

## II. PUBLICATIONS

### *Veröffentlichungen*

1. **Temperature dependence of the charge carrier mobility in disordered organic semiconductors at large carrier concentrations**  
I. Fishchuk, A. Kadashchuk, J. Genoe, M. Ullah, H. Sitter, B. Singh, N.S. Sariciftci, H. Bässler  
Physical Review B 81 (2010), 045202-1
2. **Bio-Organic Optoelectronic Devices Using DNA**  
T. B. Singh, N. S. Sariciftci, J. G. Grote  
Advanced Polymer Science 223 (2010), 189 Book Chapter
3. **The role of the dielectric interface in organic transistors: A combined device and photoemission study**  
P. Stadler, A. M. Track, M. Ullah, H. Sitter, G. J. Matt, G. Koller, T. B. Singh, H. Neugebauer, N. S. Sariciftci, M. G. Ramsey  
Organic Electronic 11 (2010), 207
4. **Effect of shifting of aromatic rings on charge carrier mobility and photovoltaic response of anthracene and thiophene-containing MEH-PPE-PPVs**  
S. Guenes, A. Wild, E. Cevik, A. Pivrikas, U. Schubert, D. Egbe  
Solar Energy Materials & Solar Cells 94 (2010), 484
5. **Anthracene Based Conjugated Polymers: Correlation between  $\pi$ - $\pi$ -Stacking Ability, Photophysical Properties, Charge Carrier Mobility, and Photovoltaic Performance**  
D. Egbe, S. Tuerk, S. Rathgeber, F. Kuehnlenz, R. Jadhav, A. Wild, E. Birckner, G. Adam, A. Pivrikas, V. Cimrova, G. Knoer, N. S. Sariciftci, H. Hoppe  
Macromolecules 43 (2010), 1261
6. **Self-Assembly of Thiophene- and Furan-Appended Methanofullerenes with Poly(3-Hexylthiophene) in Organic Solar Cells**  
P. Troshin, E. Khakina, M. Egginger, A. Goryachev, S. Troyanov, A. Fuchsbauer, A. Peregudov, R. Lyubovskaya, V. Razumov, N.S. Sariciftci  
ChemSusChem 3 (2010), 356
7. **Intercorrelation between Structural Ordering and Emission Properties in Photoconducting Polymers**  
S. Rathgeber, D. Bastos de Toledo, E. Birckner, H. Hoppe, D. Egbe  
Macromolecules 43 (2010), 306

8. **Chiral (S)-5-octyloxy-2-[[4-(2-methylbutoxy)-phenylimino]-methyl]-phenol Liquid Crystalline Compound as Additive into Polymer Solar Cells**  
N. Yilmaz Canli, S. Günes, A. Pivrikas, A. Fuchsbauer, D. Sinwel, N. S. Sariciftci, Ö. Yaşa, B. Bilgin-Eran  
Solar Energy Materials & Solar Cells 94 (2010), 1089
9. **Dependence of Meyer–Neldel energy on energetic disorder in organic field effect transistors**  
M. Ullah, I. I. Fishchuk, A. Kadashchuk, P. Stadler, A. Pivrikas, C. Simbrunner, V. N. Poroshin, N. S. Sariciftci, H. Sitter  
Applied Physics Letters 96 (2010), 213306-1
10. **Donor–acceptor complex formation in evaporated small molecular organic photovoltaic cells**  
D. K. Susarova, P. A. Troshin, D. Hoeglenger, R. Koeppel, S. D. Babenko, R. N. Lyubovskaya, V. F. Razumov, N. S. Sariciftci  
Solar Energy Materials & Solar Cells 94 (2010), 803
11. **Processable Multipurpose Conjugated Polymer for Electrochromic and Photovoltaic Applications**  
D. Baran, A. Balan, S. Celebi, B. Meana Esteban, H. Neugebauer, N. S. Sariciftci, L. Toppare  
Chemistry of Materials 22 (2010), 2978
12. **Fullerene Sensitized Silicon for near- to Mid-Infrared Light Detection**  
G. Matt, T. Fromherz, M. Bednorz, S. Zamiri, G. Goncalves, C. Lungenschmied, D. Meissner, H. Sitter, N.S. Sariciftci, C. Brabec, G. Bauer  
Advanced Materials 22 (2010), 647
13. **The effects of CdSe incorporation into bulk heterojunction solar cells**  
J. Nei de Freitas, I. R. Grova, L. C. Akcelrud, E. Arici, N. S. Sariciftci, A F. Nogueira  
Journal of Materials Chemistry 20 (2010), 4845
14. **Photovoltaic properties of polymer based organic solar cells adapted for non-transparent substrates**  
A. Bedeloglu, A. Demir, Y. Bozkurt, N.S. Sariciftci  
Renewable Energy 35 (2010), 2301
15. **A Photovoltaic Fiber Design for Smart Textiles**  
A. Bedeloglu, A. Demir, Y. Bozkurt, N.S. Sariciftci  
Textile Research Journal Vol 80(11) (2010), 1065

16. **Electrochromic device and bulk heterojunction solar cell applications of poly 4,7-bis(2,3-dihydrothieno [3,4-b][1,4] dioxin-5-yl)-2-dodecyl-2H-benzo[1,2,3]triazole (PBEBT)**  
A. Balan, D. Baran, N. S. Sariciftci, L. Toppare  
Solar Energy Materials & Solar Cells 94 (2010), 1797
17. **Investigation of new PPV-type polymeric materials containing fluorene and thiophene units and their application in organic solar cells**  
J. N. de Freitas, A. Pivrikas, B. F. Nowacki, L. C. Akcelrud, N. S. Sariciftci, A. F. Nogueira  
Synthetic Metals 160 (2010), 1654
18. **Quaterthiophene-based multipods as promising materials for solution-processible organic solar cells and field effect transistors**  
P. Troshin, S. Ponomarenko, Y. Luponosov, E. Khakina, M. Egginger, T. Meyer-Friedrichsen, A. Elschner, S. Peregudova, M. Buzin, V. Razumov, N. S. Sariciftci, A. Muzafarov  
Solar Energy Materials & Solar Cells 94 (2010), 2064
19. **Organic electrochemical light emitting field effect transistors**  
C. Yumusak, N.S. Sariciftci  
Applied Physics Letters 97 (2010), 033302
20. **Fluorene-Carbazole Dendrimers: Synthesis, Thermal, Photophysical and Electroluminescent Device Properties**  
O. Usluer, S. Demic, D. Egbe, E. Birckner, C. Tozlu, A. Pivrikas, A. Montaigne Ramil, N.S. Sariciftci  
Advanced Functional Materials, Vol 20, Issue 23 (2010), 4152
21. **A green neutral state donor–acceptor copolymer for organic solar cells**  
S. Guenes, D. Baran, G. Guenbas, A. Durmus, A. Fuchsbauer, N. S. Sariciftci, L. Toppare  
Polymer Chemistry 1 (2010), 1245
22. **Biocompatible and Biodegradable Materials for Organic Field-Effect Transistors**  
M. Irimia-Vladu, P. A. Troshin, M. Reisinger, L. Shmygleva, Y. Kanbur, G. Schwabegger, M. Bodea, R. Schwödäuer, A. Mumyatov, J. W. Fergus, V. F. Razumov, H. Sitter, N. S. Sariciftci, S. Bauer  
Advanced Functional Materials, Vol 20, Issue 23 (2010), 4069 (front cover)
23. **Environmentally sustainable organic field effect transistors**  
M. Irimia-Vladu, P. A. Troshin, M. Reisinger, G. Schwabegger, M. Ullah, R. Schwödäuer, A. Mumyatov, M. Bodea, J. W. Fergus, V. F. Razumov, H. Sitter, S. Bauer, N. S. Sariciftci  
Organic Electronics 11 (2010), 1974

24. **Spectroelectrochemical and Photovoltaic Characterization of a Solution-Processable n-and-p Type Dopable Pyrrole-Bearing Conjugated Polymers**  
D. Baran, A. Balan, B. Meana-Esteban, H. Neugebauer, N. S. Sariciftci, L. Toppare  
Macromolecular Chemistry and Physics 211 (2010), 2602
25. **Fullerene sensitized silicon for near- to mid-infrared light detection**  
G. J. Matt, T. Fromherz, M. Bednorz, H. Neugebauer, N. S. Sariciftci, G. Bauer  
physica status solidi (b) 247, Nos. 11-12 (2010), 3043
26. **Interfaces and traps in pentacene field-effect transistors**  
C.S. Suchand Sangeeth, P. Stadler, S. Schaur, N.S. Sariciftci, R. Menon  
Journal of Applied Physics 108 (2010), 113703
27. **Exotic materials for bio-organic electronics**  
M. Irimia-Vladu, N.S. Sariciftci, S. Bauer  
Journal of Materials Chemistry Vol 21, Issue 5 (2011), (inside front cover)
28. **Inorganic Nanoparticles for Photovoltaic Applications**  
E. Arici  
Book chapter 8, 185 (2010) of Inorganic Nanoparticles: Synthesis, Applications, and Perspectives (Nanomaterials and Their Applications) edited by C. Altavilla and E. Ciliberto, Crc Press Inc. ISBN 1439817618
29. **Effect of 2-D Delocalization on Charge Transport and Recombination in Bulk-Heterojunction Solar Cells**  
R. Osterbacka, A. Pivrikas, G. Juska, A. Poskus, H. Aarnio, G. Sliauzys, K. Genevicius, K. Arlauskas, N. S. Sariciftci  
IEEE Journal of Selected Topics in Quantum Electronics, Vol. 16, No. 6 (2010), 1738
30. **Charge Carrier Lifetime and Recombination in Bulk Heterojunction Solar Cells**  
A. Pivrikas, H. Neugebauer, N. S. Sariciftci  
IEEE Journal of Selected Topics in Quantum Electronics, Vol. 16, No. 6 (2010), 1746
31. **Improvement in Carrier Mobility and Photovoltaic Performance Through Random Distribution of Segments of Linear and Branched Side Chains**  
D. A. M. Egbe, G. Adam, A. Pivrikas, A. Montaigne Ramil, E. Birckner, V. Cimrova, H. Hoppe, N. S. Sariciftci  
Journal of Materials Chemistry 20 (2010), 9726

32. **Photo-induced charge separation process in (C120-O-PCBM)/(M3EH-PPV)blend solid film studied by means of X, K- bands ESR at 77 and 120 K**  
A. Konkin, U. Ritter, P. Scharff, L. Weber, A. Aganov, N. S. Sariciftci, D. A. M. Egbe  
Synthetic Metals 160 (2010), 485
33. **Electrochromic and electroluminescent devices based on a novel branched quasi-dendric fluorene-carbazole-2,5-bis(2-thienyl)-1H-pyrrole system**  
S. Koyuncu, O. Usluer, M. Can, S. Demic, S. Icli, N. S. Sariciftci  
Journal of Materials Chemistry 21 (2011), 2684
34. **[70]Fullerene-Based Materials for Organic Solar Cells**  
P. A. Troshin, H. Hoppe, A. S. Peregudov, M. Egginger, S. Shokhovets, G. Gobsch, N. S. Sariciftci, V. F. Razumov  
ChemSusChem 4 (2011), 119
35. **Water soluble poly(1-vinyl-1,2,4-triazole) as novel dielectric layer for organic field effect transistors**  
M. Abbas, G. Cakmak, N. Tekin, A. Kara, H. Y. Guney, E. Arici, N. S. Sariciftci  
Organic Electronics 12 (2011), 497
36. **Mobility and photovoltaic performance studies on polymer blends: effects of side chains volume fraction**  
G. Adam, A. Pivrikas, A. Montaigne-Ramil, S. Tadesse, T. Yohannes, N.S. Sariciftci, D.A.M. Egbe  
Journal of Materials Chemistry 21 (2011), 2594

#### **Books:**

1. **Semiconducting and Metallic Polymers**  
A.J. Heeger, N.S. Sariciftci, E.B. Namdas  
Oxford University Press 978-0-19-852864-7 (2010)

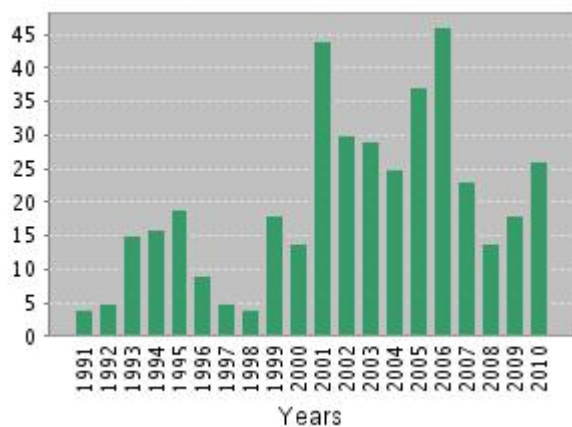
#### **in print/submitted**

1. **Photovoltaic performance of PPE-PPV copolymers: effect of the fullerene component**  
D. K. Susarova, E. A. Khakina, P. A. Troshin, A. E. Goryachev, N. S. Sariciftci, V. F. Razumova,  
D. A. M. Egbe  
Journal of Materials Chemistry (2011) in press

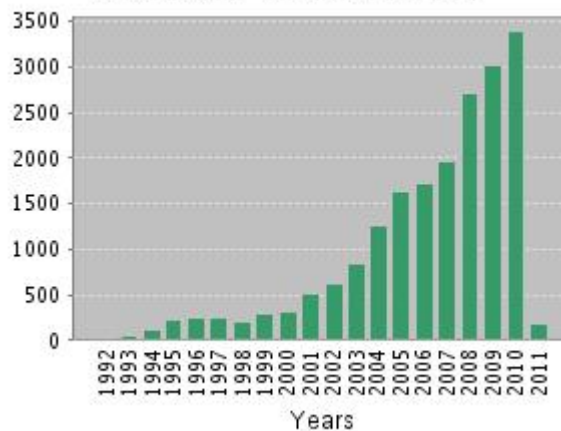
2. **Luminescence and spectroscopic studies of organometallic rhodium and rhenium multi-chromophore systems carrying polypyridyl acceptor sites and phenylethynyl antenna subunits**  
K. Oppelt, D.A.M. Egbe, U. Monkowius, M. List, M. Zabel, N.S. Sariciftci, G. Knör  
Journal of Organometallic Chemistry (2011) in press
  
3. **Electro-spray orientation of Poly(3-Hexylthiophene) films**  
M. Ali, M. Abbas, K. Imin, S. K. Shah, E. Bontempi, P. Colombi, A. Di Cicco and R. Gunnella  
submitted to Organic Electronics
  
4. **Modification of structural, electronic and optical properties of eumelanin films by electrospray deposition**  
M. Abbas, F. D'Amico, M. Ali, R. Borromei, P. Postorino, S. Mangialardo, M. Piccinini, A. M. Cestelli and R. Gunnella  
submitted to Journal of Physical Chemistry B

#### Citation Report of Author Sariciftci

**Published Items in Each Year**



**Citations in Each Year**



**Results found:** 413

**Sum of the times cited:** 19,725

**Average citations per Item:** 47.76

**h-index:** 60

**Patente:**

1. *Radiation-emitting device e.g. organic light emitting diode, has radiation directed primary element directs radiation towards side surfaces of substrate and decreases emission of radiation over main surfaces of substrate*

**Patent Number(s):** DE102007062040-A1

**Inventor(s):** Arici-Bogner E., Buchhauser D., Gaerditz C., Heuser K., Hunze A., Paetzold R., Tschamber

2. *Radiation emitting electronic device e.g. light emitting device, has radiation emitting functional regions, and radiation out-coupling material comprising polysilsesquioxane and nanoparticles, in optical path of functional region more options*

**Patent Number(s):** EP1760802-A2; JP2007073518-A; US2007114520-A1; EP1760802-A3

**Inventor(s):** Arici-Bogner E., Gaerditz C., Heuser K., Hunze A, Paetzold R., Garditz C

3. *Organic light-emitting diode for lighting purposes predominantly emitting white light mixed with colors and composite video signal conversation, comprises substrate layer structure, anode, cathode and intermediate arranged functional layer more options*

**Patent Number(s):** DE102007009530-A1; WO2008104164-A1; EP2126998-A1; KR2009127291-A; CN101622732-A; US2010084674-A1; JP2010519711-W; TW200847501-A

**Inventor(s):** Arici-Bogner E., Paetzold R., Hunze A., Heuser K., Paetzold R.

4. *Natural Materials for Organic Field Effect Transistors*

U.S. Provisional Patent No. 61/399949, Issued: July 20, 2010

M. Irimia-Vladu, N.S. Sariciftci, S. Bauer