A. Mukmeneva  
NMR-spektroskopische und polarographische Untersuchung der Zersetzungreaktion von Cumylhydroperoxid durch Dithiophosphorsäuren (russ.)  
Isv. Akad. Nauk SSSR, Ser. Khim. **1989**, 34 - 41
4. H. Komber, F. Böhme, D. Pospiech, M. Rätzsch  
<sup>13</sup>C NMR analysis of poly(m-phenylene terephthalate - *co* - oxybenzoate)s: main-chain and end-group resonance assignments and sequence distribution  
Makromolekulare Chemie **191**, 2675 - 2684 (1990) DOI: [10.1002/macp.1990.021911116](https://doi.org/10.1002/macp.1990.021911116)

### **1991 - 1995**

5. H. Komber, G. Großmann, A. Petr, D. G. Pobedimskii  
<sup>31</sup>P-CIDNP Investigations of the Reaction of O,O-Dialkyl Dithiophosphoric Acid with Cumyl Hydroperoxide  
Polymer Degradation and Stability **32**, 249 - 259 (1991)
6. G. Großmann, H. Komber  
NMR Investigations on diastereomeric mixtures of bis(dialkoxythiophosphoryl)sulfanes and - polysulfanes containing *sec.* butoxy groups.  
Assignment of <sup>31</sup>P, <sup>13</sup>C and <sup>1</sup>H NMR signals in a mixture of seven diastereomers using shift-correlated 2D NMR spectra  
Phosphorus, Sulfur, and Silicon **61**, 269 - 281 (1991)

7. H. Komber, L. Jakisch, S. Zschoche, H. Möbus, M. Rätzsch, D. Scheller  
The stereochemistry of the succinimide unit in alkene/N-methylmaleimide copolymers investigated by  $^{15}\text{N}$  NMR spectroscopy  
*Makromol. Chemie, Rapid Communications* **12**, 547 - 552 (1991)
8. G. Pompe, E. Meyer, H. Komber, H. Hamann  
Influence of PBT crystallization on miscibility degree of amorphous phase in PC/PBT melt blends  
*Thermochimica Acta* **187**, 185 - 200 (1991)
9. W. A. Herrmann, W. Wagner, U. N. Flessner, U. Volkhardt, H. Komber  
Methyltrioxorhenium als Katalysator für die Olefin-Metathese  
*Angewandte Chemie* **103**, 1704 - 1706 (1991)  
*Angewandte Chemie, Int. Ed. Engl.* **30**, 1636 - 1638 (1991)
10. H. Komber, V. Steinert, S. Zschoche, M. Rätzsch, G. Großmann  
NMR Spectroscopic Characterization of Maleic Anhydride -  $\square$ -Methylstyrene Adducts  
*Magnetic Resonance in Chemistry* **30**, 207 - 215 (1992)
11. G. Großmann, B. Schwab, A. John, H. Komber, G. Jeschke, J. Sieler  
Crystal structure, solid state NMR, and quantum chemical model calculations of bis-(diethoxy-thiophosphoryl)-trisulfane  
*Phosphorus, Sulfur, and Silicon*, **78**, 297 - 308 (1993)
12. G. Großmann, H. Komber  
NMR Investigations on Diastereomeric Mixtures of Bis(Dialkoxyphosphoryl) Sulfanes and Polysulfanes  
*Main Group Chemistry News*, **1**, 6 - 15 (1993)
13. S. Bauer, W. Ren, S. Yilmaz, W. Wirges, W.-D. Molzow, R. Gerhard-Multhaup, U. Oertel, B. Hänel, L. Häußler, H. Komber, K. Lunkwitz  
Nonlinear optical side-chain polymer with high thermal stability and its pyroelectric thermal analysis  
*Appl. Phys. Lett.*, **63**, 2018 - 2020 (1993)

14. M. Rillich, H. Komber, F. Böhme  
Polymers containing formamidine groups  
1. Synthesis and characterization of aliphatic polyformamidines  
*Polym. Bull.*, **31**, 381 -385 (1993)
15. H. Komber, G. Großmann  
A conformational study of bis(5,5-dimethyl-2-X-1,3,2-dioxaphosphorinan-2-yl) sulfanes and polysulfanes using NMR and IR spectroscopy  
*Phosphorus, Sulfur, and Silicon*, **83**, 233 - 242 (1993)
16. R. Gerhard-Multhaupt, S. Bauer, W.-D. Molzow, W. Ren, W. Wirges, S. Yilmaz, U. Oertel, L. Häußler, H. Komber, K. Lunkwitz  
Electro-optical and pyroelectrical thermal analysis of novel nonlinear optical side-chain polymers with high thermal stability  
*Proc. SPIE*, Band 2042, 384 - 391 (1993)
17. D. Pospiech, H. Komber, D. Voigt, L. Häußler, E. Meyer, G. Schauer, D. Jehnichen, F. Böhme  
Thermotropic elastomers with poly(oxy-1,4-butanediyl) units in the main chain  
*Makromol. Chem. Phys.*, **195**, 2633 - 2651 (1994)
18. F. Böhme, H. Komber, D. Leistner, M. Rätzsch  
A modified synthesis of liquid-crystalline poly(ethylene terephthalate-co-oxybenzoate)s with completely random chain structures  
*Macromol. Chem. Phys.*, **195**, 3233 - 3243 (1994)
19. M. Rillich, L. Häußler, H. Komber, F. Wittig, F. Böhme  
Polymers containing formamidine groups  
2. Synthesis of polyformamidines derived from triethyl orthoformate and aromatic diamines  
*Polymer Bulletin*, **33**, 397 -404 (1994)
20. M. J. Potrzebowski, G. Großmann, J. Blaszczyk, M. W. Wieczorek, J. Sieler, P. Knopik, H. Komber  
X-Ray and Solid State NMR Studies of Bis(5,5-dimethyl-2-thioxo-1,3,2-dioxaphosphorinan-2-yl) Disulfide and Diselenide  
*Inorg. Chem.* **33**, 4688 - 4695 (1994)

21. H. Komber

The  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of alternating ethene-maleic anhydride copolymer and the corresponding diacid and sodium salt

Macromol. Chem. Phys., **196**, 669 - 678 (1995)

22. M. Gedan-Smolka, D. Jehnichen, H. Komber, D. Voigt, F. Böhme, M. Rätzsch

Fully aromatic copoly(ester-imide)s with high thermal stability

Angew. Makromol. Chem., **229**, 159 -174 (1995)

23. M. Rillich, D. Jehnichen, H. Komber, F. Böhme

Polymers containing formamidine groups

4. Copolyformamidines prepared from triethyl orthoformate, benzidine and various diamines

Macromol. Chem. Phys., **196**, 1635 - 1644 (1995)

24. F. Böhme, M. Rillich, H. Komber

Polymers containing formamidine groups

5. Formation of a cyclic formamidine trimer by the condensation reaction of 2,6-diaminopyridine with triethyl orthoformate

Macromol. Chem. Phys., **196** (10), 3209 - 3216 (1995)

25. H. Komber

NMR Conformational Study of the Neutralisation of *meso*- and *racemic*-2,3-Dimethyl- and 2,3-Diethylsuccinic Acid in Aqueous Solution

J. Chem. Soc., Perkin Trans. 2, **1995**, 1923 - 1927

26. T. Uhlich, G. Tomaschewski, H. Komber

Synthesis of a Hydrophobised and Photocrosslinkable Prepolymer Based on Poly(vinyl alcohol)

Reactive & Functional Polymers, **28**, 55 - 60 (1995)

**1996 - 2000**

27. H. Komber

The  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of alternating isobutene/maleic anhydride copolymer and the corresponding acid and sodium salt - a stereochemical analysis

Macromol. Chem. Phys., **197** (1), 343 - 353 (1996)

28. T. Rische, S. Zschoche, H. Komber  
Grafting of maleic anhydride onto poly(tetrahydrofuran)  
Macromol. Chem. Phys., **197** (3), 981 - 990 (1996)
29. S. Reinhardt, H. Komber, V. Steinert  
Investigations on the dissociation behaviour of hydrolyzed alternating copolymers of maleic anhydride and alkenes -  $^{13}\text{C}$  NMR spectra and potentiometric titrations  
J. Polym. Sci., Chem. Ed., 34 (12), 2415 - 2419 (1996)
30. D. Pospiech, L. Häußler, H. Komber, D. Voigt, D. Jehnichen, A. Janke, A. Baier, K. Eckstein, F. Böhme  
LC multiblock copolymers containing polysulfone segments: 1. Synthesis and morphology  
J. Appl. Polymer Sci, 62 (11), 1819 - 1833 (1996)
31. H. Komber, C. Klinger, F. Böhme  
 $^1\text{H}$ ,  $^{13}\text{C}$  and  $^{15}\text{N}$  nuclear magnetic resonance studies of polyamidines prepared from di(4,4'-aminophenyl) methane and different triethyl orthoesters - polymers with a prototropic tautomerism  
Polymer, 38 (11), 2603 - 2608 (1997)
32. M. Gedan-Smolka, D. Lehmann, S. Cetin, H. Komber  
Kombinierte Härtung von Pulverlacken: Neuartige Vernetzungs-mechanismen zur Steuerung der Filmbildung  
Farbe + Lack, 103, 48 - 56 (1997)
33. K.-J. Eichhorn, D. Voigt, H. Komber, D. Pospiech  
Characterization of a poly(ethersulfone) by on-line coupling of size exclusion chromatography with NMR and FTIR spectroscopy  
Macromol. Symp., 119, 325 - 338 (1997)
34. J. Nagel, U. Oertel, P. Friedel, H. Komber, D. Möbius  
Langmuir-Blodgett layers from Schiff base Copper(II) complexes  
Langmuir, 13 (17), 4693 - 4698 (1997)

35. H. Komber, C. Klinger, F. Böhme

A  $^{15}\text{N}$  CPMAS study of N<sup>1</sup>,N<sup>2</sup>-diarylsubstituted polyformamidine, polyacetamidines and polybenzamidine and model compounds

Macromolecules, 30 (25) 8066 - 8068 (1997)

36. D. Pospiech, K. Eckstein, H. Komber, D. Voigt, F. Böhme, H. R. Kricheldorf

The use of melt polycondensation for synthesis of LC multiblock copolymers

Polym. Prepr., 38 (2), 398 - 399 (1997)

37. K. Werner, H. Komber, S. Reinhardt, V. Steinert

Solution behaviour of hydrophobically modified hydrolysed alternating copolymers of maleic anhydride and propene

European Polymer Journal, 34 (3-4), 327-333 (1998)

38. H. Komber, M. Gruner, H. Malz

$^1\text{H}$  and  $^{13}\text{C}$  signal assignment for the 4-phenyl-1,2,3,4-tetrahydronaphthyl end-group of autopolymerized polystyrene

Macromol. Chem. Phys., Rapid Commun., 19 (2), 83 - 88 (1998)

39. H. Malz, H. Komber, D. Voigt, J. Pionteck

Reactions for selective elimination of TEMPO-end groups in polystyrene

Macromol. Chem. Phys., 199 (4), 583 – 588 (1998)

40. F. Böhme, C. Kunert, C. Klinger, H. Komber

Structural influences on the properties of aromatic polyamidines

Macromolecular Symposia, 128, 183 - 193 (1998)

41. F. Böhme, C. Klinger, H. Komber, L. Häußler, D. Jehnichen

Synthesis and properties of polyamidines

J. Polym. Sci., Part A: Polym. Chem., 36, 929 - 938 (1998)

42. J. Luston, F. Böhme, H. Komber, G. Pompe

Unsaturated 2-oxazoline modification of polyethylene containing carboxylic groups

J. Macromol. Sci., Pure Appl. Chem., A35(7&8), 1045-1054 (1998)

43. D. Pospiech, L. Häußler, K. Eckstein, H. Komber, D. Voigt, D. Jahnichen, E. Meyer, A. Janke, H. R. Kricheldorf  
Design of poly(ester imide)/polysulfone multiblock copolymers and their property profiles  
Designed Monomers and Polymers, 1, 187 - 206 (1998)
44. T. Rische, S. Zschoche, H. Komber  
Structure of grafted products of maleic anhydride and poly(propylene oxide)  
Macromol. Chem. Phys., 199, 1539 - 1545 (1998)
45. G. Maier, C. Zech, B. Voit, H. Komber  
An approach to hyperbranched polymers with a degree of branching of 100%  
Macromol. Chem. Phys., 199 (12), 2655 - 2664 (1998)
46. T. Huber, F. Böhme, H. Komber, J. Kronek, J. Luston, D. Voigt, B. Voit  
New hyperbranched poly(etheramide)s via nucleophilic ring opening of 2-oxazoline containing monomers  
Macromol. Chem. Phys., 200, 126-133 (1999)
47. H.-J. Adler, P. Fischer, A. Heller, I. Jansen, D. Kuckling, H. Komber, D. Lehmann, J. Piontek, D. Pleul, F. Simon  
a) Makromolekulare Chemie 1998  
b) Trends in polymer chemistry 1998  
a) Nachr. Chem. Tech. Lab. 47 (2), 203 -208 (1999)  
b) Acta Polym., 50 (7), 232 -239 (1999)
48. D. Pospiech, K. Eckstein, L. Häußler, H. Komber; K. Grundke, F. Simon, H.-J. Jacobasch  
Hydrophilation of Polysulfone by Formation of Segmented Block Copolymers  
Macromol. Chem. Phys., 200 (6), 1311-1325 (1999)
49. J. Luston, F. Böhme, H. Komber, G. Pompe  
Unsaturated 2-oxazoline end-capping of liquid crystalline polyester by reactive processing and in a solution  
J. Appl. Polym. Sci., 72 (8), 1047 - 1053 (1999)

50. M. Köthe, M. Müller, F. Simon, H. Komber, H.-J. Jacobasch, H.-J. Adler  
Examination of poly(butadiene epoxide)-coatings on inorganic surfaces  
*Colloides and Surfaces, Part A: Physicochem. Eng. Aspects*, 154 (1-2), 75 - 85 (1999)
51. H. Malz, H. Komber, D. Voigt, I. Hopfe, J. Pionteck  
Synthesis of functional polymers by atom transfer radical polymerization  
*Macromol. Chem. Phys.*, 200 (3), 642 - 651 (1999)
52. J. Luston, J. Kronek, F. Böhme, H. Komber  
Synthesis of bis-2-oxazolines containing inner unsaturation and their hydrolysis to phenylene bis-acrylic acids  
*Designed Monomers and Polymers*, 2, 61 - 68 (1999)
53. D. Schmaljohann, H. Komber, B. I. Voit  
Conversion dependence of the structural units and the degree of branching of a hyperbranched polyester based on 4,4-bis-(4'-hydroxyphenyl)pentanoic acid determined by NMR spectroscopy  
*Polymer Preprints*, 40 (1), 580 - 581 (1999)
54. D. Schmaljohann, H. Komber, B. Voit  
Conversion dependence of the structural units and the degree of branching of a hyperbranched polyester based on 4,4-bis-(4'-hydroxyphenyl)pentanoic acid determined by NMR spectroscopy  
*Acta Polymerica*, 50, 196 - 204 (1999)
55. L. Jakisch, F. Böhme, H. Komber, G. Pompe  
Synthesis and thermal polymerization of aromatic 2-oxazolines containing carboxylic groups  
*Macromol. Chem. Phys., Rapid Commun.*, 20 (5), 256 - 260 (1999)
56. J. Luston, F. Böhme, H. Komber  
Synthesis of 2-oxazolines containing allyl groups by phase transfer catalysis  
*Designed Monomers and Polymers*, 2 (4), 325 - 331 (1999)

