## Moritz K Riede

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/4980874/publications.pdf

Version: 2024-02-01

182 papers

11,365 citations

54 h-index 103 g-index

189 all docs

 $\frac{189}{\text{docs citations}}$ 

189 times ranked 11219 citing authors

| #  | Article  | IF           | Citations |
|----|--|--------------|-----------|
| 1  | Charge transfer state characterization and voltage losses of organic solar cells. JPhys Materials, 2022, 5, 024002.  | 4.2          | 19        |
| 2  | Geminate and Nongeminate Pathways for Triplet Exciton Formation in Organic Solar Cells. Advanced Energy Materials, 2022, 12, .   | 19.5         | 22        |
| 3  | Properties and Applications of Copper(I) Thiocyanate Holeâ€Transport Interlayers Processed from Different Solvents. Advanced Electronic Materials, 2022, 8, .                  | 5.1          | 9         |
| 4  | Interfacial rearrangements and strain evolution in the thin film growth of ZnPc on glass. Physical Review Materials, 2022, 6, .  | 2.4          | 1         |
| 5  | Organic Solar Cells—The Path to Commercial Success. Advanced Energy Materials, 2021, 11, 2002653.  | 19.5         | 287       |
| 6  | Electron spin as fingerprint for charge generation and transport in doped organic semiconductors. Journal of Materials Chemistry C, 2021, 9, 2944-2954.                        | 5 <b>.</b> 5 | 15        |
| 7  | The role of spin in the degradation of organic photovoltaics. Nature Communications, 2021, 12, 471.  | 12.8         | 16        |
| 8  | Chain Conformation Control of Fluorene-Benzothiadiazole Copolymer Light-Emitting Diode Efficiency and Lifetime. ACS Applied Materials & Samp; Interfaces, 2021, 13, 2919-2931. | 8.0          | 6         |
| 9  | Direct observation and evolution of electronic coupling between organic semiconductors. Physical Review Materials, 2021, 5, .  | 2.4          | 1         |
| 10 | Perspectives of Organic and Perovskiteâ€Based Spintronics. Advanced Optical Materials, 2021, 9, 2100215.   | 7.3          | 46        |
| 11 | Studying the Effect of High Substrate Temperature on the Microstructure of Vacuum Evaporated TAPC: C60 Organic Solar Thin Films. Materials, 2021, 14, 1733.                    | 2.9          | 3         |
| 12 | Adduct-based p-doping of organic semiconductors. Nature Materials, 2021, 20, 1248-1254.  | 27.5         | 40        |
| 13 | Organic Electronics and Beyond. Advanced Optical Materials, 2021, 9, 2101108.  | 7.3          | 1         |
| 14 | Perspectives of Organic and Perovskiteâ€Based Spintronics (Advanced Optical Materials 14/2021).<br>Advanced Optical Materials, 2021, 9, 2170053.                               | 7.3          | 1         |
| 15 | The role of charge recombination to triplet excitons in organic solar cells. Nature, 2021, 597, 666-671.   | 27.8         | 225       |
| 16 | Assessing the Photovoltaic Quality of Vacuumâ€Thermal Evaporated Organic Semiconductor Blends. Advanced Materials, 2021, , 2107584.  | 21.0         | 5         |
| 17 | A liquid-crystalline non-fullerene acceptor enabling high-performance organic solar cells. Journal of<br>Materials Chemistry A, 2021, 9, 26917-26928.                          | 10.3         | 5         |
| 18 | Filamentary High-Resolution Electrical Probes for Nanoengineering. Nano Letters, 2020, 20, 1067-1073.  | 9.1          | 2         |

| #  | Article  | IF   | CITATIONS |
|----|--|------|-----------|
| 19 | Molecular doped organic semiconductor crystals for optoelectronic device applications. Journal of Materials Chemistry C, 2020, 8, 14996-15008.   | 5.5  | 25        |
| 20 | Molecular Quadrupole Moments Promote Groundâ€State Charge Generation in Doped Organic Semiconductors. Advanced Functional Materials, 2020, 30, 2004600.  | 14.9 | 15        |
| 21 | Ultrafast Charge Dynamics in Dilute-Donor versus Highly Intermixed TAPC:C <sub>60</sub> Organic Solar Cell Blends. Journal of Physical Chemistry Letters, 2020, 11, 5610-5617.   | 4.6  | 15        |
| 22 | $\langle i \rangle$ In Situ $\langle i \rangle$ Observations of the Growth Mode of Vacuum-Deposited $\hat{l}\pm$ -Sexithiophene. