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## II. PUBLICATIONS

### *Veröffentlichungen*

1. **Effects of Postproduction Treatment on Plastic Solar Cells**  
F. Padinger, R. Rittberger, N.S. Sariciftci  
Advanced Functional Materials, Vol 13, No. 2 (2003)
2. **Time Domain Investigation of the Intrachain Vibrational Dynamics of a Prototypical Light-Emitting Conjugated Polymer**  
G. Lanzani, G. Cerullo, C. Brabec, N.S. Sariciftci  
Physical Review Letters, Vol 90, No. 4 (2003), 047402/1-4
3. **Long living photoinduced charge separation for solar cell applications in fulleropyrrolidine-phthalocyanine dyad thin films**  
M. Loi, P. Denk, H. Hoppe, H. Neugebauer, C. Winder, D. Meissner, C. Brabec, N.S. Sariciftci, A. Gouloumis, P. Vauquez, T. Torres  
Journal of Materials Chemistry (2003), 13, 700-704
4. **Charge recombination in conjugated polymer/fullerene blends studied by transient absorption spectroscopy**  
A.F. Nogueira, I. Montanari, J. Nelson, J.R. Durrant, C. Winder, N.S. Sariciftci, C.J. Brabec  
Journal of Physical Chemistry B, Vol 107 (2003), 1567-1573
5. **Convenient Synthesis and Polymerisation of 5,6-Disubstituted Dithiophthalides Towards Soluble PITN and Initial Spectroscopic Characterization of the Resulting Low Band Gap Polymers**  
I. Polec, L. Goris, A. Henckens, M. Nicolas, M. Loi, L. Lutsen, J. Manca, D. Vanderzande, N.S. Sariciftci  
Journal of Polymer Science, part A : Polymer Chemistry, Vol 41 (2003), No 7, 1034-1045
6. **A soluble donor/acceptor double/cable polymer: polythiophene with pendant fullerenes**  
A. Cravino, G. Zerza, M. Maggini, S. Bucella, M. Svensson, M. R. Andersson, H. Neugebauer, C. Brabec, N.S. Sariciftci  
Chemistry Monthly 134 (2003), 519-527
7. **Hybrid Solar Cells based on Nanoparticles of CuInS<sub>2</sub> in Organic Matrices**  
E. Arici, N.S. Sariciftci, D. Meissner  
Advanced Functional Materials (2003), 13, No.2, 165-171

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8. **A Fulleropyrrolidine-phthalocyanine dyad for photovoltaic applications**  
M. Loi, P. Denk, H. Hoppe, H. Neugebauer, D. Meissner, C. Winder, C. Brabec, N.S. Sariciftci, A. Gouloumis, P. Vazquez, T. Torres  
Synthetic Metals 137 (2003) 1491-1492
  9. **Spectroscopic properties of PEDOTEHIITN, a novel soluble low band-gap conjugated polymer**  
A. Cravino, M. Loi, M. Scharber, C. Winder, H. Neugebauer, P. Denk, H. Meng, Y. Chen, F. Wudl, N.S. Sariciftci  
Synthetic Metals, 137(2003) 1435-1436
  10. **Charge recombination dynamics in a polymer/fullerene bulk heterojunction studied by transient absorption spectroscopy**  
A. Nogueira, I. Montanari, J. Nelson, C. Winder, C. Brabec, N.S. Sariciftci, J. Durrant  
Synthetic Metals 137 (2003) 1505-1506
  11. **Ultrafast spectroscopy of polaron pairs in polymer solar cells**  
J. Müller, M. Scharber, U. Lemmer, J. Feldmann, U. Scherf, N.S. Sariciftci  
Synthetic Metals 137 (2003) 1475-1476
  12. **Comparison of the electrochemical and optical bandgap of low-bandgap polymers**  
D. Mühlbacher, H. Neugebauer, A. Cravino, N.S. Sariciftci  
Synthetic Metals 137 (2003) 1361-1362
  13. **Optical- and photocurrent detected magnetic resonance studies on konjugated Polymer / Fullerene Composites**  
M. Scharber, N. Schultz, N.S. Sariciftci, C. Brabec  
Physical Review B, Vol 67 (2003) 085202/1-7
  14. **Hot wall epitaxial growth of highly ordered organic epilayers**  
H. Sitter, A. Andreev, G. Matt, N.S. Sariciftci  
Synthetic Metals Vol 138 (2003), 9-13
  15. **Oriented organic semiconductor thin films**  
A. Andreev, R. Resel, D.-M. Smilgies, H. Hoppe, G. Matt, H. Sitter, N.S. Sariciftci, D. Meissner, H. Plank, O. Zrzavecka  
Synthetic Metals Vol 138 (2003), 59-63