57. I. Voigt, F. Simon, H. Komber, H.-J. Jacobasch, S. Spange  
Controlled Synthesis of Stable Polyvinylamine/Silica Hybrid Particles by Interfacial Post-Crosslinking-Reactions  
*Coll. & Polym. Sci.*, 278 (1), 48 - 56 (2000)
58. L. Jakisch, H. Komber, L. Häußler, F. Böhme  
A new Bifunctional Coupling Agent: Synthesis and Model Reactions  
*Macromol. Symp.*, 149, 237 - 243 (2000)
59. D. Schmaljohann, J. G. Barratt, H. Komber, B. Voit  
Kinetics of non-ideal Hyperbranched Polymerizations, 1. Simulation of the Structural Units and the Diads  
*Macromolecules*, 33(17), 6284-6294 (2000)
60. A. Kaya, L. Jakisch, H. Komber, G. Pompe, J. Pionteck, B. Voit, U. Schulze  
Synthesis of oxazoline functionalized polypropene using metallocene catalysts  
*Macromol. Rapid Comm.*, 21(17), 1267-1271 (2000)
61. D. Appelhans, H. Komber, D. Voigt, L. Häußler, B. I. Voit  
Synthesis and Characterization of Poly(ether amide) Dendrimers Based on Different Core Molecules  
*Macromolecules*, 33(26), 9494-9503 (2000)
62. D. Pospiech, L. Häußler, K. Eckstein, H. Komber, D. Voigt, A. Janke, A. Gottwald, D. Jehnichen, H. R. Kricheldorf  
LCP - polysulfone multiblock copolymers: Combination of high performance polymers  
in „Functional Materials“, Series Euromat99, Ed. Grassie, K. et al., ISBN 3-527-30254-9 Wiley-VCH, Weinheim, 2000, 292-297
63. G. Maier, C. Zech, B. Voit, H. Komber  
Perfectly branched hyperbranched polymers  
in “Tailored Polymer & Applications”, Eds. Y. Yagci et al., ISBN 90-6764-326-2 VSP, Utrecht, 2000, 99 - 110

**2001 - 2005**

64. M. Eigner, H. Komber, B. Voit  
Hyperbranched poly(triazene ester)s as novel globular photolabile and thermolabile polymers  
*Macromol. Chem. Phys.*, 202 (2), 245-256 (2001)
65. G. Maier, C. Zech, B. Voit, H. Komber  
Hyperbranched Polymers with a Degree of Branching of 100%  
*Macromol. Symp.*, 163, 75 - 86 (2001) - ISSN: 1022-1360 (Wiley-VCH Verlag GmbH)
66. J. Luston, J. Kronek, F. Böhme, H. Komber  
Azo-Group Labelled Polyesters by End-Capping with 2-Oxazoline Derivatives - Preparation  
*Macromol. Symp.*, 164, 105 - 115 (2001) - ISBN (Wiley-VCH Verlag GmbH)
67. O. Monticelli, A. Mariani, B. Voit, H. Komber, R. Mendichi, V. Pitto, D. Tabuani, S. Russo  
Hyperbranched aramids by the  $A_2 + B_3$  vs.  $AB_2$  approach: influence of the reaction conditions on structural development  
*High Perform. Polym.*, 13 (2), S45 - S59 (2001)
68. D. Pospiech, L. Häußler, K. Eckstein, H. Komber, D. Voigt, D. Jehnichen, P. Friedel, A. Gottwald, W. Kollig, H. R. Kricheldorf  
Synthesis and phase separation behavior of high performance multiblock copolymers  
*High Perform. Polym.*, 13 (2), S275 - S292 (2001)
69. C. Kunert, D. Voigt, P. Friedel, H. Komber, F. Böhme  
Polymers containing Formamidine Groups. VI. Structural Influences on the Formation of Cyclic Trimers  
*J. Polym. Sci.: Part A: Polym. Chem.* 39, 1280 - 1287 (2001)
70. D. Schmaljohann, J. G. Barratt, H. Komber, D. Appelhans, B. I. Voit  
Kinetic Studies and Numerical Modeling of Nonideal Hyperbranched Polycondensation Reaction  
*Polymer Materials: Science & Engineering* 84, 526 - 527 (2001) (ISBN 0-8412-3787-5).

71. H. Komber, B. Voit, O. Monticelli, S. Russo  
NMR Studies on a Hyperbranched Aromatic Polyamide from A<sub>2</sub> and B<sub>3</sub> Monomers: Structure and Interactions with Lithium Salts  
Polymer Materials: Science & Engineering 84, 557 - 558 (2001) (ISBN 0-8412-3787-5).
72. H. Komber, B. Voit, O. Monticelli, S. Russo  
<sup>1</sup>H and <sup>13</sup>C NMR Spectra of a Hyperbranched Aromatic Polyamide from p-Phenylene-diamine and Trimesic acid  
Macromolecules, 34 (16), 5487 - 5493 (2001)
73. A. Kaya, L. Jakisch, H. Komber, D. Voigt, J. Pionteck, B. Voit, U. Schulze  
Synthesis of Various Functional Propylene Copolymers Using *rac*-Et[1-Ind]<sub>2</sub>ZrCl<sub>2</sub>/MAO as the Catalyst System  
Macromol. Rapid Commun., 22(12), 972-977 (2001)
74. H. Malz, J. Pionteck, P. Pötschke, H. Komber, D. Voigt, J. Luston, F. Böhme  
2-Oxazoline terminated polystyrene by atom transfer radical polymerization  
Macromol. Chem. Phys., 202 (12), 2148-2154 (2001)
75. J. Kronek, J. Luston, F. Böhme, H. Komber  
Azo-Group Labelled Polyesters by End-Capping with 2-Oxazoline Derivatives – Photochemical Properties  
Macromol. Symp., 170, 301 – 310 (2001)
76. A. V. Tenkovtsev, A. V. Yakimansky, M. M. Dudkina, V. V. Lukoshkin, H. Komber, L. Häussler, F. Böhme  
Ionic Complexes of Bis(hydroxyarylidene)alkanones with Strong Polymeric Bases as a New Class of Third-Order Nonlinear Optical Chromophores  
Macromolecules, 34 (20), 7100 – 7107 (2001)
77. U. Oertel, D. Appelhans, P. Friedel, D. Jehnichen, H. Komber, B. Pilch, B. Hänel, B. Voit  
Excitation energy transfer between a first generation dendrimer and a pyrene derivative in LB multilayers  
Langmuir, 18 (1), 105 – 111 (2002)

78. H. Komber, A. Ziemer, B. Voit  
Etherification as side reaction in the hyperbranched polycondensation of 2,2-bis(hydroxymethyl)propionic acid  
*Macromolecules*, 35 (9), 3514 – 3519 (2002)
79. F. Böhme, Ch. Kunert, H. Komber, D. Voigt, P. Friedel, M. Khodja, H. Wilde  
Polymeric and Macroyclic Ureas Based on Meta-Substituted Aromatic Diamines  
*Macromolecules*, 35 (11), 4233 – 4237 (2002)
80. K. Sharavanan, H. Komber, F. Böhme  
Synthesis and Properties of Aliphatic Polyacetamidines  
*Macromol. Chem. Phys.*, 203 (12), 1852-1858 (2002)
81. H. Komber, H.-H. Limbach, F. Böhme, C. Kunert  
NMR Studies of the Tautomerism of Cyclo-tris(4-R-2,6-pyridylformamide) in Solution and in the Solid State  
*J. Am. Chem. Soc.*, 124 (40), 11955 – 11963 (2002)
82. D. Schmaljohann, H. Komber, J. G. Barratt, D. Appelhans, B. I. Voit  
Kinetics of non-ideal Hyperbranched Polymerizations,  
2. Kinetic Analysis of the Polycondensation of 3,5-Bis(trimethylsiloxy)-benzoylchloride using NMR Spectroscopy  
*Macromolecules*, 36 (1), 97 – 108 (2003)
83. E. J. Onah, U. Oertel, L. Häußler, D. Voigt, C. Froeck, H. Komber, B. I. Voit, K. Lunkwitz  
Fluorine containing poly(amide-imide)s: synthesis and formation of Langmuir-Blodgett monolayers  
*Europ. Polym. J.*, 39(1), 127 – 134 (2003)
84. L. Jakisch, H. Komber, F. Böhme  
Multifunctional Coupling Agents: Synthesis and Model Reactions  
*J. Polym. Sci.: Part A: Polym. Chem.*, 41, 655 – 667 (2003)

85. J. C. Rueda, H. Komber, J. C. Cedron, B. Voit, G. Shevstova  
Synthesis of New Hydrogels by Copolymerization of Poly(2-methyl-2-oxazoline) Bis(macromonomers) and N-Vinylpyrrolidone  
Macromol. Chem. Phys., 204 (7), 947 - 953 (2003)
86. J. Rueda, R. Suica, H. Komber, B. Voit  
Synthesis of New Polymethyloxazoline Hydrogels by the “Macroinitiator” Method  
Macromol. Chem. Phys., 204 (7), 954 - 960 (2003)
87. U. Schulze, T. Fonagy, H. Komber, G. Pompe, J. Pionteck, B. Ivan  
Synthesis of Poly(propylene-g-styrene) Graft Copolymers by Metallocene Catalyzed Copolymerization of Propene with Allyl-terminated Polystyrene Macromonomer Obtained via Quasiliving Atom Transfer Radical Polymerization and the Effect of the Grafts on Blending Polypropylene with Polystyrene  
Macromolecules, 36, 4719 – 4726 (2003)
88. D. Tabuani, O. Monticelli, H. Komber, S. Russo  
Preparation and Characterisation of Pd Nanoclusters within Hyperbranched Aramids Templates to be used in Homogeneous Catalysis  
Macromol. Chem. Phys., 204 (12), 1576 - 1583 (2003)
89. D. Pospiech, H. Komber, D. Voigt, D. Jehnichen, L. Häußler, A. Gottwald, W. Kollig, K. Eckstein, A. Baier, K. Grundke  
Synthesis and characterization of semiflourinated polymers and block copolymers  
Macromol. Symp., 199 (1), 173 - 186 (2003)
90. C. Clausnitzer, B. Voit, H. Komber, D. Voigt  
Poly(ether amide) Dentrimers via Nucleophilic Ring opening Addition Reactions of Phenol Groups toward Oxazolines: Synthesis and Characterization  
Macromolecules, 36, 7065 - 7074 (2003)
91. O. Monticelli, S. Fiori, A. Mariani, S. Russo, H. Komber  
Synthesis, characterisation and properties of aramid copolymers prepared from AB and AB<sub>2</sub> monomers  
e-Polymers, 2003, no. 053 (18 pages) (2003)

92. A. Taeger, C. Vogel, D. Lehmann, D. Jehnichen, H. Komber, J. Meier-Haack, N. A. Ochoa, S. P. Nunes, K.-V. Peinemann  
Ion exchange membranes Derived from sulfonated polyaramides  
Reactive & Functional Polymers, 57, 77 - 92 (2003)
93. G. Schmack, B. Tändler, G. Opitz, R. Vogel, H. Komber, L. Häußler, D. Voigt, S. Weinmann, M. Heinemann, H.-G. Fritz  
High-Speed Melt Spinning of Various Grades of Polylactides  
Jour. Appl. Polym. Sci., 91, 800-806 (2004)
94. A. Kowalcuk-Bleja, B. Trzebicka, H. Komber, B. Voit, A. Dworak  
Controlled radical polymerization of p-(iodomethyl)styrene – a route to branched and star-like structures  
Polymer, 45, 9 – 18 (2004)
95. K. Sharavanan, H. Komber, D. Fischer, F. Böhme  
Hydrolytic degradation of polyamidines and its potential application in controlled release of active agents  
Polymer, 45, 2127 – 2132 (2004)
96. T. Hoffmann, D. Pospiech, L. Häußler, A. John, P. Friedel, H. Komber, D. Voigt, P. Werner, V. Altstädt  
Synthesis and Phase Separation of PEEK / PSU Multiblock Copolymers  
High Perform. Polym., 16 (1), 3 - 20 (2004)
97. M. Abdelrehim, H. Komber, J. Langenwalter, B. Voit, B. Bruchmann  
Synthesis and Characterization of Hyperbranched Poly(urea-urethane)s Based on AA\* and B<sub>2</sub>B\* Monomers  
J. Polym. Sci. A: Polym. Chem., 42, 3062 – 3081 (2004)
98. A. Scheel, H. Komber, B. Voit  
Hyperbranched Thermolabile Polycarbonates Derived from A<sub>2</sub> + B<sub>3</sub> Monomer system  
Macromol. Symp., 210 (1), 101 – 110 (2004)

99. V. Bhadraiah Sadhu, J. Pionteck, D. Voigt, H. Komber, B. Voit  
Synthesis of Halogen-Free Amino-Functionalized Polymethyl Methacrylate by Atom Transfer Radical Polymerization (ATRP)  
Macromol. Symp., 210 (1), 147 – 155 (2004)
100. A. Scheel, H. Komber, B. Voit  
Novel Hyperbranched Poly([1,2,3] Triazole)s via 1,3-Dipolar Cycloaddition Derived from AB<sub>2</sub> Monomers  
Macromol. Rapid. Commun., 25, 1175 – 1180 (2004)
101. D. Appelhans, V. Stastny, H. Komber, D. Voigt, B. Voit, P. Lhoták, I. Stibor  
Novel dendritic cores based on thiocalix[4]arene derivatives  
Tetrahedron Letters, 45 (38), 7145-7149 (2004)
102. M. M. Dudkina, A. V. Tenkovtsev, H. Komber, L. Häußler, F. Böhme  
Competitive Influence of Carboxylic Groups in Ionic Complex Formation of 4-Hydroxybenzylidene Alkanones with Polyamidines  
Macromolecules, 37 (22), 8389 – 8393 (2004)
103. V. Bhadraiah Sadhu, J. Pionteck, D. Voigt, H. Komber, D. Fischer, B. Voit  
Atom Transfer Radical Polymerization: A Strategy for the Synthesis of Halogen-Free Amino-Functionalized Poly (methyl methacrylate) in a One-pot Reaction  
Macromol. Chem. Phys., 205 (17), 2356 – 2365 (2004)
104. L. Jakisch, H. Komber, R. Wursche, F. Böhme  
Multifunctional Coupling Agents. II. Chain Extension and Terminal Group Modification of Polyamides  
J. Appl. Polym. Sci. 94 (5), 2170 – 2177 (2004)
105. J. C. Rueda, H. Komber, B. Voit  
Synthesis of New Amphiphilic and Lypophilic Polymer Networks Containing 2-Methyl- and 2-Nonyl-2-oxazoline by the “Macroinitiator” Method  
J. Polym. Sci.: Part A: Polym. Chem. , 43(1), 122 – 128 (2005)

