

II. PUBLICATIONS

Veröffentlichungen

1. **Low Band Gap Donor – Acceptor Conjugated Polymers toward Organic Solar Cells Applications**
K. Colladet, S. Fourier, T. J. Cleij, L. Lutsen, J. Gelan, D. Vanderuande, Le H. Nguyen, H. Neugebauer, N. S. Sariciftci, A. Aguirre, G. Janssen, E. Goovaerts
Macromolecules 40 (2007), 65
2. **Donor-acceptor heterojunction solar cells based on perylene dimide and perylene bisbenzimidazole**
S. Erten, F. Meghdadi, S. Guenes, R. Koeppel, N.S. Sariciftci, S. Icli
The European Physical Journal Applied Physics 36 (2007), 225
3. **Conjugated polymer based organic solar cells**
G. Dennler, N. S. Sariciftci, C. Brabec
Semiconducting Polymers: Chemistry, Physics and Engineering Vol 1, Second Edition, Hadzioannou, Malliaras (Eds.)
4. **Photovoltaic enhancement of organic solar cells by a bridged donor-acceptor block copolymer approach**
S.-S. Sun, C. Zhang, A. Ledbetter, S. Choi, K. Seo, C. Bonner, Jr., M. Drees, N.S. Sariciftci
Applied Physics Letters 90 (2007), 043117
5. **Flexible, long-lived, large-area, organic solar cells**
C. Lungenschmied, G. Dennler, H. Neugebauer, N. S. Sariciftci, M. Glatthaar, T. Meyer, A. Meyer
Solar Energy Materials & Solar Cells 91 (2007), 379
6. **Hybrid solar cells using PbS nanoparticles**
S. Guenes, K. Fritz, H. Neugebauer, N.S. Sariciftci, S. Kumar, G. Scholes
Solar Energy Materials & Solar Cells 91 (2007), 420
7. **Hybrid solar cells based on CuInS₂ and organic buffer-sensitizer layers**
S. Bereznev, R. Koeppel, I. Konovalov, J. Kois, S. Guenes, A. Öpik, E. Mellikov, N. S. Sariciftci
Thin Solid Films 515 (2007), 5759-5762
8. **Effects of Annealing on the Nanomorphology and Performance of Poly(alkylthiophene):Fullerene Bulk-Heterojunction Solar Cells**
Le Huong Nguyen, H. Hoppe, T. Erb, S. Guenes, G. Gobsch, N.S. Sariciftci
Advanced Functional Materials 17 (2007), 1071-1078

9. **Fluorene functionalised sexithiophenes-utilising intramolecular charge transfer to extend the photocurrent spectrum in organic solar cells**
P. Skabara, R. Berridge, I. Serebryakow, A. Kanibolotsky, L. Kanibolotskaya, S. Gordeyev, I. Perepichka, N.S. Sariciftci, C. Winder
Journal of Materials Chemistry 17 (2007), 1055-1062
10. **Enhancing photon harvesting in organic solar cells with luminescent concentrators**
R. Koeppe, N.S. Sariciftci, A. Büchtemann
Applied Physics Letters 90 (2007), 181126
11. **Advanced photon-harvesting concepts for low-energy gap organic solar cells**
R. Koeppe, O Bossart, G. Calzaferri, N.S. Sariciftci
Solar Energy Materials and Solar Cells 91 (2007), 986
12. **Conjugated Polymer-Based Organic Solar Cells**
S. Guenes, H. Neugebauer, N.S. Sariciftci
Chemical Review 107 (2007), 1324
13. **Quasi-solid-state dye-sensitized solar cells with cyanoacrylate as electrolyte matrix**
S. Lu, R. Koeppe, S. Guenes, N.S. Sariciftci
Solar Energy Materials & Solar Cells 91 (2007), 1081-1086
14. **Correlation of crystalline and structural properties of C₆₀ thin films grown at various temperature with charge carrier mobility**
B. Singh, N.S. Sariciftci, H. Yang, L. Yang, B. Plochberger, H. Sitter
Applied Physics Letters 90 (2007), 213512
15. **Combined Effects of Conjugation Pattern and Alkoxy Side Chains on the Photovoltaic Properties of Thiophene-Containing PPE-PPVs**
D. Egbe, L.H. Nguyen, K. Schmidtke, A. Wild, C. Sieber, S. Guenes, N.S. Sariciftci
Journal of Polymer Science: Part A: Polymer Chemistry 45 (2007), 1619-1631
16. **Negative capacitance in organic semiconductor devices: Bipolar injection and charge recombination mechanism**
E. Ehrenfreund, C. Lungenschmied, G. Dennler, H. Neugebauer, N.S. Sariciftci
Applied Physics Letters 91 (2007), 012112