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16. **Poly(5,6-Dithiooctylisothianaphtene), a new Low Band Gap Polymer: Spectroscopy and Solar Cell Construction**  
L. Goris, M. Loi, A. Cravino, H. Neugebauer, N.S. Sariciftci, L. Lutsen, J. Manca, L. De Schepper, D. Vanderzande  
Synthetic Metals Vol 138 (2003), 249-253
  
  17. **Towards Increasing the Photon Harvesting in Bulk Heterojunction Polymer Solar Cells**  
C. Winder, M.A. Loi, N.S. Sariciftci, P. Denk, F. Padinger, J.C. Hummelen, R.A.J. Janssen, A. Gouloumis, P. Vazquez, T. Torres  
Proceeding for SPIE 2002, Vol 4801 (2003), p 22
  
  18. **Molecules as bipolar conductors**  
A. Cravino, N.S. Sariciftci  
Nature Materials, Vol 2 (2003), 360-361
  
  19. **Influence of the solvent on the crystal structure of PCBM and the efficiency of MDMO-PPV: PCBM “plastic” solar cells**  
M.T. Rispens, A. Meetsma, R. Rittberger, C.J. Brabec, N.S. Sariciftci, J.C. Hummelen  
Chem. Commun. (2003), 2116-2118
  
  20. **Excited state spectroscopy in polymer fullerene photovoltaic devices under operation conditions**  
C. Winder, C. Lungenschmied, G. Matt, N.S. Sariciftci, A. Nogueira, I. Montanarai, J. Durrant, C. Arndt, U. Zhokhavets, G. Gobsch  
Synthetic Metals Vol 139 (2003), 577-580
  
  21. **Optoelectronic devices based on para-sexiphenyl films grown by hot wall epitaxy**  
C. Winder, A. Andreev, H. Sitter, G. Matt, N.S. Sariciftci, D. Meissner  
Synthetic Metals Vol 139 (2003), 573-576
  
  22. **Tuning of the photoinduced charge transfer process in donor-acceptor double-cable copolymers**  
S. Luzzati, M. Scharber, M. Catellani, N. Lupsac, F. Giacalone, J. Segura, N. Martin, H. Neugebauer, N.S. Sariciftci  
Synthetic Metals Vol 139 (2003), 731-733
  
  23. **Spectral signatures of positive and negative charged states in doped and photoexcited low band-gap polydithienophenes**  
H. Neugebauer, A. Cravino, S. Luzzati, M. Catellani, A. Petr, L. Dunsch, N.S. Sariciftci  
Synthetic Metals Vol 139 (2003), 747-750

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24. **Photo-and thermally stimulated luminescence in highly-ordered films of para-sexiphenyl grown by Hot-Wall Epitaxy**  
A. Kadashchuk, A. Andreev, H. Sitter, N.S. Sariciftci  
Synthetic Metals Vol 139 (2003), 937-940
  25. **Core/shell nanomaterials in photovoltaics**  
E. Arici, D. Meissner, F. Schäffler, N.S. Sariciftci  
International Journal of Photoenergy Vol 05, No. 4, (2003) 199-208
  26. **Molecular alignments in epitaxial grown sexiphenyl films on mica(001)**  
H. Plank, R. Resel, N.S. Sariciftci, A. Andreev, H. Sitter, G. Hlawacek, C. Teichert, A. Thierry, B. Lotz  
Thin solid films Vol 443 (2003) 108-114
  27. **Modeling the optical absorption within conjugated polymer/fullerene based bulk-heterojunction organic solar cells**  
H. Hoppe, N. Arnold, N.S. Sariciftci, D. Meissner  
Solar Energy Materials & Solar Cells Vol 80 (2003), 105-113
  28. **Photophysics and Photovoltaic Device Application of Fullerene Containing Phthalocyanine Dyads**  
H. Neugebauer, M. Loi, C. Winder, N.S. Sariciftci, G. Cerullo, A. Gouloumis, P. Vazquez, T. Torres  
Proceedings of IWEPNM 03, Kirchberg, 537-540 (2003)

**Books:**

1. **Organic Photovoltaics Concepts and Realization**  
C. Brabec, V. Dyakonov, J. Parisi, N.S. Sariciftci  
ISBN 3-540-00405-x Springer Verlag, 2003

