

II. PUBLICATIONS

Veröffentlichungen

1. **Effect of alkoxy side chains on intra and interchain exciton coupling in PPE-PPV copolymers solution**
M. Guesmi, A. Ben Fredj, S. Romdhane, N. Bouguerra, D.A.M. Egbe, R.W. Lang, M. Havlicek, N.S. Sariciftci, H. Bouchriha
Synthetic Metals 224 (2017), 72
2. **Low and high molecular mass dithienopyrrole-naphthalene bisimide donor-acceptor compounds: synthesis, electrochemical and spectroelectrochemical behaviour**
R. Rybakiewicz, E. D. Glowacki, L. Skorka, S. Pluczyk, P. Zassowski, D. H. Apaydin, M. Lapkowski, M. Zagorska, A. Pron
Chemistry - A European Journal Vol 23, Issue 12 (2017) 2839
3. **Polymers with Alternating Anthracene and Phenylene Building Blocks Linked by Ethynylene and/or Vinylene Units: Studying Structure-Properties-Relationships**
S. Boudiba, Ruzicka, C. Ulbricht, S. Enengl, C. Enengl, J. Gasiorowski, C. Yumusak, V. Pokorna, D. Vyprachticky, K. Hingerl, D. R. T. Zahn, F. Tinti, N. Camaioni, S. Bouguessa, A. Gouasmia, V. Cimrova, D. A. M. Egbe
Journal of Polymer Science, Part A: Polymer Chemistry 55 (2017), 129
4. **Explaining the Cyclic Voltammetry of a Poly(1,4-phenylene-ethynylene)-alt-poly(1,4-phenylene-vinylene) Copolymer upon Oxidation by using Spectroscopic Techniques**
C. Enengl, S. Enengl, N. Bouguerra, M. Havlicek, H. Neugebauer, D.A.M. Egbe
ChemPhysChem 18 (2017), 93
5. **Carbon dioxide conversion to synthetic fuels using biocatalytic electrodes**
S. Schlager, A. Fuchsbaauer, M. Haberbauer, H. Neugebauer, N.S. Sariciftci
Journal of Materials Chemistry A 5 (2017), 2429
6. **Morphology-dependent exciton diffusion length in PPE-PPVs thin films as revealed by a Forster mechanism based-study**
A. Saaidia, M.A. Saidani, S. Romdhane, A. Ben Fredj, D.A.M. Egbe, E. Tekin, H. Bouchriha
Synthetic Metals 226 (2017), 177

7. **Biocatalytic and Bio-electrocatalytic Approaches for the Reduction of CO₂ Using Enzymes**
S. Schlager, A. Dibenedetto, M. Aresta, D. H. Apaydin, L. M. Dumitru, H. Neugebauer, N. S. Sariciftci
Energy Technology 5 (2017) 812
8. **Organic Microboxes Prepared by Self-assembly of a Charge-transfer Dye**
A. Toba, J. Matsui, K. Nakayama, T. Yoshida, C. Yumusak, P. Stadler, M. C. Scharber, M. S. White, N. S. Sariciftci, A. Masuhara
Chemistry Letters, 46 (2017), 557
9. **Increase in electron scattering length in PEDOT:PSS by a triflic acid post-processing**
D. Farka, H. Coskun, P. Bauer, D. Roth, B. Bruckner, P. Klapetek, N. Serdar Sariciftci, P. Stadler
Monatshefte für Chemie, 148 (2017), 871
10. **Electrochemical Capture and Release of CO₂ in Aqueous Electrolytes Using an Organic Semiconductor Electrode**
D. H. Apaydin, M. Gora, E. Portenkirchner, K. T. Oppelt, H. Neugebauer, M. Jakesova, E. D. Glowacki, J. Kunze-Liebhäuser, M. Zagorska, J. Mieczkowski, N. S. Sariciftci
ACS Applied Materials & Interfaces 9 (2017), 12919
11. **Organic, Organometallic and Bioorganic Catalysis for Electrochemical Reduction of CO₂**
D. H. Apaydin, S. Schlager, E. Portenkirchner, N. S. Sariciftci
ChemPhysChem 10 (2017), 226
12. **Bio-Electrocatalytic Application of Microorganisms for Carbon Dioxide Reduction to Methane**
S. Schlager, M. Haberbauer, A. Fuchsbauer, C. Hemmelmair, L. M. Dumitru, G. Hinterberger, H. Neugebauer, N. S. Sariciftci
ChemSusChem 10 (2017), 226
13. **Electrochemical self-assembly of CuSCN-DAST hybrid thin films**
Y. Tsuda, H. Sun, L. Sun, S. Okada, A. Masuhara, P. Stadler, N. S. Sariciftci, M. S. White, T. Yoshida
Monatshefte für Chemie, 148 (2017), 845
14. **Optical and electronic properties of mixed halide (X = I, Cl, Br) methylammonium lead perovskite solar cells**
S. Tombe, G. Adam, H. Heilbrunner, D. H. Apaydin, C. Ulbricht, N. S. Sariciftci, C. J. Arendse, E. Iwuoha, M. C. Scharber
Journal of Materials Chemistry C 5 (2017), 1714