106. S. Gramm, H. Komber, D. Schmaljohann

Copolymerization Kinetics of N-Isopropylacrylamide and Diethylene Glycol Monomethylether Monomethacrylate Determined by Online NMR spectroscopy

J. Polym. Sci.: Part A: Polym. Chem., 43 (1), 142 – 148 (2005)

107. D. Pospiech, H. Komber, D. Jehnichen, L. Häussler, K. Eckstein, H. Scheibner, A. Janke, H. R. Kricheldorf, O. Petermann

Multiblock Copolymers of L-Lactide and Trimethylene Carbonate

Biomacromolecules, 6(1), 439 – 446 (2005)

108. H. Komber, V. Steinert

Isomerisation of *Erythro*- and *Threo*-Succinate Units in Alternating Alkene–Maleic Acid Copolymers: A Promising Route to New Microstructures

Macromol. Rapid Commun., 26(3), 168-171 (2005)

109. T. Hoffmann, D. Pospiech, L. Häußler, H. Komber, D. Voigt, C. Harnisch, C. Kollann, M. Ciesielski, M. Döring, R. Perez-Graterol, J. Sandler, V. Altstädt

Novel Phosphorous-Containing Aromatic Polyethers - Synthesis and Characterization

Macromol. Chem. Phys., 206(4), 423-431 (2005)

110. D. Appelhans, H. Komber, R. Kirchner, J. Seidel, C.-F. Huang, D. Voigt, D. Kuckling, F.-C. Chang, B. Voit

Polypeptide-Shelled Poly(propylene imine) Dendrimers and Their Complexing Properties towards Copper(II) Ions

Macromol. Rapid Commun., 26(8), 586-591 (2005)

111. D. Appelhans, Z.-G. Wang, S. Zschoche, R.-C. Zhuang, L. Häußler, P. Friedel, F. Simon, D. Jehnichen, K. Grundke, K.-J. Eichhorn, H. Komber, B. Voit

Bulk and Surface Properties of Maleimide Copolymers: Effekt of Fluorinated Side Chains

Macromolecules 38(5); 1655-1664 (2005)

112. H. Stephan, G. Geipel, D. Appelhans, G. Bernhard, D. Tabunai, H. Komber, B. Voit

Pegylation of 1,4,8,11-tetraazacyclotetradecane (cyclam) and its Cu(II) complexation

Tetrahedron Letters 46(18), 3209-3212 (2005)

113. J. C. Rueda, S. Zschoche, H. Komber, D. Schmaljohann, B. Voit

Synthesis and Characterization of Thermo-Responsive Graft Copolymers of NIPAAm and 2-Alkyl-2-oxazolines by the "Grafting from" Method

Macromolecules 38(17); 7330-7336 (2005)

113a. J. C. Rueda, S. Zschoche, H. Komber, D. Schmaljohann, B. Voit

Sintesis y Caracterizacion de Polimeros Termosensibles

Revista de Quimica PUCP 20(1-2), 41 – 46 (2006)

114. D. Appelhans, M. Smet, G. Khimich, H. Komber, D. Voigt, P. Lhotak, D. Kuckling, B. Voit  
Lysine dendrimers based on thiocalix[4]arene core moieties as molecular scaffolds for supramolecular host systems

New J. Chem. 29, 1386 – 1389 (2005)

115. H. Mart, U. Oertel, H. Komber, L. Häussler, F. Böhme  
Ionic Interactions in Blends of Polyamidines and Proton Donor Terminated Poly(alkylene ether)s

Macromolecules 38(19), 8051-8057 (2005)

## 2006 – 2010

116. F. Böhme, H. Komber, S. H. Jafari

Synthesis and characterization of a novel unsaturated polyester based on poly(trimethylene terephthalate)

Polymer 47, 1892 – 1898 (2006)

117. R. T. S. Muthu Lakshmi, J. Meier-Haack, K. Schlenstedt, H. Komber, V. Choudhary, I. K. Varma

Synthesis, characterisation and membrane properties of sulphonated poly(aryl ether sulphone) copolymers

Reactive & Functional Polymers 66, 634-644 (2006)

118. R. Grombe, M.-F. Gouzy, M. Nitschke, H. Komber, C. Werner

Preparation and characterization of glycosylated maleic anhydride copolymer thin films

Colloids and Surfaces A: Physicochem. Eng. Aspects, 284-285, 295-300 (2006)

119. H. Komber, K. Stumpe, B. Voit  
NMR Study of Hyperbranched Polyphenylenes from the AB<sub>2</sub>, (AB<sub>2</sub>+AB) and (A<sub>2</sub>+B<sub>3</sub>) Methods  
Macromol. Chem. Phys., 207(20), 1814-1824 (2006)
120. K. Stumpe, H. Komber, B. Voit  
Novel Branched Polyphenylenes based on A<sub>2</sub>/B<sub>3</sub> and AB<sub>2</sub>/AB Monomers via Diels-Alder Cycloaddition  
Macromol. Chem. Phys., 207(20), 1825-1833 (2006)
121. B. T. Dung, L. Jakisch, H. Komber, L. Häußler, B. Voit, N. D. Nghia, F. Böhme  
Multifunctional Coupling Agents: 3. Segmented Block Copolymers Based on Carboxy-Terminated Poly(propylene oxide) and Amino-Terminated Polyamide 12  
Macromol. Chem. Phys., 207(21), 1953-1964 (2006)
122. U. Oertel, M. M. Dudkina, H. Komber, B. Pilch, A. V. Tenkovtsev, F. Böhme  
A spectroscopic study on the dissociation behavior of 4-hydroxybenzylideneacetone type NLO chromophores in the presence of sodium hydroxide  
Optical Materials, 29(4), 377-385 (2006)
123. D. Fischer, K. Sahre, M. Abdelrehim, B. Voit, V. B. Sadhu, J. Pionteck, H. Komber, J. Hutschenreuter  
Process monitoring of polymers by in-line ATR-IR, NIR and RAMAN spectroscopy and ultrasonic measurements  
Comptes Rendus Chimie, 9(11-12), 1419-1424 (2006)
124. O. Hien, H. Komber, B. I. Voit, N. Krasteva, A. Yasuda, T. Vossmeyer  
Hyperbranched polythioethers: preparation and use in gold nanoparticle composite sensor films  
Journal of Nanostructured Polymers and Nanocomposite, 2 (4), 109 – 120 (2006)
125. T. Fonagy, U. Schulze, H. Komber, D. Voigt, J. Pionteck, B. Ivan  
Poly(propylene-g-styrene) graft copolymers with well-defined microstructure by metallocene catalyzed copolymerization of propylene with allyl-terminated polystyrene macromonomers  
Macromolecules, 40 (5), 1401-1407 (2007)
126. T. Fonagy, U. Schulze, H. Komber, D. Voigt, J. Pionteck, B. Ivan

Well-defined poly(propylene-g-styrene) graft copolymers by combining quasiliving ATRP and metallocene catalysis: A semi-combinatorial approach

Polymer Preprints 48, 207-208 (2007)

127. A. Savitsky, A. V. Tenkovtsev, H. Komber, U. Oertel, F. Böhme

Synthesis and ionic interactions of a proton donor terminated polyalkylene ethers

Macromol. Rapid Commun., 28(5), 641-645 (2007)

128. H. Komber, K. Stumpe, B. Voit

The Rotation of Pentaphenylphenyl Groups and their Terminal Phenyl Groups: a Variable-Temperature <sup>1</sup>H NMR Study on an Albatrossene and a Three-bladed Molecular Propeller

Tetrahedron Lett., 48 (15), 2655-2659 (2007)

129. D. Appelhans, Y. Zhong, H. Komber, P. Friedel, U. Oertel, U. Scheler, N. Morgner, D. Kuckling, S. Richter, J. Seidel, B. Brutschy, B. Voit

Oligosaccharide-Modified Poly(propyleneimine) Dendrimers: Synthesis, Structure Determination and Cu(II) Complexation

Macromol. Biosci., 7 (3), 373-383 (2007)

130. Z. Özyürek, H. Komber, S. Gramm, D. Schmaljohann, A. H. E. Müller, B. Voit

Thermoresponsive Glycopolymers via Controlled Radical Polymerization

Macromol. Chem Phys. 208 (10), 1035-1049 (2007)

131. S. Fleischmann, H. Komber, D. Appelhans, B. Voit

Synthesis of Functionalized NMP Initiators for Click Chemistry: A Versatile Method for the Preparation of Functionalized Polymers and Block Copolymers

Macromol. Chem Phys. 208 (10), 1050-1060 (2007)

132. L. Jakisch, H. Komber, F. Böhme

Multifunctional coupling agents: 5. Introduction of a new coupling agent for selective coupling of hydroxy and amino group containing polymers.

Macromol. Mat. Engin. 292 (5), 557-570 (2007)

133. V. Senkovskyy, N. Khanduyeva, H. Komber, U. Oertel, M. Stamm, D. Kukling, A. Kiriy

Conductive Polymer Brushes of Regioregular Head-to-Tail Poly(3-alkylthiophenes) via Catalyst-Transfer Surface-Initiated Polycondensation

J. Am. Chem. Soc., 129 (20), 6626-6632 (2007)

134. J. Meier-Haack, H. Komber, C. Vogel, W. Butwilowski, K. Schlenstedt, D. Lehmann

Side-Chain Sulfonated Poly(arylene ether)s for Fuel Cell Applications

Macromol. Symp. 254 (1), 322 – 328 (2007)

135. B. Voit, S. Fleischmann, H. Komber, A. Scheel, K. Stumpe

Cycloaddition Reactions and Dendritic Polymer Architectures - A Perfect Match

Macromol. Symp. 254 (1), 16 – 24 (2007)

136. A. Reisch, H. Komber, B. Voit

Kinetic Analysis of Two Hyperbranched A<sub>2</sub>+B<sub>3</sub> Polycondensation Reactions by NMR Spectroscopy

Macromolecules 40 (19), 6846 - 6858 (2007)

137. D. Pospiech, A. Korwitz, H. Komber, D. Voigt, D. Jehnichen, J. Müller, A. Janke, T. Hoffmann, B. Kretschmar

In situ Synthesis of Poly(ethylene terephthalate)/layered Silicate Nanocomposites by Polycondensation

High Perform. Polym. 19 (10), 565 – 580 (2007)

138. F. Böhme, L. Jakisch, H. Komber, R. Wursche

Multifunctional coupling agents: 4. Block copolymers based on amino terminated polyamide 12 and carboxy terminated poly(butane terephthalate)

Polymer Degradation and Stability, 92 (12), 2270 – 2277 (2007)

139. R. K. Narayanan, A. K. Hijazi, H. Komber, B. Voit, S. Zschoche, F. E. Kühn, O. Nukyen, M. Walter, P. Hanefeld

Synthesis of highly reactive polyisobutylenes using solvent-ligated manganese (II) complexes as catalysts

J. Polym Sci. Part A: Polym. Chem., 45 (23), 5636 – 5648 (2007)

140. J. C. Rueda, K. Contreras, R. Coello, M. Lomer, H. Komber, S. Zschoche, B. Voit

## Characterization of new thermo-responsive hydrogels for optical sensing applications

Proc. of SPIE 6572, 65720T-1 – 65720-7 (2007)

141. M. Millaruelo, V. Steinert, H. Komber, R. Klopsch, B. Voit  
Synthesis of Vinylphosphonic Acid Anhydrides and their Copolymerization with Vinylphosphonic Acid  
*Macromol. Chem Phys.*, 209 (4), 366-374 (2008)
142. H. Komber, V. Steinert, B. Voit  
<sup>1</sup>H, <sup>13</sup>C and <sup>31</sup>P NMR Study on Poly(vinylphosphonic acid) and its Dimethylester  
*Macromolecules*, 41 (6), 2119-2125 (2008)
143. U. Schulze, D. Pospiech, H. Komber, L. Häussler, D. Voigt, M. Eschner  
Synthesis and properties of propene copolymers with ether comonomers  
*Europ. Polym. J.*, 44 (3), 694-703 (2008)
144. M. Farmahini-Farahani, S.H. Jafari, H.A. Khonakdar, F. Böhme, H. Komber, A. Yavari, M. Tarameshloo  
Investigation of exchange reactions and rheological response of the reactive blends of poly(trimethylene terephthalate) and phenoxy resin  
*Polymer International* 57 (4), 612-617 (2008)
145. M. Messerschmidt, M. Millaruelo, H. Komber, L. Häussler, B. Voit, T. Krause, M. Yin, W.-D. Habicher  
Synthesis of Partially Protected Block Copolymers Based on 4-Hydroxystyrene Using NMRP and a Sequence of Polymer Analogous Reactions  
*Macromolecules* 41 (8), 2821-2831 (2008)
146. S. Fleischmann, H. Komber, B. Voit  
Diblock Copolymers as Scaffolds for Efficient Functionalization via Click Chemistry  
*Macromolecules*, 41 (14), 5255-5264 (2008)
147. B. Klajnert, D. Appelhans, H. Komber, N. Morgner, S. Schwarz, S. Richter, B. Brutschy, M. Ionov, A. K. Tonkikh, M. Bryszewska, B. Voit  
The Influence of Densely Organized Maltose Shells on the Biological Properties of Poly(propylene imine) Dendrimers: New Effects Dependent on Hydrogen Bonding

- Chem. Eur. J., 14 (23), 7030-7041 (2008)
148. M. Bräuer, B. Tändler, H. Komber, G. Pompe, C. Bellmann, H. Brünig, C. Hess  
Beiträge zum Reaktionsmechanismus des Elastanfaserschmelzspinnens nach dem Vernetzerverfahren  
Kautschuk, Gummi, Kunststoffe, 61 (10), 531-539 (2008)
149. J. C. Cuggino, C. I. Alvarez Igarzabal, J. C. Rueda, L. M. Quinzani, H. Komber, M. C. Strumia  
Synthesis and characterization of new hydrogels through copolymerization of N-acryloyl-tris-(hydroxymethyl) aminomethane and different crosslinking agents  
Europ. Polym. J., 44 (11), 3548-3555 (2008)
150. Z. Wang, D. Appelhans, A. Synytska, H. Komber, F. Simon, K. Grundke, B. Voit  
Studies of Surface Segregation and Surface Properties of N-pentylperfluorooctaneamide End-Capped Semicrystalline Poly(butylene terephthalate) Films  
Macromolecules, 41 (22), 8557-8565 (2008)
151. F. Schallauski, M. Erber, H. Komber, A. Lederer  
An Easy Strategy for the Synthesis of Well-Defined Aliphatic-Aromatic Hyperbranched Polyesters  
Macromol. Chem Phys., 209 (22), 2331-2338 (2008)
152. D. Pospiech, D. Jehnichen, H. Komber, A. Korwitz, A. Janke, T. Hoffmann, B. Kretschmer, L. Häußler, U. Reuter, M. Döring, S. Seibold, R. Perez-Graterol, J. K. W. Sandler, V. Altstädt, F. Bellucci, G. Camino  
New polymers for tailor-made nanocomposites  
J. of Nanostructured Polymers and Nanocomposites, 4 (2), 62-75 (2008)
153. I. Aravind, K.-J. Eichhorn, H. Komber, D. Jehnichen, N. E. Zafeiropoulos, K. H. Ahn, Y. Grohens, M. Stamm, S. Thomas  
A study on Reaction-Induced Miscibility of Poly(trimethylene terephthalate)/Polycarbonate Blends  
J. Phys. Chem. B 113 (6), 1569-1578 (2009) DOI: [10.1021/jp805204m](https://doi.org/10.1021/jp805204m)

154. A. Ghosh, S. Banerjee, H. Komber, K. Schneider, L. Häußler, B. Voit  
Synthesis and characterization of fluorinated poly(imide siloxane) block copolymers  
*Europ. Polym. J.*, 45 (5), 1561 – 1569 (2009)
155. D. Appelhans, H. Komber, M. Abdul Quadir, S. Richter, S. Schwarz, J. van der Vlist, A. Aigner, M. Müller, K. Loos, J. Seidel, K.-F. Arndt, R. Haag, B. Voit  
Hyperbranched PEI with Various Oligosaccharide Architectures: Synthesis, Characterization, ATP Complexation, and Cellular Uptake Properties  
*Biomacromolecules*, 10 (5), 1114 - 1124 (2009) DOI: [10.1021/bm801310d](https://doi.org/10.1021/bm801310d)
156. J. Hegewald, J. Pionteck, L. Häußler, H. Komber, B. Voit  
End-Functionalized Polystyrene by ATRP: A Facile Approach to Primary Amino and Carboxylic Acid Terminal Groups  
*J. Polym Sci.: Part A: Polym. Chem.* 47 (15), 3845 – 3859 (2009)
157. J. Stadermann, S. Fleischmann, M- Messerschmidt, H. Komber, B. Voit  
Multifunctional Block Copolymers Based on Styrene Derivatives  
*Macromol. Symp.*, 275-276, 35 - 42 (2009)
158. S. Banerjee, H. Komber, L. Häußler, B. Voit  
Synthesis and Characterization of Hyperbranched Poly(arylene ether)s from a New Activated Trifluoro B<sub>3</sub> Monomer Adopting an A<sub>2</sub>+B<sub>3</sub> Approach  
*Macromol. Chem Phys.*, 210 (16), 1272-1282 (2009)
159. S.-H. Jafari, H. A. Khonakdar, A. Asadinezhad, L. Häußler, F. Böhme, H. Komber  
On the Interrelationship of Transreactions with Thermal Properties and Dynamic Mechanical Analysis of PTT/PEN Blends  
*Macromol. Chem Phys.*, 210 (16), 1291-1302 (2009)
160. S. Fleischmann, A. Kiriy, V. Bocharova, C. Tock, H. Komber, B. Voit  
Synthesis of Dendronized Diblock Copolymers via Click Chemistry: The Effect of the Dendronization on Phase Separation Behaviour  
*Macromol. Rapid Comm.*, 30 (17), 1457 – 1462 (2009)
161. U. Oertel, H. Mart, H. Komber, F. Böhme

Media effects on the optical properties of proton donor group containing azobenzene derivatives

Optical Materials, 32 (1), 54 – 61 (2009)

162. H. Komber, U. Georgi, B. Voit

<sup>1</sup>H and <sup>13</sup>C NMR Spectra of Highly Branched Poly(4-chloromethylstyrene). Signal Assignment, Structure Characterization, and a SCVP Kinetics Study

Macromolecules, 42 (21), 8307 – 8315 (2009)

DOI: [10.1021/ma901614r](https://doi.org/10.1021/ma901614r)

163. U. Oertel, H. Komber, A. V. Tenkovtsev, M. M. Dudkina, A. E. Trofimov, F. Böhme

Ionic pseudopolyrotaxanes bearing a chromophore in the side chain - A spectroscopic study in water  
Polymer, 50 (25), 5876 – 5883 (2009)

164. V. Senkovskyy, R. Tkachov, T. Beryozkina, H. Komber, U. Oertel, M. Horecha, V. Bocharova, M. Stamm, S. A. Gevorgyan, F. C. Krebs, A. Kiriy

“Hairy” Poly(3-hexylthiophene) Particles Prepared via Surface-Initiated Kumada Catalyst-Transfer Polycondensation

J. Am. Chem. Soc., 131 (45), 16445–16453 (2009)

DOI: [10.1021/ja904885w](https://doi.org/10.1021/ja904885w)

165. E. Kaul, V. Senkovskyy, R. Tkachov, V. Bocharova, H. Komber, M. Stamm, A. Kiriy

Synthesis of a Bifunctional Initiator for Controlled Kumada Catalyst-Transfer Polycondensation/Nitroxide-Mediated Polymerization and Preparation of Poly(3-hexylthiophene)-Polystyrene Block Copolymer Therefrom

Macromolecules, 43 (1), 77–81 (2010)

DOI: [10.1021/ma902354j](https://doi.org/10.1021/ma902354j)

166. G. W. Rabe, H. Komber, L. Häußler, K. Kreger, G. Lattermann

Polymerization of Diethyl Vinylphosphonate mediated by Rare-earth Tris(amide) Compounds

Macromolecules, 43 (3), 1178 – 1181 (2010)

DOI: [10.1021/ma902068n](https://doi.org/10.1021/ma902068n)

167. U. Schulze, M. Johannsen, R. Haschick, H. Komber, A. Lederer, B. Voit

Synthesis of poly(10-undecene-1-ol) by metallocene-catalyzed polymerization

Europ. Polym. J., 46 (3), 578 – 586 (2010)

168. A. Ghosh, B. Banerjee, H. Komber, A. Lederer, L. Häußler, B. Voit

Extremely High Molar Mass Hyperbranched Poly(arylene ether)s from a New Semifluorinated AB<sub>2</sub> Monomer by an Unusual AB<sub>2</sub>+A<sub>2</sub> Polymerization Approach

Macromolecules, 43 (6), 2846 – 2854 (2010)

DOI: [10.1021/ma9028322](https://doi.org/10.1021/ma9028322)

169. J. C. Rueda, S. Zschoche, H. Komber, F. Krahl, K.-F. Arndt, B. Voit

New Thermo-Sensitive Graft Copolymers Based on a Poly(N-isopropylacrylamide) Backbone and Functional Polyoxazoline Grafts with Random and Diblock Structure

Macromol. Chem. Phys., 211 (6), 706 – 716 (2010)

170. D. Appelhans, U. Oertel, R. Mazzeo, H. Komber, J. Hoffmann, S. Weidner, B. Brutschy, B. Voit, M. F. Ottaviani

Dense-shell Glycodendrimers: UV-vis and EPR study of Metal Ion Complexation

Proceedings of the Royal Society A 466; 1489-1513 (2010)

171. J. Stadermann, M. Erber, H. Komber, J. Brandt, K.-J. Eichhorn, M. Bönsch, M. Mertig, B. Voit

Photopatternable Films of Block Copolymers Prepared through Double-Click Reaction

Macromolecules, 43 (7), 3136 – 3140 (2010)

DOI: [10.1021/ma100109t](https://doi.org/10.1021/ma100109t)

172. A. Khalyavina, F. Schallausky, H. Komber, M. Al Samman, W. Radke, A. Lederer

Aromatic-Aliphatic Polyesters with Tailored Degree of Branching Based on AB/AB<sub>2</sub> and ABB\*/AB<sub>2</sub> Monomers

Macromolecules, 43 (7), 3268 – 3276 (2010)

DOI: [10.1021/ma100037n](https://doi.org/10.1021/ma100037n)

173. U. Georgi, M. Erber, J. Stadermann, M. Abulikemu, H. Komber, A. Lederer, B. Voit

New Approaches to Hyperbranched Poly(4-chloromethylstyrene) and Introduction of Various Functional End Groups by Polymer-Analogous Reactions

J. Polym. Sci.: Part A: Polym. Chem., 48 (10), 2224 – 2235 (2010)

174. R. Tkachov, V. Senkovskyy, H. Komber, J.-U. Sommer, A. Kiriy

Random Catalyst Walking Along Polymerized Poly(3-hexylthiophene) chains in Kumada Catalyst-Transfer Polycondensation

J. Am. Chem. Soc. 132 (22), 7803–7810 (2010)

DOI: [10.1021/ja102210r](https://doi.org/10.1021/ja102210r)

175. V. Senkovskyy, T. Beryozkina, V. Bocharova, R. Tkachov, H. Komber, A. Lederer, M. Stamm, N. Severin, J. P. Rabe, A. Kiriy

A Core-First Preparation of Poly(3-alkylthiophene) Stars

Macromol. Symp. 291-292, 17-25 (2010)

176. B. E. Diebl, Y. Li, M. Cokoja, F. E. Kühn, N. Radhakrishnan, S. Zschoche, H. Komber, H. Y. Yeong, B. Voit, O. Nuyken, P. Hanefeld, H.-M. Walter

Synthesis and Application of Molybdenum (III) Complexes Bearing Weakly Coordinating Anions as Catalysts of Isobutylene Polymerization

J. Polym Sci.: Part A: Polym. Chem. 48 (17), 3775 – 3786 (2010)

177. S. Boye, H. Komber, P. Friedel, A. Lederer

Solution properties of selectively modified hyperbranched polyesters

Polymer 51(18), 4110 – 4120 (2010)

178. T. Hoffmann, D. Pospiech, L. Häußler, K. Sahre, H. Komber, C. Harnisch, M. Auf der Landwehr, A. Schäfer, M. Döring

Phosphorus-containing Polysulfones - A Comparative Study

High Performance Polymers, 22 (6), 715 – 741 (2010)

179. V. Senkovskyy, M. Sommer, R. Tkachov, H. Komber, W. T. S. Huck, A. Kiriy

Convenient Route to Initiate Kumada Catalyst-Transfer Polycondensation Using Ni(dppe)Cl<sub>2</sub> or Ni(dppp)Cl<sub>2</sub> and Sterically Hindered Grignard Compounds

Macromolecules 43 (23), 10157 – 10161 (2010)

## 2011

180. H. Satpathi, A. Ghosh, H. Komber, S. Banerjee, B. Voit

Synthesis and characterization of new semifluorinated linear and hyperbranched poly(arylene ether phosphine oxide)s through B<sub>2</sub>+A<sub>2</sub> and AB<sub>2</sub> approaches

Europ. Polymer J., 47 (2), 196 - 207 (2011)

DOI: [10.1016/j.eurpolymj.2010.11.012](https://doi.org/10.1016/j.eurpolymj.2010.11.012)

181. S. Werner, D. Pospiech, D. Jehnichen, K. Eckstein, H. Komber, P. Friedel, A. Janke, F. Näther, U. Reuter, B. Voit, R. Taurino, M. Messori

Synthesis and phase separation behavior of alpha,omega-difunctionalized diblock copolymers

J. Polym Sci.: Part A: Polym. Chem., 49 (4), 926 - 937 (2011) DOI: [10.1002/pola.24505](https://doi.org/10.1002/pola.24505)

182. U. Schulze, K. Sahre, M. Johannsen, H. Komber, B. Voit

Poly(10-undecene-1-ol) characterized by MALDI-TOF MS and NMR spectroscopy

Europ. Polymer J., 47 (3), 352 - 361 (2011) DOI: [10.1016/j.eurpolymj.2010.12.005](https://doi.org/10.1016/j.eurpolymj.2010.12.005)

183. R. Sablong, R. Duchateau, C. E. Koning, D. Pospiech, A. Korwitz, H. Komber, S. Starke, L. Häußler, D. Jehnichen, M. Auf der Landwehr

Incorporation of a flame retardancy enhancing phosphorus-containing diol into poly(butylene terephthalate) *via* solid state polymerisation: A comparative study

Polym. Degrad. Stab., 96(3), 334 – 341 (2011) DOI: [10.1016/j.polymdegradstab.2010.07.001](https://doi.org/10.1016/j.polymdegradstab.2010.07.001)

184. M. Riedel, J. Stadermann, H. Komber, F. Simon, B. Voit

Synthesis, post-modification and self-assembled thin films of pentafluorostyrene containing block copolymers

Eur. Polym. J., 47 (4), 675 – 684 (2011) DOI: [10.1016/j.eurpolymj.2010.10.010](https://doi.org/10.1016/j.eurpolymj.2010.10.010)

185. R. Tkachov, V. Senkovskyy, H. Komber, A. Kiriy

Influence of Alkyl Substitution Pattern on Reactivity of Thiophene-Based Monomers in Kumada Catalyst-Transfer Polycondensation

Macromolecules, 44 (7), 2006 – 2015 (2011) DOI: [10.1021/ma102724y](https://doi.org/10.1021/ma102724y)

186. J. Stadermann, H. Komber, M. Erber, F. Däbritz, H. Ritter, B. Voit

Diblock copolymer formation via self-assembly of cyclodextrin and adamantyl end-functionalized polymers

Macromolecules, 44 (9), 3250 – 3259 (2011) DOI: [10.1021/ma200048a](https://doi.org/10.1021/ma200048a)

187. R. Pötzsch, S. Fleischmann, C. Tock, H. Komber, B. Voit

Combining RAFT and Staudinger Ligation: A Potentially New Synthetic Tool for Bioconjugate Formation

Macromolecules, 44 (9), 3260 – 3269 (2011) DOI: [10.1021/ma2000724](https://doi.org/10.1021/ma2000724)