**In print:**

1. **Morphology and growth kinetic of molecular organic thin films deposited by hot wall epitaxy**  
A. Andreev, H. Sitter, S. Sariciftci, R. Resel, D.-M. Smilgies  
Proceedings of Conference on Crystal Growth and Epitaxy, Vienna, 2002
2. **Self-organization in organic semiconductor thin films grown by Hot Wall Epitaxy**  
Ch. Teichert, G. Hlawacek, H. Sitter, A. Andreev, G. Matt, N.S. Sariciftci  
Proceedings of 35th IUVSTA Workshop, Trofaiach, Austria

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3.       **Hybrid Solar Cells**  
E. Arici, D. Meissner, N.S. Sariciftci  
Encyclopedia of Nanotechnology, Edited by Hari Singh Nalwa
  
  4.       **Nanostructured Bipolar Organic Polymers**  
A. Cravino, H. Neugebauer, N.S. Sariciftci  
Encyclopedia of Nanoscience and Nanotechnology
  
  5.       **Investigation of excited states in polymer/fullerene solar cells by means of photoinduced reflection-/absorption spectroscopy**  
C. Arndt, U. Zhokhavets, G. Gobsch, C. Winder, C. Lungenschmied, N.S. Sariciftci  
Proceedings E-MRS 2003
  
  6.       **Tuning of the Photoinduced Charge Transfer Process in Donor-Acceptor “Double Cable” Copolymers**  
S. Luzzati, A. Mozer, P. Denk, M. Scharber, M. Catellani, N. Lupsac, F. Giacalone, J. Segura, N. Martin, H. Neugebauer, N.S. Sariciftci  
Proceedings of the 48th SPIE, San Diego
  
  7.       **Hybrid solar cells based on inorganic nanoclusters and conjugated polymers**  
E. Arici, H. Hoppe, F. Schäffler, D. Meissner, M.A. Malik, N. S. Sariciftci  
Thin Solid Films
  
  8.       **Modelling of optical absorption in conjugated polymer/fullerene bulk-heterojunction plastic solar cells**  
H. Hoppe, N. Arnold, D. Meissner, N.S. Sariciftci  
Thin Solid Films
  
  9.       **Aggregate states and energetic disorder in highly-ordered nanostructures of para-sexiphenyl grown by Hot Wall Epitaxy**  
A. Kadashchuk, A. Andreev, H. Sitter, N.S. Sariciftci, Yu. Skryshevski, Yu. Piryatinski, I. Blinsky  
Advanced Functional Materials
  
  10.      **Morphology and growth kinetics of organic thin films deposited by Hot Wall Epitaxy**  
A. Yu. Andreev, C. Teichert, G. Hlawacek, H. Hoppe, R. Resel, D.-M. Smilgies, H. Sitter, N. S. Sariciftci  
Organic Electronics

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**submitted to:**

1. **Low Bandgap Polymers for Photon Harvesting in Bulk Heterojunction Solar Cells**  
C. Winder, N.S. Sariciftci  
Journal of Material Chemistry
2. **Anomalous photoinduced absorption of konjugated polymer/fullerene mixtures at low temperatures and high frequencies**  
M. Scharber, C. Winder, H. Neugebauer, N.S. Sariciftci  
Synthetic Metals, Special Issue
3. **Morphology Effects in Nanocrystalline CuInSe<sub>2</sub>-Conjugated Polymer Hybrid Systems**  
E. Arici, H. Hoppe, F. Schäffler, D. Meissner, M. Malik, N.S. Sariciftci  
Applied Physics A
4. **Photophysics and photovoltaic device properties of phthalocyanine-fullerene dyad: conjugated polymer mixtures**  
H. Neugebauer, M. Loi, C. Winder, N.S. Sariciftci, G. Cerullo, A. Gouloumis, P. Vazquez, T. Torres  
Solar Energy Materials and Solar Cells
5. **Nanoscale morphology of conjugated polymer/fullerene based bulk-heterojunction solar cells**  
H. Hoppe, M. Niggemann, C. Winder, J. Kraut, R. Hiesgen, A. Hirsch, D. Meissner, N.S. Sariciftci  
Advanced Functional Materials
6. **Random laser action in self-organized para-sexiphenyl nano-fibers grown by Hot Wall Epitaxy**  
F. Quochi, F. Cordella, R. Orru, J.E. Communal, P. Verzeroli, A. Mura, G. Bongiovanni, A. Andreev, H. Sitter, N. S. Sariciftci  
Applied Physics Letters
7. **A soluble PEDOT –derivative for Polymeric Solar Cells: Photophysics and Devices**  
C. Winder, M. Loi, A. Cravino, M. Scharber, C. Brabec, H. Neugebauer, N.S. Sariciftci, I. Perepichka, J. Roncali, Synthetic Metals