

II. PUBLICATIONS

Veröffentlichungen

1. **Monitoring the Channel Formation in Organic Field-Effect Transistors via Photoinduced Charge Transfer**
B. Singh, R. Koeppe, N.S. Sariciftci, M. Morana, C. Brabec
Advanced Functional Materials, 19 (2009), 789-795
2. **Organic Solar Cells with Semitransparent Metal Back Contacts for Power Window Applications**
R. Koeppe, D. Hoeglinger, P. Troshin, R. Lyubovskaya, V. Razumov, N.S. Sariciftci
ChemSusChem 2 (2009), 309-313
3. **Material Solubility-Photovoltaic Performance Relationship in the Design of Novel Fullerene Derivatives for Bulk Heterojunction Solar Cells**
P. Troshin, H. Hoppe, J. Renz, M. Egginger, J. Mayorova, A. Goryachev, A. Pereguov, R. Lyubovskaya, G. Gobsch, N.S. Sariciftci, V. Razumov
Advanced Functional Materials 19 (2009), 779-788
4. **Small-molecule vacuum processed melamine-C₆₀, organic field-effect transistors**
M. Irimia-Vladu, N. Marjanovic, M. Bodea, G. Hernandez-Sosa, A. Montaigne Ramil, R. Schwödiauer, S. Bauer, N.S. Sariciftci, F. Nüesch
Organic Electronics 10 (2009), 408-415
5. **Rubrene thin film characteristics on mica substrates**
S.M. Abd Al-Baqi, G. Hernandez-Sosa, H. Sitter, B. Singh, P. Stadler, N.S. Sariciftci
Interface Controlled Organic Thin Films, Springer Proceedings in Physics, Vol 129 (2009), 43
6. **Temperature dependence of charge transport in C₆₀ based organic**
M Ullah, B. Singh, G. Matt, C.P. Simbrunner, G. Hernandez-Sosa, N.S. Sariciftci, H. Sitter
Interface Controlled Organic Thin Films, Springer Proceedings in Physics, Vol 129 (2009), 173
7. **Negative capacitance and its photo-inhibition in organic bulk heterojunction devices**
C. Lungenschmied, E. Ehrenfreund, N.S. Sariciftci
Organic Electronics 10 (2009), 115-118
8. **Sensing Infrared Light with an Organic/Inorganic Hetero-junction**
G. Matt, T. Fromherz, G. Goncalves, C. Lungenschmied, D. Meissner, N.S. Sariciftci
Interface Controlled Organic Thin Films, Springer Proceedings in Physics, Vol 129 (2009), 153

9. **Negative Differential Resistance in C₆₀ Diodes**
P. Stadler, A. Fuchsbauer, G. Hesser, T. Fromherz, G. Matt, H. Neugebauer, N.S. Sariciftci
Interface Controlled Organic Thin Films, Springer Proceedings in Physics, Vol 129 (2009), 189
10. **Current versus gate voltage hysteresis in organic field effect transistors**
M. Egginger, S. Bauer, R. Schwödiauer, H. Neugebauer, N.S. Sariciftci
Monatshefte der Chemie 140 (2009), 735-750
11. **In situ FTIR spectroelectrochemical characterization of n- and p-dopable phenyl-substituted polythiophenes**
T. Yohannes, S. Lattante, H. Neugebauer, N.S. Sariciftci, M. Andersson
Physical Chemistry Chemical Physics 11 (2009), 6283
12. **Light- and Touch-Point Localization using Flexible Large Area Organic Photodiodes and Elastomer Waveguides**
R. Koeppe, P. Bartu, S. Bauer, N.S. Sariciftci
Advanced Materials 21 (2009) 3510-3514
13. **A flexible textile structure based on polymeric photovoltaics using transparent cathode**
A. Bedeloglu, A. Demir, Y. Bozkurt, N.S. Sariciftci
Synthetic Metals 159 (2009), 2043
14. **Development of novel processable electron accepting conjugated polymers containing fluoranthene units in the main chain**
A. Palmaerts, L. Lutsen, T. J. Cleij, D. Vanderzande, A. Pivrikas, H. Neugebauer, N.S. Sariciftci
Polymer 50 (2009), 5007
15. **Trannulenes: a new class of photoactive materials for organic photovoltaic devices**
P. Troshin, R. Koeppe, D. Susarova, N. Polyakova, A. Peregudoc, V. Razumov, N.S. Sariciftci,
R. Lyubovskaya
Journal of Materials Chemistry 19 (2009), 7738
16. **Meyer-Neldel rule in fullerene field-effect transistors**
M. Ullah, T.B. Singh, H. Sitter, N.S. Sariciftci
Applied Physics A, Materials Science & Processing 97 (2009), 521

17. **A Photovoltaic Fiber Design for Smart Textiles**
A. Bedeloglu, A. Demir, Y. Bozkurt, N.S. Sariciftci
Textile Research Journal (2009) in press
18. **Bio-organic field effect transistors based on crosslinked deoxyribonucleic acid (DNA) gate dielectric**
C. Yumusak, B. Singh, N.S. Sariciftci, G. Grote
Applied Physics Letters 95 (2009), 263304
19. **Electrical response of highly ordered organic thin film metal-insulator-semiconductor devices**
M. Ullah, D. Taylor, R. Schwödiauer, H. Sitter, S. Bauer, N.S. Sariciftci, B. Singh
Journal of Applied Physics 106 (2009), 114505
20. **Fullerene Sensitized Silicon for Near- to Mid-Infrared Light Detection**
G. J. Matt, T. Fromherz, M. Bednorz, S. Zamiri, G. Goncalves, C. Lungenschmied, D. Meissner, H. Sitter, N. S. Sariciftci, C. J. Brabec, G. Bauer
Advanced Materials 21 (2009), in press
21. **Anthracene-Containing PPE-PPV Copolymers: Effect of Side-Chain Nature and Length on Photophysical and Photovoltaic Properties**
R. Jadhav, S. Türk, F. Kühnlenz, V. Cimrova, S. Rathgeber, D. A. M. Egbe, H. Hoppe
Phys. Status Solidi A 12 (2009), 2695
22. **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
23. **Bio-Organic Optoelectronic Devices Using DNA**
T. B. Singh, N. S. Sariciftci, J. G. Grote
Advanced Polymer Science 223 (2010), 189-212 Book Chapter
24. **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 Electronics 11 (2010), 207-211

25. **Intercorrelation between Structural Ordering and Emission Properties in Photoconducting Polymers**

S. Rathgeber, D. Bastos de Toledo, E. Birekner, H. Hoppe, D. A. M. Egbe
Macromolecules 43 (2010), 306

in print/submitted

1. **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. Fuchsbaauer, D. Sinwel, N. S. Sariciftci, Ö. Yaşa, B. Bilgin-Eran
Solar Energy Materials & Solar Cells, in press

2. **A Novel Donor-Acceptor Type Neutral Green State Polymer for Organic Solar Cells**

S. Günes, D. Baran, G. Günbas, A. Durmus, A. Fuchsbaauer, N. S. Sariciftci, L. Toppare
submitted to Polymer Chemistry

3. **Recent developments of hybrid concepts for photovoltaic applications**

E. Arici-Bogner

chapter of the book "Inorganic Nanoparticles, New Frontiers of Research" edited by C. Altavilla and published by Research Signpost, in print

4. **Effect of CdSe incorporation in polymer/PCBM solar cells**

J. N. Freitas, I. R. Grova, L. C. Akcelrud, E. Arici, N. S. Sariciftci, A. F. Nogueira
submitted to Organic Electronics

5. **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. Fuchsbaauer, A. Peregudov, R. Lyubovskaya, V. Razumov, N.S. Sariciftci
ChemSusChem, in press

6. **Anthracene Based Conjugated Polymers: Correlation between π - π -Stacking Ability, Photophysical Properties, Charge Carrier Mobility, and Photovoltaic Performance**

D. Egbe, S. Tuerk, S. Rathgeber, F. Kuehnlenz, R. Jadhav, A. Wild, E. Birekner, G. Adam, A. Pivrikas, V. Cimrova, G. Knoer, N. S. Sariciftci, H. Hoppe
Macromolecules, in press

7. **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, in press

Patente:

1. "OLED with color conversion" E. Arici-Bogner, A. Hunze, R. Paetzold, K. Heuser, USA patent, Appl. Serial No. 12/527,655, August, 2009.