188. A. Ghosh, S. Banerjee, H. Komber, L. Häußler, K. Schneider, B. Voit

New Semifluorinated Siloxane-Grafted Copolyimides: Synthesis and Comparison with Their Linear Analogs

Macromol. Mater. Eng., 296 (5), 391 – 400 (2011) DOI: [10.1002/mame.201000311](https://doi.org/10.1002/mame.201000311)

189. A. Ghosh, S. Chatterjeeb, S. Banerjeeb, H. Komber, B. Voit  
Linear and Hyperbranched Poly(arylene ether)s from a New Semifluorinated AB Monomer

J. Macromol. Sci., Part A: Pure Appl. Chem., 48 (7), 509 – 517 (2011)  
DOI: [10.1080/10601325.2011.579807](https://doi.org/10.1080/10601325.2011.579807)

190. C. Vogel, H. Komber, A. Quetschke, W. Butwilowski, A. Pötschke, K. Schlenstedt, J. Meier-Haack  
Side-chain sulfonated random and multiblock poly(ether sulfone)s for PEM applications  
Reactive Functional Polym., 71 (8), 828 – 842 (2011) DOI: [10.1016/j.reactfunctpolym.2011.04.006](https://doi.org/10.1016/j.reactfunctpolym.2011.04.006)

191. V. Senkovskyy, M. Sommer, R. Tkachov, H. Komber, M. Heuken, B. Voit, W. T. S. Huck, V. Kataev, A. Petr, A. Kiriy  
Chain-Growth Polymerization of Unusual Anion-Radical Monomers Based on Naphthalene Diimide: A New Route to well-defined n-Type Conjugated Copolymers  
J. Am. Chem. Soc., 133 (49), 19966–19970 (2011) DOI: [10.1021/ja208710x](https://doi.org/10.1021/ja208710x)

192. H. Komber, V. Senkovskyy, R. Tkachov, K. Johnson, A. Kiriy, W. T. S. Huck, M. Sommer  
Ring walking versus trapping of Nickel(0) during Kumada catalyst transfer polycondensation using externally initiated electron-accepting thiophenebenzothiadiazole-thiophene precursors  
Macromolecules, 44 (23), 9164 – 9172 (2011) DOI: [10.1021/ma2018827](https://doi.org/10.1021/ma2018827)

## 2012

193. A. Ghosh, S. Banerjee, D.-Y. Wang, H. Komber, B. Voit  
Synthesis, characterization and properties of new siloxane grafted copolyimides  
J. Appl. Polym. Sci., 123 (5), 2959 – 2967 (2012) DOI: [10.1002/app.34927](https://doi.org/10.1002/app.34927)
194. M. Heuken, H. Komber, B. Voit  
Polystyrene-Based C<sub>60</sub> Acceptor Copolymers through Azide-Alkyne Click Chemistry Approaches  
Macromol. Chem. Phys., 213 (1), 97 – 107 (2012) DOI: [10.1002/macp.201100547](https://doi.org/10.1002/macp.201100547)
195. S. Zschoche, J. C. Rueda, M. Binner, H. Komber, A. Janke, K.-F. Arndt, S. Lehmann, B. Voit  
Reversibly switchable pH- and thermo-responsive core-shell nanogels based on Poly(NiPAAm-*graft*-2-carboxyethyl-2-oxazoline)s

Macromol. Chem. Phys., 213 (2), 215 – 226 (2012) DOI: [10.1002/macp.201100388](https://doi.org/10.1002/macp.201100388)

196. A. Ghosh, D. Bera, D.-Y. Wang, H. Komber, A. K. Mohanty, S. Banerjee, B. Voit  
Synthesis, characterization and properties of new semifluorinated poly(arylene ether phosphine oxides)s  
Macromol. Mater. Eng., 297 (2), 145 – 154 (2012) DOI: [10.1002/mame.201100139](https://doi.org/10.1002/mame.201100139)
197. M. Johannsen, U. Schulze, K. Sahre, H. Komber, B. Voit  
Synthesis of Allyl-Terminated Polar Macromonomers by Metallocene-Catalyzed Polymerizations of 10-Undecene-1-ol  
ACS Macro Lett., 1 (2), 352 – 355 (2012) DOI: [10.1021/mz200185b](https://doi.org/10.1021/mz200185b)
198. J. Stadermann, M. Riedel, H. Komber, F. Simon, B. Voit  
Functionalized Block Copolymers for Preparation of Reactive Self-assembled Surface Patterns  
J. Polym Sci.: Part A: Polym. Chem., 50 (7), 1351 – 1361 (2012) DOI: [10.1002/pola.25901](https://doi.org/10.1002/pola.25901)
199. P. Kohn, S. Huettner, H. Komber, V. Senkovskyy, R. Tkachov, A. Kiriy, R. H. Friend, U. Steiner, W. T. S. Huck, J.-U. Sommer, M. Sommer  
On the role of single regio-defects and polydispersity in regioregular poly(3-hexylthiophene): Defect distribution, synthesis of defect-free chains and a simple model for the determination of crystallinity  
J. Am. Chem. Soc., 134 (10), 4790 – 4805 (2012) DOI: [10.1021/ja210871j](https://doi.org/10.1021/ja210871j)
200. H. Komber, S. Chakraborty, B. Voit, S. Banerjee  
Degree of sulfonation and microstructure of post-sulfonated polyethersulfone studied by NMR spectroscopy  
Polymer, 53 (8), 1624 – 1631 (2012) DOI: [10.1016/j.polymer.2012.02.020](https://doi.org/10.1016/j.polymer.2012.02.020)

201. F. Däbritz, A. Lederer, H. Komber, B. Voit

Synthesis and characterization of two classes of hyperstar polymers bearing hyperbranched cores grafted with linear arms

J. Polym Sci.: Part A: Polym. Chem., 50 (10), 1979 – 1990 (2012) DOI: [10.1002/pola.25972](https://doi.org/10.1002/pola.25972)

202. D. Pospiech, S. Werner, D. Jehnichen, H. Komber, P. Friedel, U. Reuter, S. S. Funari, J. Perlisch, B. Voit

Multifunctionalized methacrylate di- and triblock copolymers: synthesis and nanostructure

J. of Nanostructured Polymers and Nanocomposites, 8 (2), 58 - 66 (2012) Link: [03.08,02,04.html](#)

203. M. Heuken, H. Komber, T. Erdmann, V. Senkovskyy, A. Kiriy, B. Voit

Fullerene-Functionalized Donor-Acceptor Block Copolymers through Etherification as Stabilizers for Bulk Heterojunction Solar Cells

Macromolecules, 45 (10), 4101 – 4114 (2012) DOI: [10.1021/ma300473w](https://doi.org/10.1021/ma300473w)

204. M. Sommer, H. Komber, S. Huettner, R. Mulherin, P. Kohn, N. C. Greenham, W. T. S. Huck

Synthesis, Purification and Characterization of Well-Defined All-Conjugated Diblock Copolymers F8TBT-*b*-P3HT

Macromolecules, 45 (10), 4142 – 4151 (2012) DOI: [10.1021/ma300533k](https://doi.org/10.1021/ma300533k)

205. A. Lederer, T. Hartmann, H. Komber

Sphere-Like Fourth Generation Pseudo-Dendrimers with a Hyperbranched Core

Macromol. Rapid Comm., 33 (17), 1440 – 1444 (2012) DOI: [10.1002/marc.201200223](https://doi.org/10.1002/marc.201200223)

206. V. Senkovskyy, R. Tkachov, H. Komber, A. John, J.-U. Sommer, A. Kiriy

Mechanistic Insight into Catalyst-Transfer Polymerization of unusual Anion-Radical Naphthalene Diimide Monomers: An Observation of Ni(0) Intermediates

Macromolecules, 45 (19), 7770 – 7777 (2012) DOI: [10.1021/ma301797w](https://doi.org/10.1021/ma301797w)

207. N. K. Singha, A. Kavitha, D. J. Haloi, P. Mandal, A. Janke, D. Jehnichen, H. Komber, B. Voit

Effect of Nanoclay on in situ Preparation of "All Acrylate" ABA Triblock Copolymers via ATRP and Their Morphology

Macromol. Chem. Phys., 213 (19), 2034 – 2043 (2012) DOI: [10.1002/macp.201200174](https://doi.org/10.1002/macp.201200174)

208. M. Paolino, F. Ennen, H. Komber, M. Cernescu, A. Cappelli, B. Brutschy, B. Voit, D. Appelhans  
Self-assembly of poly(propylene imine) glycodendrimers: role of aromatic interactions in the formation of necklace- and donut-like nanostructures  
*Polymer Chem.*, 3 (12), 3239 – 3242 (2012) DOI: [10.1039/c2py20649h](https://doi.org/10.1039/c2py20649h)
209. A. Gube, H. Komber, K. Sahre, P. Friedel, B. Voit, F. Böhme  
Formation of oligomeric and macrocyclic ureas based on 2,6-diaminopyridine  
*J. Org. Chem.*, 77 (21), 9620 – 9627 (2012) DOI: [10.1021/jo3015598](https://doi.org/10.1021/jo3015598)
210. S. Boye, D. Appelhans, V. Boyko, S. Zschoche, H. Komber, P. Friedel, P. Formanek, A. Janke, B. Voit, A. Lederer  
pH Triggered Aggregate Shape of Different Generations Lysine-Dendronized Maleimide Copolymers with Maltose Shell  
*Biomacromolecules*, 13 (12), 4222 – 4235 (2012) DOI: [10.1021/bm301489s](https://doi.org/10.1021/bm301489s)
- 2013**
211. M. Sommer, H. Komber  
Spiropyran main-chain conjugated polymers  
*Macromol. Rapid Commun.*, 34 (1), 57 – 62 (2013) DOI: [10.1002/marc.201200688](https://doi.org/10.1002/marc.201200688)
212. J. M. McCarthy, B. Rasines Moreno, D. Filippini, H. Komber, M. Maly, M. Cernescu, B. Brutschy, D. Appelhans, M. S. Rogers  
Influence of Surface Groups on Poly(propylene imine) Aendrimers Antiprion Activity  
*Biomacromolecules*, 14 (1), 27 – 37 (2013) DOI: [10.1021/bm301165u](https://doi.org/10.1021/bm301165u)
213. A. K. Mohanty, E. A. Mistri, S. Banerjee, H. Komber, B. Voit  
Highly fluorinated sulfonated poly(arylene ether sulfone) copolymers: Synthesis and evaluation of proton exchange membrane properties  
*Ind. Eng. Chem. Res.*, 52 (8), 2772 – 2783 (2013) DOI: [10.1021/ie303380a](https://doi.org/10.1021/ie303380a)
214. R. Mukherjee, A. K. Mohanty, S. Banerjee, H. Komber, B. Voit  
Phthalimidine based fluorinated poly(arylene ether sulfone)s copolymer proton exchange membranes  
*J. Membr. Sci.*, 435, 145 – 154 (2013) DOI: [10.1016/j.memsci.2013.01.059](https://doi.org/10.1016/j.memsci.2013.01.059)

215. N. Zhang, L. Jakisch, H. Komber, B. Voit, F. Böhme

Synthesis of multifunctional coupling agents and their selective reactions with hydroxy and amino groups in melt

Tetrahedron, 69 (18), 3656 – 3663 (2013)

DOI: [10.1016/j.tet.2013.03.024](https://doi.org/10.1016/j.tet.2013.03.024)

216. M. Messerschmidt, H. Komber, L. Häußler, C. Hanzelmann, M. Stamm, B. Raether, O. da Costa e Silva, P. Uhlmann

Amphiphilic ABC Triblock Copolymers Tailored via RAFT Polymerization as Textile Surface Modifiers with Dual-Action Properties

Macromolecules, 46 (7), 2616 – 2627 (2013)

DOI: [10.1021/ma302471q](https://doi.org/10.1021/ma302471q)

217. M. Paolino, F. Ennen, S. Lamponi, M. Cernescu, B. Voit, A. Cappelli, D. Appelhans, H. Komber

Cyclodextrin-Adamantane Host-Guest Interactions on the Surface of Biocompatible Adamantyl-Modified Glycodendrimers

Macromolecules, 46 (9), 3215 – 3227 (2013)

DOI: [10.1021/ma400352m](https://doi.org/10.1021/ma400352m)

218. E. A. Mistri, A. K. Mohanty, S. Banerjee, H. Komber, B. Voit

Naphthalene dianhydride based semifluorinated sulfonated copoly(ether imide)s: Synthesis, characterization and proton exchange properties

Journal of Membrane Science, 441, 168 – 177 (2013)

DOI: [10.1016/j.memsci.2013.03.015](https://doi.org/10.1016/j.memsci.2013.03.015)

219. N. Hauptmann, M. Pion, M.-A. Munoz-Fernandez, H. Komber, C. Werner, D. Appelhans, B. Voit

Ni(II)-NTA Modified Poly(ethylene imine) Glycopolymers: Physicochemical Properties and First In Vitro Study of Polyplexes Formed with HIV-Derived Peptides

Macromol. Biosci., 13 (5), 531 – 538 (2013)

DOI: [10.1002/mabi.201200449](https://doi.org/10.1002/mabi.201200449)

220. E. Vacas Córdoba, M. Pion, B. Rasines, D. Filippini, H. Komber, M. Ionov, M. Bryszewska, D. Appelhans, M. Ángeles Muñoz-Fernández,

Glycodendrimers as new tools in the search for effective anti-HIV DC-based immunotherapies

Nanomedicine: Nanotechnology, Biology and Medicine, 9 (7), 972 – 984 (2013)

DOI: [10.1016/j.nano.2013.03.004](https://doi.org/10.1016/j.nano.2013.03.004)

221. C. Langner, J. Meier-Haack, B. Voit, H. Komber

The stepped reaction of decafluorobiphenyl with thiophenol studied by in situ <sup>19</sup>F NMR spectroscopy

Journal of Fluorine Chemistry, 156, 314 – 321 (2013)

DOI: [10.1016/j.jfluchem.2013.07.013](https://doi.org/10.1016/j.jfluchem.2013.07.013)

222. R. Pötzsch, H. Komber, B. C. Stahl, C. J. Hawker, B. I. Voit

Radical Thiol-Yne Chemistry on Diphenylacetylene - Selective and Quantitative Addition Enabling The Synthesis of Hyperbranched Poly(vinyl sulfide)s

Macromol. Rapid Comm., 34(22), 1772-1778 (2013)

DOI: [10.1002/marc.201300707](https://doi.org/10.1002/marc.201300707)

## 2014

223. J. C. Rueda, E. Campos, H. Komber, S. Zschoche, L. Häussler, B. Voit

Synthesis and characterization of new pH- and thermo-responsive hydrogels based on N-isopropylacrylamide and 2-oxazolines

Designed Monomers and Polymers, 17(3), 208-216 (2014)

DOI: [10.1080/15685551.2013.840471](https://doi.org/10.1080/15685551.2013.840471)

224. A. K. Mohanty, S. Banerjee, H. Komber, B. Voit

Imidoaryl biphenol based new fluorinated sulfonated poly(arylene ether sulfone) copolymers and their proton exchange membrane properties

Solid State Ionics, 254, 82-91 (2014)

DOI: [10.1016/j.ssi.2013.11.029](https://doi.org/10.1016/j.ssi.2013.11.029)

225. H. Komber, S. Müllers, F. Lombeck, A. Held, M. Walter, M. Sommer

Soluble and stable alternating main-chain merocyanine copolymers through quantitative spiropyran-merocyanine conversion

Polymer Chemistry, 5(2), 443-453 (2014)

DOI: [10.1039/c3py00853c](https://doi.org/10.1039/c3py00853c)

226. F. Ennen, S. Boye, A. Lederer, M. Cernescu, H. Komber, B. Brutschy, B. Voit, D. Appelhans

Biohybrid structures consisting of biotinylated glycodendrimers and proteins: Influence of the biotin ligand's number and chemical nature on the biotin-avidin conjugation

Polymer Chemistry, 5(4), 1323-1339 (2014)

DOI: [10.1039/C3PY01152F](https://doi.org/10.1039/C3PY01152F)

227. R. Pötzsch, B. C. Stahl, H. Komber, C. J. Hawker, B. I. Voit

High Refractive Index Polyvinylsulfide Materials Prepared By Selective Radical Mono-Addition Thiol-Yne Chemistry

Polymer Chemistry, 5(8), 2911-2921 (2014)

DOI: [10.1039/C3PY01740K](https://doi.org/10.1039/C3PY01740K)

228. W. Liu, R. Tkachov, H. Komber, V. Senkovskyy, M. Schubert, Z. Wei, A. Facchetti, D. Neher, A. Kiriy

Chain-Growth Polycondensation of Perylene Diimide-Based Copolymers: a New Route to Regio-Regular Perylene Diimide-Based Acceptors for All-Polymer Solar Cells and n-Type Transistors

Polymer Chemistry, 5(10), 3404-3411 (2014)

DOI: [10.1039/C3PY01707A](https://doi.org/10.1039/C3PY01707A)

229. S. Kinder, H. Komber, D. Jehnichen, L. Häussler, F. Böhme, M. Garaleh, D. Pospiech, B. Voit, U. Schulze  
Synthesis and characterization of comb-like copolymers based on poly( $\epsilon$ -caprolactone) and poly( $\alpha$ -olefin)  
Macromol. Chem. Phys., 215(8), 733-741 (2014) DOI: [10.1002/macp.201300695](https://doi.org/10.1002/macp.201300695)
230. K. Awasthi, S. Choudhury, H. Komber, F. Simon, P. Formanek, A. Sharma, M. Stamm  
Functionalization of track-etched poly(ethylene terephthalate) membranes as a selective filter for hydrogen purification  
Intern. Journal of Hydrogen Energy, 39(17), 9356-9365 (2014) DOI: [10.1016/j.ijhydene.2014.03.240](https://doi.org/10.1016/j.ijhydene.2014.03.240)
231. D. Schiefer, T. Wen, Y. Wang, P. Goursot, H. Komber, R. Hanselmann, P. Braunstein, G. Reiter, M. Sommer  
Nickel catalyst with a hybrid P, N ligand for Kumada catalyst transfer polycondensation of sterically hindered thiophenes  
ACS Macro Letters, 3(6), 617-621 (2014) DOI: [10.1021/mz500282j](https://doi.org/10.1021/mz500282j)
232. S. Chakraborty, K. Jähnichen, H. Komber, A. A. Basfar, B. Voit  
Synthesis of magnetic polystyrene nanoparticles using amphiphilic ionic liquid stabilized RAFT mediated miniemulsion polymerization  
Macromolecules, 47(13), 4186-4189 (2014) DOI: [10.1021/ma5008013](https://doi.org/10.1021/ma5008013)
233. A. Singh, R. Mukherjee, S. Banerjee, H. Komber, B. Voit  
Sulfonated polytriazoles from a new fluorinated diazide monomer and investigation of their proton exchange properties  
Journal of Membrane Science, 469, 225 – 237 (2014) DOI: [10.1016/j.memsci.2014.06.043](https://doi.org/10.1016/j.memsci.2014.06.043)
234. F. Lombeck, H. Komber, S. I. Gorelsky, M. Sommer  
Identifying homocouplings as critical side reactions in direct arylation polycondensation  
ACS Macro Letters, 3(8), 819-823 (2014) DOI: [10.1021/mz5004147](https://doi.org/10.1021/mz5004147)
235. R. Tkachov, H. Komber, V. Senkovskyy, S. Rauch, A. Lederer, U. Oertel, L. Häußler, B. Voit, A. Kiriy  
One-Pot Synthesis of All-Conjugated Block-Like Bithiophene-Naphthalenediimide / Fluorene Copolymer  
Macromolecules, 47(15), 4994-5001 (2014) DOI: [10.1021/ma5006588](https://doi.org/10.1021/ma5006588)

236. R. Mukherjee, S. Banerjee, H. Komber, B. Voit

High proton conducting fluorinated sulfonated poly(arylene ether sulfone)s copolymers with side chain grafting

RSC Advances, 4 (87), 46723-46736 (2014)

DOI: [10.1039/C4RA07291J](https://doi.org/10.1039/C4RA07291J)

237. Q. Wei, R. Pötzsch, H. Komber, D. Pospiech, B. Voit

High Refractive Index Hyperbranched Polymers with Different Naphthalene Contents Through Thiol – Yne Click Reaction Using Disubstituted Asymmetric Bulky Alkynes

Polymer, 55 (22), 5600 – 5607 (2014)

DOI: [10.1016/j.polymer.2014.07.030](https://doi.org/10.1016/j.polymer.2014.07.030)

238. M. Paolino, H. Komber, L. Mennuni, G. Caselli, D. Appelhans, B. Voit, A. Capelli

Supramolecular glycodendrimer-based hybrid drugs

Biomacromolecules, 15 (11), 3985 – 3993 (2014)

DOI: [10.1021/bm501057d](https://doi.org/10.1021/bm501057d)

239. A. Luzio, D. Fazzi, F. Nübling, R. Matsidik, A. Straub, H. Komber, E. Giussani, S. E. Watkins, M. Barbatti, W. Thiel, E. Gann, L. Thomsen, C. R. McNeill, M. Caironi, M. Sommer

Structure-function relationships of high electron-mobility naphthalene diimide copolymers prepared by direct arylation

Chemistry of Materials, 26 (21), 6233 – 6240 (2014)

DOI: [10.1021/cm503033j](https://doi.org/10.1021/cm503033j)

## 2015

240. F. Lombeck, R. Matsidik, H. Komber, M. Sommer

Simple Synthesis of P(Cbz-alt-TBT) and PCDTBT by Combining Direct Arylation With Suzuki Polycondensation of Heteroaryl Chlorides

Macromol. Rapid Comm., 36 (2), 231 – 237 (2015)

DOI: [10.1002/marc.201400437](https://doi.org/10.1002/marc.201400437)

241. R. Matsidik, J. Martin, S. Schmidt, J. Obermeyer, F. Lombeck, F. Nübling, H. Komber, D. Fazzi, M. Sommer

C–H Arylation of Unsubstituted Furan and Thiophene with Acceptor Bromides: Access to Donor–Acceptor–Donor-Type Building Blocks for Organic Electronics

The Journal of Organic Chemistry, 80 (2), 980 – 987 (2015)

DOI: [10.1021/jo502432e](https://doi.org/10.1021/jo502432e)

242. M. Tahir, K. W. Stöckelhuber, N. Mahmood, H. Komber, G. Heinrich

Reactive Blending of Nitrile Butadiene Rubber and Thermoplastic Polyurethane-Urea: Characterization and Properties

Macromol. Mat. Engin., 300 (2), 242 - 250 (2015)

DOI: [10.1002/mame.201400298](https://doi.org/10.1002/mame.201400298)

243. L. Metzler, T. Reichenbach, O. Brügner, H. Komber, F. Lombeck, St. Müllers, R. Hanselmann, H. Hillebrecht, M. Walter, M. Sommer

High molecular weight mechanochromic spirobifluorene main chain copolymers *via* reproducible microwave-assisted Suzuki polycondensation

Polymer Chemistry, 6 (19), 3694 – 3707 (2015)

DOI: [10.1039/c5py00141b](https://doi.org/10.1039/c5py00141b)

244. R. Matsidik, H. Komber, A. Luzio, M. Caironi, M. Sommer

Defect-free naphthalene diimide bithiophene copolymers with controlled molar mass and high performance *via* direct arylation polycondensation

J. Am. Chem. Soc., 137 (20), 6705 – 6711 (2015)

DOI: [10.1021/jacs.5b03355](https://doi.org/10.1021/jacs.5b03355)

245. D. Pospiech, A. Korwitz, H. Komber, D. Jähnichen, L. Häußler, H. Scheibner, M. Liebmann, K. Jähnichen, B. Voit

Biobased aliphatic polyesters with DOPO substituents for enhanced flame retardancy

Macromol. Chem. Phys., 216 (13), 1447 – 1461 (2015)

DOI: [10.1002/macp.201500121](https://doi.org/10.1002/macp.201500121)

246. S. Zakrzewska, H. Komber, L. Häussler, S. A. Miller, H. T. H. Nguyen, B. Voit, U. Schulze

Controlled homo- and copolymerization of propene and 1-undecene catalyzed by post-metallocenes

Europ. Polymer J., 70, 104-117 (2015)

DOI: [10.1016/j.eurpolymj.2015.07.009](https://doi.org/10.1016/j.eurpolymj.2015.07.009)

247. J. C. Rueda, M. Asmad, V. Ruiz, H. Komber, St. Zschoche, B. Voit

Synthesis and characterization of new bi-sensitive copoly(2-oxazolines)

Designed Monomers and Polymers, 18 (8), 761-769 (2015)

DOI: [10.1080/15685551.2015.1078109](https://doi.org/10.1080/15685551.2015.1078109)

248. M. Tahir, K. W. Stöckelhuber, N. Mahmood, H. Komber, P. Formanek, S. Wießner, G. Heinrich

Highly reinforced blends of nitrile butadiene rubber and *in-situ* synthesized polyurethane-urea

Europ. Polymer Journal, 73, 75-87 (2015)

DOI: [10.1016/j.eurpolymj.2015.09.024](https://doi.org/10.1016/j.eurpolymj.2015.09.024)

249. S. Broll, F. Nübling, A. Luzio, D. Lentzas, H. Komber, M. Caironi, M. Sommer

Defect Analysis of High Electron Mobility Diketopyrrolopyrrole Copolymers Made by Direct Arylation Polycondensation

Macromolecules, 48 (20), 7481-7488 (2015)

DOI: [10.1021/acs.macromol.5b01843](https://doi.org/10.1021/acs.macromol.5b01843)

250. F. Lombeck, H. Komber, A. Sepe, R. H. Friend, M. Sommer

Enhancing Phase Separation and Photovoltaic Performance of All-conjugated Donor-Acceptor Block Copolymers with Semiperfluorinated Alkyl Side Chains

Macromolecules, 48 (21), 7851-7860 (2015)

DOI: [10.1021/acs.macromol.5b01845](https://doi.org/10.1021/acs.macromol.5b01845)

251. H. Zhang, L. Jakisch, H. Komber, L. Häußler, B. Voit, F. Böhme

Novel graft copolymers with aliphatic polyether and polyester main chains

Polymer, 79, 232 – 242 (2015)

DOI: [10.1016/j.polymer.2015.10.023](https://doi.org/10.1016/j.polymer.2015.10.023)

252. E. A. Mistri, S. Banerjee, H. Komber, B. Voit

Structure-property correlation of semifluorinated 6-membered co-SPIs for proton exchange membrane

Europ. Polymer J., 73, 466-479 (2015)

DOI: [10.1016/j.eurpolymj.2015.11.006](https://doi.org/10.1016/j.eurpolymj.2015.11.006)

253. R. Matsidik, H. Komber, M. Sommer

Rational Use of Aromatic Solvents for Direct Arylation Polycondensation: C-H Reactivity versus Solvent Quality

ACS Macro Letters, 4 (12), 1346-1350 (2015)

DOI: [10.1021/acsmacrolett.5b00783](https://doi.org/10.1021/acsmacrolett.5b00783)

## 2016

254. F. Ennen, P. Fenner, S. Boye, A. Lederer, H. Komber, B. Voit, D. Appelhans

Sphere-like protein-glyopolymer nanostructures tailored by polyassociation

Biomacromolecules, 17 (1), 32-45 (2016)

DOI: [10.1021/acs.biomac.5b00975](https://doi.org/10.1021/acs.biomac.5b00975)

255. A. Singh, S. Banerjee, H. Komber, B. Voit

Synthesis and characterization of highly fluorinated sulfonated polytriazoles for proton exchange membrane application

RSC Advances, 6 (16), 13478-13489 (2016)

DOI: [10.1039/C5RA26821D](https://doi.org/10.1039/C5RA26821D)

256. Q. Wei, R. Pötzsch, X. Liu, H. Komber, A. Kiriy, B. Voit, P.-A. Will, S. Lenk, S. Reineke

Hyperbranched Polymers with High Transparency and Inherent High Refractive Index for Application in Organic Light-Emitting Diodes

Advanced Functional Materials, 26 (15), 2545-2553 (2016) DOI: [10.1002/adfm.201504914](https://doi.org/10.1002/adfm.201504914)

257. Y. Karpov, R. Tkachov, J. Maiti, T. Beryozkina, V. Bakulev, W. Liu, H. Komber, U. Lappan, M. Al-Hussein, M. Stamm, B. Voit, A. Kiriy

Copolymerization of zinc-activated isoindigo- and naphthalene-diimide based monomers: an efficient route to low bandgap  $\pi$ -conjugated random copolymers with tunable properties

Polymer Chemistry, 7 (15), 2691-2697 (2016) DOI: [10.1039/C6PY00055J](https://doi.org/10.1039/C6PY00055J)

258. R. Mukherjee, S. Banerjee, H. Komber, B. Voit

Carboxylic acid functionalized fluorinated sulfonated poly(arylene ether sulfone) copolymers with enhanced oxidative stability

Journal of Membrane Science, 510, 497-509 (2016) DOI: [10.1016/j.memsci.2016.03.028](https://doi.org/10.1016/j.memsci.2016.03.028)