15. **Adamantane substitutions: a path to high-performing, soluble, versatile and sustainable organic semiconducting materials**
A. Kovalenko, C. Yumusak, P. Heinrichova, S. Stritesky, L. Fekete, M. Vala, M. Weiter, N. S. Sariciftci, J. Krajcovic
Journal of Materials Chemistry C 5 (2017) 4716
16. **Anderson-Localization and the Mott–Ioffe–Regel Limit in Glassy-Metallic PEDOT**
D. Farka, H. Coskun, J. Gasiorowski, C. Cobet, K. Hingerl, L. M. Uiberlacker, S. Hild, T. Greunz, D. Stifter, N. S. Sariciftci, R. Menon, W. Schoefberger, C. C. Mardare, A. W. Hassel, C. Schwarzinger, M. C. Scharber, P. Stadler
Advanced Electronic Materials 3 (2017) 1700050
17. **Pseudohalide-Exchanged Quantum Dot Solids Achieve Record Quantum Efficiency in Infrared Photovoltaics**
B. Sun, O. Voznyy, H. Tan, P. Stadler, M. Liu, G. Walters, A. H. Proppe, M. Liu, J. Fan, T. Zhuang, J. Li, M. Wei, J. Xu, Y. Kim, S. Hoogland, E. H. Sargent
Advanced Materials Communication (2017) doi: 10.1002/adma.201700749
18. **Magnetic Field Effects on the Current of PCPDTBT-based Diode**
O. Taboubi, M. Radaoui, A. Ben Fredj, S. Romdhane, M. C. Scharber, N. S. Sariciftci, H. Bouchriha
The Journal of Physical Chemistry C 121, 21 (2017) 11727
19. **Sulfur-Modulated Tin Sites Enable Highly Selective Electrochemical Reduction of CO₂ to Formate**
X. Zheng, P. De Luna, F. P. G. de Arquer, B. Zhang, N. Becknell, M. B. Ross, Y. Li, M. Norouzi Banis, Y. Li, M. Liu, O. Voznyy, C. T. Dinh, T. Zhuang, P. Stadler, Y. Cui, X. Du, P. Yang, E. H. Sargent
Joule 1 (2017) 794
20. **Inorganic assembly catalysts for artificial photosynthesis: general discussion**
H. Kumagai, L. Hammarstrom, D. R. Whang, Y. Shinohara, J. Martinez, J. Karlsson, P. Summers, C. D. Windle, M. Kodera, R. Cogdell, K. Rodolfo Tolod, D. H. Apaydin, E. Fujita, A. Kibler, F. Fan, E. A. Gibson, H. Usami, A. Iwase, H. Inoue, A. Kudo, D. Gust, K. Domen, F. Cassiola, K. Takagi, S. Ook Kang, A. Yamakata, C. Li, L. Sun, H. Park, Y. Soo Kang, R. Li, F. Di Fonzo, T. Setoyama, O. Ishitani
The Royal Society of Chemistry, Faraday Discussions 198 (2017), 481

21. **Molecular catalysts for artificial photosynthesis: general discussion**
M. Wang, V. Artero, L. Hammarstrom, J. Martinez, J. Karlsson, D. Gust, P. Summers, C. Machan, P. Brueggeller, C. D. Windle, Y. Kageshima, R. Cogdell, K. Rodolfo Tolod, A. Kibler, D. H. Apaydin, E. Fujita, J. Ehrmaier, S. Shima, E. Gibson, F. Karadas, A. Harriman, H. Inoue, A. Kudo, T. Takayama, M. Wasielewski, F. Cassiola, M. Yagi, H. Ishida, F. Franco, S. Ook Kang, D. Nocera, C. Li, F. Di Fonzo, H. Park, L. Sun, T. Setoyama, Y. Soo Kang, O. Ishitani, J.-R. Shen, H.-J. Son, S. Masaoka
The Royal Society of Chemistry, Faraday Discussions 198 (2017), 353
22. **Solution-based emerging hybrid solar cells**
T. Yoshida, M. S. White, G. Trimmel, P. Stadler
Monatshefte für Chemie 148 (2017), 793
23. **Microwave-assisted Hydrothermal Synthesis of Structure-controlled ZnO Nanocrystals and Their Properties in Dye-sensitized Solar Cells**
H. Sun, L. Sun, T. Sugiura, M. S. White, P. Stadler, N. S. Sariciftci, A. Masuhara, T. Yoshida
Electrochemistry 85 (5) (2017), 253
24. **Cellular interfaces with hydrogen-bonded organic semiconductor hierarchical nanocrystals**
M. Sytnyk, M. Jakesova, M. Litvinukova, O. Mashkov, D. Kriegner, J. Stangl, J. Nebesarova, F. W. Fecher, W. Schöfberger, N. S. Sariciftci, R. Schindl, W. Heiss, E. D. Glowacki
nature communications 8, 91 (2017)
25. **Biofunctionalized conductive polymers enable efficient CO₂ electroreduction**
H. Coskun, A. Aljabour, P. De Luna, D. Farka, T. Greunz, D. Stifter, M. Kus, X. Zheng, M. Liu, A. W. Hassel, W. Schöfberger, E. H. Sargent, N. S. Sariciftci, P. Stadler
Science Advances Vol 3, No 8 (2017), 1700686, DOI: 10.1126/sciadv.1700686
26. **Confining metal-halide perovskites in nanoporous thin films**
S. Demchyshyn, J. M. Roemer, H. Groiß, H. Heilbrunner, C. Ulbricht, D. Apaydin, A. Böhm, U. Rütt, F. Bertram, G. Hesser, M. C. Scharber, N. S. Sariciftci, B. Nickel, S. Bauer, E. D. Glowacki, M. Kaltenbrunner
Science Advances Vol 3, No 8 (2017), 1700738, DOI: 10.1126/sciadv.1700738
27. **A facile approach to tailoring electrocatalytic activities of imine-rich nitrogen-doped graphene for oxygen reduction reaction**
M. S. Lee, D. R. Whang, H.-J. Choi, M. H. Yang, B.-G. Kim, J.-B. Baek, D. W. Chang
Carbon 122 (2017), 515

28. **Step-by-step improvement in photovoltaic properties of fluorinated quinoxaline-based low-band-gap polymers**
S. K. Putri, Y. H. Kim, D. R. Whang, M. S. Lee, J. H. Kim, D. W. Chang
Organic electronics 47 (2017), 14
29. **Manipulation of Chain Conformation for Optimum Charge-Transport Pathways in Conjugated Polymers**
S. Jeon, J. H. Lee, J. I. Park, B. Jo, D. R. Whang, T. K. Ahn, H. J. Park, S. D. Kim, W. H. Lee, B.-G. Kim
Applied Materials & Interfaces 9 (2017), 22757
30. **Biological approaches to artificial photosynthesis, fundamental processes and theoretical approaches: general discussion**
V. Artero, L. Hammarström, F. Fan, D. R. Whang, J. Martinez, A. Harriman, T. Noguchi, J. Karlsson, P. Summers, S. Itoh, R. Cogdell, A. Kibler, J. Ehrmaier, H. Tamiaki, E. Fujita, S. Shima, S. Yoshino, H. Inoue, M. Wasielewski, T. Corry, D. Gust, F. Cassiola, H. Ishida, K. Takagi, S. O. Kang, C. Li, L. Sun, H. Park, H. Hashimoto, Y. Amao, E. J. Son, N. Kamiya, J.-R. Shen, K. Yamaguchi
Faraday Discussions 198 (2017), 147
31. **Designing Highly Efficient CuI Photosensitizer for Photocatalytic H₂ Evolution from Water**
J. Kim, D. R. Whang, S. Y. Park
ChemSusChem Communications Vol 10, Issu 9, (2017) 1883
32. **Optimized Design Principles for Silicon Coated Nanostructured Electrode Materials and its Applicability towards High Capacity Li-Ion Battery Anodes**
A. Auer, N. S. W. Jonasson, D. H. Apaydin, A. I. Mardare, G. Neri, J. Lichtinger, R. Gernhäuser, J. Kunze-Liebhäuser, E. Portenkirchner
Energy Technology 5 (2017), 2253
33. **Spin-Forbidden Excitation: A New Approach for Triggering Photopharmacological Processes with Low-Intensity NIR Light**
E. Kianfar, D. H. Apaydin, G. Knör
ChemPhotoChem Volume 1, Issue 9 (2017), 378
34. **Biscoumarin-containing acenes as stable organic semiconductors for photocatalytic oxygen reduction to hydrogen peroxide**
M. K. Weclawski, M. Jakeova, M. Charyton, N. Demitri, B. Koszarna, K. Oppelt, S. Sariciftci, D. Gryko, E. D. Glowacki
Journal of Materials Chemistry A 5 (2017), 20780

35. **Green Materials for Electronics**

Mihai Irimia-Vladu, Eric Glowacki, Siegfried Bauer, Niyazi Serdar Sariciftci (eds.)
WILEY-VCH, Weinheim, 2018, ISBN 978-3-527-33865-8

36. **Doping-Induced Polaron Formation and Solid-State Polymerization in Benzoporphyrin–Oligothiophene Conjugated Systems**

D. Solonenko, J. Gasiorowski, D. Apaydin, K. Oppelt, M. Nuss, W. Keawsongsaeng, G. Salvan, K. Hingerl, N. Serdar Sariciftci, D. R. T. Zahn, P. Thamyongkit
The Journal of Physical Chemistry C 121 (2017), 24397

Patente

1. **US 9,768,383 B2**

Patenterteilung 2017

Titel: *"Method for applying an organic semiconductor layer based on epindolidione to a carrier"*

Inventors: Glowacki, Voss

Citation Index of Author Sariciftci according to ISI:

Number of Papers	573
Sum of the Times Cited	45849
Sum of Times Cited without self-citations	43444
Citing Articles	25762
Citing Articles without self-citations	25272
Average Citations per Item	80
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