17. **Solid State Dye Sensitized Solar Cells using Poly(3-hexylthiophene) as Hole Transport Material**
S. Guenes, H. Neugebauer, N.S. Sariciftci
The Electrochemical Society, ECS Transactions Vol 2 Issue 12: Fullerenes, Nanotubes and Carbon Nanostructures (2007) 145-154
18. **A self-rechargeable and flexible polymer solar battery**
G. Dennler, S. Bereznev, D. Fichou, K. Holl, D. Ilic, R. Koeppe, M. Krebs, A. Labouret, C. Lungenschmied, A. Marchenko, D. Meissner, E. Mellikov, J. Meot, A. Meyer, H. Neugebauer, A. Öpik, N.S. Sariciftci, S. Taillemite, T. Wöhrlé
Solar Energy 81 (2007), 947-957
19. **Organic field-effect transistors and memory elements using deoxyribonucleic acid (DNA) gate dielectric**
P. Stadler, K. Oppelt, B. Singh, J. Grote, R. Schwödiauer, S. Bauer, H. Pigmayer-Brezina, D. Bäuerle, N.S. Sariciftci
Organic Electronics, Volume 8, Issue 6, (2007), 648-654
20. **Optical Gain Performance of Epitaxially Grown para-Sexiphenyl Films**
F. Cordella, F. Quochi, M. Saba, A. Andreev, H. Sitter, N.S. Sariciftci, A. Mura, G. Bongiovanni
Advanced Materials 19 (2007), 2252-2256
21. **Supramolecular Association of Pyrrolidinofullerenes Bearing Chelating Pyridyl Groups and Zinc Phthalocyanine for Organic Solar Cells**
P. Troshin, R. Koeppe, A. Peregudov, S. Peregudova, M. Egginger, R. Lyubovskaya, N.S. Sariciftci
Chemistry of Materials 19 (2007), 5363-5372
22. **Characterization of highly crystalline C60 thin films and their field-effect mobility**
B. Singh, H. Yang, B. Plochberger, L. Yang, H. Sitter, H. Neugebauer, N.S. Sariciftci
Phys. Stat. sol. (b), 244, No. 11, (2007), 3845-3848
23. **Polymer Solar Cells**
H. Hoppe, N.S. Sariciftci
Advances in Polymer Science (2007)
24. **A Review of Charge Transport and Recombination in Polymer/Fullerene Organic Solar Cells**
A. Pivrikas, N.S. Sariciftci, G. Juska, R. Österbacka
Prog. Photovolt: Res. Appl. 15 (2007), 677

25. **Low Band Gap Donor – Acceptor Conjugated Polymers toward Organic Solar Cells Applications**
K. Colladet, S. Fourier, T. Cleij, L. Lutsen, J. Gelan, D. Vanderzande, L. H. Nguyen, H. Neugebauer, N.S. Sariciftci, A. Aguirre, G. Janssen, E. Goovaerts
Macromolecules 40 (2007), 65
26. **Effect of Styryl Side Groups on the Photophysical Properties and Hole Mobility of PPE-PPV Systems**
D. Egbe, E. Tekin, E. Birckner, A. Pivrikas, N.S. Sariciftci, U. Schubert
Macromolecules 40 (2007), 7786
27. **Double-injection current transients as a way of measuring transport in insulating organic films**
G. Juska, K. Genevicius, G. Sliuzys, A. Pivrikas, M. Scharber, R. Österbacka
Journal of Applied Physics 101 (2007), 114505

In print/submitted

1. **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 IUVESTA Workshop, Trofaiach, Austria
2. **Synthesis of poly(p-thienylene vinylene) (PTV) and its derivatives, as low band gap materials for photovoltaics**
F. Banishoeib, A. Henckens, S. Fourier, T.J.Cleij, L. Lutsen, D. Vanderzande, L. H. Nguyen, H. Neugebauer, N. S. Sariciftci
Thin Solid Films

Patente:

1. Kapazitätsmessvorrichtung, Anmeldung A 1094/2007