259. J. Diebler, H. Komber, L. Häußler, A. Lederer, T. Werner

Alkoxide Initiated Regioselective Coupling of Carbon Disulfide and Terminal Epoxides for the Synthesis of Strongly Alternating Copolymers

Macromolecules, 49, 4723-4731 (2016) DOI: [10.1021/acs.macromol.6b00728](https://doi.org/10.1021/acs.macromol.6b00728)

260. F. Lombeck, H. Komber, D. Fazzi, D. Nava, J. Kuhlmann, D. Stegerer, K. Strassel, J. Brandt, A. Diaz de Zerio Mendaza, C. Müller, W. Thiel, M. Caironi, R. Friend, M. Sommer

On the effect of prevalent carbazole homocoupling defects on the photovoltaic performance of PCDTBT:PC71BM solar cells

Advanced Energy Materials, 6 (21), ohne Seitenzahl (2016) DOI: [10.1002/aenm.201601232](https://doi.org/10.1002/aenm.201601232)

261. D. Schiefer, H. Komber, F. Mugwanga Keheze, S. Kunz, R. Hanselmann, G. Reiter, M. Sommer

Poly(3-(2,5-dioctylphenyl)thiophene) synthesized by direct arylation polycondensation: End groups, defects and crystallinity

Macromolecules, 49, 7230-7237 (2016) DOI: [10.1021/acs.macromol.6b01795](https://doi.org/10.1021/acs.macromol.6b01795)

262. R. Matsidik, A. Luzio, S. Hameury, H. Komber, C. R. McNeill, M. Caironi, M. Sommer  
Effects of PNDIT2 end groups on aggregation, thin film structure, alignment and electron transport in field-effect transistors  
J. Mater. Chem. C., 4, 10371-10380 (2016) DOI: [10.1039/c6tc03804b](https://doi.org/10.1039/c6tc03804b)
- 2017**
263. Q. Wei, P. Kleine, Y. Karpov, X. Qiu, H. Komber, K. Sahre, A. Kiriy, R. Lygaitis, S. Lenk, S. Reineke, B. Voit  
Conjugation induced thermally activated delayed fluorescence (TADF): from conventional non-TADF units to TADF-active polymers  
Adv. Funct. Materials, 27 (7), 1605051 (2017) DOI: [10.1002/adfm.201605051](https://doi.org/10.1002/adfm.201605051)
264. S. Zschoche, J. C. Rueda, M. Binner, H. Komber, A. Janke, D. Appelhans, B. Voit  
Temperature- and pH-dependent aggregation behavior of dual-sensitive poly(2-oxazoline)s block copolymers as latent amphiphilic macromolecules  
Europ. Polymer J., 88, 623-635 (2017) DOI: [10.1016/j.eurpolymj.2016.11.014](https://doi.org/10.1016/j.eurpolymj.2016.11.014)
265. J. Ma, J. Liu, M. Baumgarten, Y. Fu, Y.-Z. Tan, K. S. Schellhammer, F. Ortmann, G. Cuniberti, H. Komber, R. Berger, K. Müllen, X. Feng  
A stable saddle-shaped polycyclic hydrocarbon with an open-shell singlet ground state  
Angew. Chemie, 129 (12), 3328–3332 (2017) DOI: [10.1002/ange.201611689](https://doi.org/10.1002/ange.201611689)  
Angew. Chemie, Int. Ed. 56 (12), 3280–3284 (2017) DOI: [10.1002/anie.201611689](https://doi.org/10.1002/anie.201611689)
266. F. Nübling, H. Komber, M. Sommer  
All-conjugated, all-crystalline donor-acceptor block copolymers P3HT-b-PNDIT2 via direct arylation polycondensation  
Macromolecules, 50 (5), 1909–1918 (2017) DOI: [10.1021/acs.macromol.7b00251](https://doi.org/10.1021/acs.macromol.7b00251)
267. R. Tkachov, L. Stepien, A. Roch, H. Komber, F. Hennersdorf, J. J. Weigand, I. Bauer, A. Kiriy, Ch. Leyens  
Facile synthesis of potassium tetrathiooxalate – The “true” monomer for the preparation of electron-conductive poly(nickel-ethylenetetrathiolate)  
Tetrahedron, 73 (16), 2250-2254 (2017) DOI: [10.1016/j.tet.2017.03.010](https://doi.org/10.1016/j.tet.2017.03.010)
268. J. Liu, J. Ma, K. Zhang, P. Ravat, P. Machata, S. Avdoshenko, F. Hennersdorf, H. Komber, W. Pisula, J. J. Weigand, A. A. Popov, R. Berger, K. Müllen, X. Feng

**π-Extended and Curved Antiaromatic Polycyclic Hydrocarbons**

J. Am. Chem. Soc., 139 (22), 7513-7521 (2017)

DOI: [10.1021/jacs.7b01619](https://doi.org/10.1021/jacs.7b01619)

269. C. Vogel, H. Komber, J. Meier-Haack

Temperature-stable anion-exchange materials from cyclopolymerization of quaternary ammonium halides

React. Funct. Polym., 117, 34-42 (2017)

DOI: [10.1016/j.reactfunctpolym.2017.06.001](https://doi.org/10.1016/j.reactfunctpolym.2017.06.001)

270. F. Lombeck, St. Müllers, H. Komber, S. M. Menke, A. J. Pearson, P. J. Conaghan, Ch. R. McNeill, R. H. Friend, M. Sommer

Benzoyl side-chains push the open-circuit voltage of PCDTBT/PCBM solar cells beyond 1 V

Organic Electronics, 49, 142-151 (2017)

DOI: [10.1016/j.orgel.2017.06.055](https://doi.org/10.1016/j.orgel.2017.06.055)

271. R. Matsidik, A. Luzio, Ö. Askin, D. Fazzi, A. Sepe, U. Steiner, H. Komber, M. Caironi, M. Sommer

Highly planarized naphthalene diimide-bifuran copolymers with unexpected charge transport performance

Chem. Mater., 29 (13), 5473–5483 (2017)

DOI: [10.1021/acs.chemmater.6b05313](https://doi.org/10.1021/acs.chemmater.6b05313)

272. F. Lombeck, F. Marx, K. Strassel, S. Kunz, C. Lienert, H. Komber, R. H. Friend, M. Sommer

To branch or not to branch: C-H selectivity of thiophene-based donor-acceptor-donor monomers for use in direct arylation polycondensation exemplified by PCDTBT

Polym. Chem., 8, 4738-4745 (2017)

DOI: [10.1039/C7PY00879A](https://doi.org/10.1039/C7PY00879A)

273. S. Saha, S. Banerjee, H. Komber, B. Voit

Flexible diazide based new sulfonated polytriazoles: Synthesis, characterization and proton exchange properties

Macromol. Chem. Phys., 218 (14), 1700070 (2017)

DOI: [10.1002/macp.201700070](https://doi.org/10.1002/macp.201700070)

274. D. Pospiech, D. Jehnichen, K. Eckstein, P. Scheibe, H. Komber, K. Sahre, A. Janke, U. Reuter, L. Häußler, L. Schellkopf, P. Friedel, B. Voit

Semifluorinated PMMA block copolymers: Synthesis, nanostructure and thin film properties

Macromol. Chem. Phys., 218 (18), 1600599 (2017)

DOI: [10.1002/macp.201600599](https://doi.org/10.1002/macp.201600599)

275. A. Singh, S. Bisoi, S. Banerjee, H. Komber, B. Voit

Hydroquinone based sulfonated copolytriazoles with enhanced proton conductivity

Macromol. Materials and Engineering, 302 (11), 1700208 (2017) DOI: [10.1002/mame.201700208](https://doi.org/10.1002/mame.201700208)

276. A. K. Mandal, S. Bisoi, S. Banerjee, H. Komber, B. Voit

Sulfonated copolyimides containing trifluoromethyl and phosphine oxide moieties: Synergistic effect towards proton exchange membrane properties

European Polymer Journal, 95, 581-595 (2017) DOI: [10.1016/j.eurpolymj.2017.08.050](https://doi.org/10.1016/j.eurpolymj.2017.08.050)

## 2018

277. J. Vaezi, M. Nekoomanesh, H. A. Khonakdar, S. H. Jafari, H. Komber., A. Mojarrad

On the correlation of rheology and morphology of bimodal polypropylene reactor blends synthesized by homogeneous binary metallocene/metallocene catalysts

Polym. Plast. Technol. Eng., 57 (8), 791 – 803 (2018) DOI: [10.1080/03602559.2017.1354220](https://doi.org/10.1080/03602559.2017.1354220)

278. Y. Shin, A. Welford, H. Komber, R. Matsidik, T. Thurn-Albrecht, Ch. R. McNeill, M. Sommer

Regioregular polymer analogous thionation of naphthalene diimide-bithiophene copolymers

Macromolecules, 51 (3), 984 – 991 (2018) DOI: [10.1021/acs.macromol.7b02355](https://doi.org/10.1021/acs.macromol.7b02355)

279. M. Schwarzer, A. Korwitz, H. Komber, L. Häußler, B. Dittrich, B. Schartel, D. Pospiech

Phosphorus-Containing Polymer Flame Retardants for Aliphatic Polyesters

Macromolecular Materials and Engineering, 303 (2), 1700512 (2018) DOI: [10.1002/mame.201700512](https://doi.org/10.1002/mame.201700512)

280. S. Saha, A. G. Kumar, Md. T. Noori, S. Banerjee, M. M. Ghangrekar, H. Komber, B. Voit

New Crosslinked Sulfonated Polytriazoles: Proton Exchange Properties and Microbial Fuel Cell Performance

European Polymer Journal, 103 (6), 322-334 (2018) DOI: [10.1016/j.eurpolymj.2018.04.023](https://doi.org/10.1016/j.eurpolymj.2018.04.023)

281. A. G. Kumar, A. Singh, H. Komber, B. Voit, B. R. Tiwari, Md. T. Noori, M. M. Ghangrekar, S. Banerjee

Novel sulfonated co-poly(ether imide)s containing trifluoromethyl, fluorenyl and hydroxyl groups for enhanced proton exchange membrane properties: Application in microbial fuel cell

ACS Applied Materials & Interfaces, 10 (17), 14803-14817 (2018) DOI: [10.1021/acsami.8b03452](https://doi.org/10.1021/acsami.8b03452)

282. M. R. Ajayakumar, Y. Fu, J. Ma, F. Hennersdorf, H. Komber, J. J. Weigand, A. Alfonsov, A. A. Popov, R. Berger, J. Liu, K. Müllen, X. Feng

## Toward Full Zigzag-Edged Nanographenes: peri-Tetracene and Its Corresponding Circumanthracene

J. Am. Chem. Soc., 140 (20), 6240-6244 (2018)

DOI: [10.1021/jacs.8b03711](https://doi.org/10.1021/jacs.8b03711)

283. Y. Shin, M. Massetti, H. Komber, D. Nava, G. Lanzani, M. Caironi, M. Sommer

Improving miscibility of a naphthalene dimide-bithiophene copolymer with n-type dopants through the incorporation of “kinked” monomers

Adv. Electron. Mater. 4 (10), 1700581 (2018)

DOI: [10.1002/aelm.201700581](https://doi.org/10.1002/aelm.201700581)

284. J. C. Rueda, M. Malásquez, L. Lagos, H. Komber, St. Zschoche, B. Voit

Sintesis de hidrogeles commutables a partir de N-isopropilacrilamida, macromonomeros de 2-oxazolinas y laponita

Revista de la Sociedad Química del Perú, 84 (1), 143-56 (2018)

[http://www.scielo.org.pe/scielo.php?script=sci\\_abstract&pid=S1810-634X2018000100013&lng=en&nrm=iso&tlng=en](http://www.scielo.org.pe/scielo.php?script=sci_abstract&pid=S1810-634X2018000100013&lng=en&nrm=iso&tlng=en)

285. R. Matsidik, M. Giorgio, A. Luzio, M. Caironi, H. Komber, M. Sommer

A defect-free naphthalene diimide bithiazole copolymer via regioselective direct arylation polycondensation

Europ. J. Org. Chem., 2018 (44), 6121-6126

DOI: [10.1002/ejoc.201800821](https://doi.org/10.1002/ejoc.201800821)

## 2019

286. F. Nübling, T. R. Hopper, B. Kuei, H. Komber, V. Untilova, M. Brinkmann, E. D. Gomez, A. A. Bakulin, M. Sommer

Block junction functionalized all-conjugated donor acceptor block copolymers

ACS Applied Materials &amp; Interfaces, 11 (1), 1143-1155 (2019)

DOI: [10.1021/acsami.8b18608](https://doi.org/10.1021/acsami.8b18608)

287. S. Grätz, H. Komber, M. Bauer, B. Voit

Diels-Alder Reaction between Cyanates and Cyclopentadienone-Derivatives – A New Class of Crosslinkable Oligomers

Polymer Chemistry, 10 (6), 698-704 (2019)

DOI: [10.1039/C8PY01374H](https://doi.org/10.1039/C8PY01374H)

Polymer Chemistry Blog - Paper of the month (March 2019):

<http://blogs.rsc.org/py/2019/03/01/paper-of-the-month-a-diels-alder-reaction-between-cyanates-and-cyclopentadienone-derivatives-a-new-class-of-crosslinkable-oligomers/>

288. J. Lenz, D. Pospiech, H. Komber, M. Paven, R. Albach, S. Mentizi, G. Langstein, B. Voit  
Synthesis of the H-phosphonate dibenzo[d,f][1,3,2]dioxaphosphepine 6-oxide and the phospha-Michael addition to unsaturated compounds  
*Tetrahedron*, 75 (9), 1306-1310 (2019) DOI: [10.1016/j.tet.2019.01.045](https://doi.org/10.1016/j.tet.2019.01.045)
289. J. Ma, K. Zhang, K. S. Schellhammer, Y. Fu, H. Komber, C. Xu, A. A. Popov, F. Hennersdorf, J. J. Weigand, S. Zhou, W. Pisula, F. Ortmann, R. Berger, J. Liu, X. Feng  
Wavy-shaped polycyclic hydrocarbons with controlled aromaticity  
*Chemical Science*, 10 (14), 4025-4031 (2019) DOI: [10.1039/C8SC05416A](https://doi.org/10.1039/C8SC05416A)
290. M. Suckow, M. Lang, H. Komber, D. Pospiech, M. Wagner, F. Weinelt, F.-E. Baumann, F. Böhme  
Bisdithiooxalate as novel coupling agent for amino-terminated polymers  
*Polymer Chemistry*, 10 (15), 1930-1937 (2019) DOI: [10.1039/c8py01723a](https://doi.org/10.1039/c8py01723a)
291. K. Xu, J. I. Urgel, K. Eimre, M. Di Giovannantonio, A. Keerthi, H. Komber, S. Wang, A. Narita, R. Berger, P. Ruffieux, C. A. Pignedoli, J. Liu, K. Müllen, R. Fasel, X. Feng  
On-surface synthesis of a nonplanar porous nanographene  
*J. Am. Chem. Soc.*, 141 (19), 7726-7730 (2019) DOI: [10.1021/jacs.9b03554](https://doi.org/10.1021/jacs.9b03554)
292. Ch. Horn, D. Pospiech, J. Zessin, S. Stein, D. Jehnichen, H. Komber, M. Göbel, B. Voit, A. Kiriy  
Synthesis and characterization of a regioregular side-chain semifluorinated polythiophene  
*physica status solidi (a) – applications and materials science*, 216 (12), 1800747 (2019)  
DOI: [10.1002/pssa.201800747](https://doi.org/10.1002/pssa.201800747)
293. M. Nasrollahzadeh, M. Sajjadi, H. Komber, H. A. Khonakdar, S. M. Sajadi  
*In situ* green synthesis of Cu-Ni bimetallic nanoparticles supported on reduced graphene oxide as an effective and recyclable catalyst for the synthesis of *N*-benzyl-*N*-aryl-5-amino-1*H*-tetrazoles  
*Applied Organometallic Chemistry*, 33 (7), e4938 (2019) DOI: [10.1002/aoc.4938](https://doi.org/10.1002/aoc.4938)
294. A. G. Kumar, S. Saha, H. Komber, B. R. Tiwari, M. M. Ghangrekar, B. Voit, S. Banerjee  
Trifluoromethyl and Benzyl Ether Side Groups Containing Novel Sulfonated Co-Poly(ether imide)s: Application in Microbial Fuel Cell  
*Europ. Polymer J.*, 118, 451-464 (2019) DOI: [10.1016/j.eurpolymj.2019.06.014](https://doi.org/10.1016/j.eurpolymj.2019.06.014)

295. J. Liu, S. Mishra, C. A. Pignedoli, D. Passerone, J. I. Urgel, A. Fabrizio, T. G. Lohr, J. Ma, H. Komber, M. Baumgarten, C. Corminboeuf, R. Berger, P. Ruffieux, K. Müllen, R. Fasel, X. Feng  
Open-shell nonbenzenoid nanographenes containing two pairs of pentagonal and heptagonal rings  
J. Am. Chem. Soc., 141 (30), 12011-12020 (2019) DOI: [10.1021/jacs.9b04718](https://doi.org/10.1021/jacs.9b04718)
296. D. Pospiech, A. Korwitz, K. Eckstein, H. Komber, D. Jehnichen, M. Suckow, A. Lederer, K. Arnhold, M. Göbel, M. Bremer, A. Hoffmann, S. Fischer, A. Werner, T. Walther, H. Brünig, B. Voit  
Fiber formation and properties of polyester/lignin blends  
J. Applied Polym. Sci., 136 (46), 48257 (2019) DOI: [10.1002/app.48257](https://doi.org/10.1002/app.48257)
297. M. Heinze, S. Starke, M. Händler, H. Komber, M. Drache, N. Moszner, B. Voit, D. Pospiech  
Combination of nuclear magnetic resonance spectroscopy and nonlinear methods to analyze the copolymerization of phosphonic acid derivatives  
J. Applied Polym. Sci., 136 (48), 48256 (2019) DOI: [10.1002/app.48256](https://doi.org/10.1002/app.48256)
298. D. Adamczak, H. Komber, A. Illy, A. D. Scaccabarozzi, M. Caironi, M. Sommer  
Indacenodithiophene homopolymers via direct arylation: direct polycondensation versus polymer analogous reaction pathways  
Macromolecules, 52 (19), 7251-7259 (2019) DOI: [10.1021/acs.macromol.9b01269](https://doi.org/10.1021/acs.macromol.9b01269)
299. M. Paolino, M. Licciardi, C. Savoca, G. Giammona, L. Modica De Mohac, A. Reale, G. Giuliani, H. Komber, A. Donati, G. Leone, A. Magnani, M. Anzini, A. Cappelli  
Hyaluronan graft copolymers bearing fatty-acid residues as self-assembling nanoparticles for olanzapine delivery  
Pharmaceutics, 11 (12), 675 (2019) DOI: [10.3390/pharmaceutics11120675](https://doi.org/10.3390/pharmaceutics11120675)

**2020**

300. P.-Y. Ho, H. Komber, K. Horatz, T. Tsuda, S. Mannsfeld, E. Dmitrieva, O. Blacque, U. Kraft, H. Sirringhaus, F. Lissel  
Synthesis and Characterization of a Semiconducting and Solution-processable Ruthenium-based Polymetallayne  
Polymer Chemistry, 11 (2), 472-479 (2020) DOI: [10.1039/C9PY01090D](https://doi.org/10.1039/C9PY01090D)
301. S. Stein, A. Mordvinkin, B. Voit, H. Komber, K. Saalwächter, F. Böhme  
Self-healing and reprocessable bromo butylrubber based on combined ionic cluster formation and hydrogen bonding  
Polymer Chemistry, 11 (6), 1188-1197 (2020) DOI: [10.1039/C9PY01630A](https://doi.org/10.1039/C9PY01630A)
302. J. Ma, Y. Fu, E. Dmitrieva, F. Liu, H. Komber, F. Hennersdorf, A. A. Popov, J. J. Weigand, J. Liu, X. Feng  
Helical Nanographenes Containing an Azulene Unit: Synthesis, Crystal structures, and Properties  
Angew. Chem., 132 (14), 5686-5691 (2020) DOI: [10.1002/ange.201914716](https://doi.org/10.1002/ange.201914716)
303. M. R. Ajayakumar, Y. Fu, F. Liu, H. Komber, V. Tkachova, S. Zhou, A. A. Popov, J. Liu, X. Feng  
Tailoring Magnetic Feature in Zigzag-Edged Nanographenes via Controlled Diels-Alder Reactions  
Chem. Eur. J., 26 (33), 7497-7503 (2020) DOI: [10.1002/chem.202001130](https://doi.org/10.1002/chem.202001130)
304. J. C. Rueda, H. Komber, F. Santillan, B. Voit  
Synthesis and characterization of tough, self-crosslinked thermoresponsive DMAA hydrogels  
Polymers, 12 (6), 1401 (2020) DOI: [10.3390/polym12061401](https://doi.org/10.3390/polym12061401)
305. A. Ghorai, S. Roy, S. Das, H. Komber, M. M. Ghangrekar, B. Voit, S. Banerjee  
Chemically stable sulfonated polytriazoles containing trifluoromethyl and phosphine oxide moieties for proton exchange membranes  
ACS Applied Polymer Materials, 2 (7), 2967-2979 (2020) DOI: [10.1021/acsapm.0c00443](https://doi.org/10.1021/acsapm.0c00443)
306. Y. Shin, H. Komber, D. Caiola, M. Casinelli, H. Sun, D. Stegerer, M. Schreiter, K. Horatz, F. Lissel, X. Jiao, C. R. McNeill, S. Cimo, C. Bertarelli, S. Fabiano, M. Caironi, M. Sommer  
Synthesis and Aggregation Behavior of a Glycolated Naphthalene Diimide Bithiophene Copolymer for Application in Low-Level n-Doped Organic Thermoelectrics  
Macromolecules, 53 (13), 5158–5168 (2020) DOI: [10.1021/acs.macromol.0c00657](https://doi.org/10.1021/acs.macromol.0c00657)

307. J. C. Rueda, C. Suárez, H. Komber, St. Zschoche, B. Voit

Synthesis and characterization of pH- and thermo-responsive hydrogels based on poly(2-cyclopropyl-2-oxazoline) macromonomer, sodium acrylate, and acrylamide

Polymer Bulletin, 77 (10), 5553-5565 (2020)

DOI: [10.1007/s00289-019-03034-0](https://doi.org/10.1007/s00289-019-03034-0)

308. S. Roy, A. Ghorai, H. Komber, B. Voit, S. Banerjee

Synthesis of 2,2'-Hindered Pyridine Containing Semifluorinated Polytriazoles and Investigation for Low-Temperature Proton Exchange Membrane Application with Enhanced Oxidative Stability

Europ. Polymer J., 136, 109898 (2020)

DOI: [10.1016/j.eurpolymj.2020.109898](https://doi.org/10.1016/j.eurpolymj.2020.109898)

309. J. Engelke, B. Tuten, R. Schweins, H. Komber, L. Barner, L. Plüschke, C. Barner-Kowollik, A. Lederer

An In-Depth Analysis Approach Enabling Precision Single Chain Nanoparticle Design

Polymer Chemistry, 11 (41), 6559-6578 (2020)

DOI: [10.1039/D0PY01045F](https://doi.org/10.1039/D0PY01045F)

<https://chemrxiv.org/s/473372af1e5aa2f17388>

310. W. Niu, J. Ma, P. Soltani, W. Zheng, F. Liu, A. A. Popov, J. J. Weigand, H. Komber, E. Poliani, C. Casiraghi, J. Droste, M. R. Hansen, S. Osella, D. Beljonne, M. Bonn, H. I. Wang, X. Feng, J. Liu, Y. Mai

A Curved Graphene Nanoribbon with Multi-Edge Structure and High Intrinsic Charge Carrier Mobility

J. Am. Chem. Soc., 142 (43), 18293-18298 (2020)

DOI: [10.1021/jacs.0c07013](https://doi.org/10.1021/jacs.0c07013)

311. F. Kempe, F. Riehle, H. Komber, M. Matsidik, M. Walter, M. Sommer

Semifluorinated, kinked polyarylenes via direct arylation polycondensation

Polymer Chemistry, 11 (43), 6928-6934 (2020)

DOI: [10.1039/D0PY00973C](https://doi.org/10.1039/D0PY00973C)

## 2021

312. K. Ditte, J. Perez, S. Chae, M. Hambach, M. Al-Hussein, H. Komber, P. Formanek, S. Mannsfeld, A. Fery, A. Kiriy, F. Lissel

Ultra-soft and high mobility block-copolymers for skin-compatible electronics

Adv. Materials, 33 (4), 2005416 (2021)

DOI: [10.1002/adma.202005416](https://doi.org/10.1002/adma.202005416)

313. S. Mishra, K. Xu, K. Eimre, H. Komber, J. Ma, C. A. Pignedoli, R. Fasel, X. Feng, P. Ruffieux

## Synthesis and characterization of [7]triangulene

Nanoscale, 13, 1624-1628 (2021)

DOI: [10.1039/D0NR08181G](https://doi.org/10.1039/D0NR08181G)

314. Q. Wang, S. V. Lenjani, O. Dolynchuk, A. D. Scaccabarozzi, H. Komber, Y. Guo, F. Günther, S. Gemming, R. Magerle, M. Caironi, M. Sommer  
Electron Mobility of Diketopyrrolopyrrole Copolymers is Robust against Homocoupling Defects  
Chem. Mater. 33, 668-677 (2021) DOI: [10.1021/acs.chemmater.0c03998](https://doi.org/10.1021/acs.chemmater.0c03998)
315. Y. Fei; Y. Fu; X. Bai, L. Du, Z. Li; H. Komber; K.-H. Low; S. Zhou; D. L. Phillips, X. Feng, J. Liu  
Defective Nanographenes Containing Seven-Five-Seven (7-5-7) Membered Rings  
J. Am. Chem. Soc., 143 (5), 2353–2360 (2021) DOI: [10.1021/jacs.0c12116](https://doi.org/10.1021/jacs.0c12116)
316. W. Niu, Y. Fu, H. Komber, J. Ma, X. Feng, Y. Mai, J. Liu  
Sulfur-doped nanographenes containing multiple subhelicenes  
Organic Letters, 23 (6), 2069 – 2073 (2021) DOI: [10.1021/acs.orglett.1c00232](https://doi.org/10.1021/acs.orglett.1c00232)
317. D. Adamczak, A. Perinot, H. Komber, A. Illy, S. Hultmark, B. Passarella, W. L. Tan, S. Hutsch, D. Becker-Koch, C. Rapley, A. D. Scaccabarozzi, M. Heeney, Y. Vaynzof, F. Ortmann, C. R. McNeill, C. Müller, M. Caironi, M. Sommer  
Side chain-dependent properties of indacenodithiophene-benzothiadiazole copolymers made by direct arylation polycondensation  
J. Mater. Chem. C, 9 (13), 4597-4606 (2021) DOI: [10.1039/D1TC00043H](https://doi.org/10.1039/D1TC00043H)
318. Q. Wang, S. Böckmann, F. Günther, M. Streiter, M. Zerson, A. D. Scaccabarozzi, W. L. Tan, H. Komber, C. Deibel, R. Magerle, S. Gemming, C. R. McNeill, M. Caironi, M. R. Hansen, M. Sommer  
Hydrogen bonds control single chain conformation, crystallinity and electron transport in isoelectronic diketopyrrolopyrrole copolymers  
Chemistry of Materials, 33 (7), 2635 – 2645 (2021) DOI: [10.1021/acs.chemmater.1c00478](https://doi.org/10.1021/acs.chemmater.1c00478)
319. M. R. Ajayakumar, J. Ma, A. Lucotti, K. S. Schellhammer, F. Lombardi, G. Serra, E. Dmitrieva, M. Rosenkranz, H. Komber, L. Bogani, J. Liu, F. Ortmann, M. Tommasini, X. Feng  
Persistent peri-Heptacene: Synthesis and In-Situ Characterization

Angew. Chem. Int. Ed., 133 (25), 13972 – 13977 (2021) DOI: [10.1002/ange.202102757](https://doi.org/10.1002/ange.202102757)

320. F. Lombardi, J. Ma, H. Komber, J. Liu, W. K. Myers, X. Feng, L. Bogani  
Synthetic Tuning the Quantum Properties of Open-shell Radicaloids  
Chem, 7 (5), 1363 – 1378 (2021) DOI: [10.1016/j.chempr.2021.03.024](https://doi.org/10.1016/j.chempr.2021.03.024)
321. A. Ghorai, S. Roy, S. Das, H. Komber, M. M. Ghangrekar, B. Voit, S. Banerjee  
Sulfonated polytriazoles with phosphaphenanthrene unit via click polymerization: Fabrication of membranes and properties  
ACS Applied Polymer Materials, 3 (8), 4127 – 4138 (2021) DOI: [10.1021/acsapm.1c00600](https://doi.org/10.1021/acsapm.1c00600)
322. D. Pospiech, A. Korwitz, H. Komber, D. Jehnichen, K. Arnhold, H Brünig, H. Scheibner, M. T. Müller, B. Voit  
Polyesters with bio-based ferulic acid units: crosslinking paves the way to property consolidation  
Polym. Chem., angenommen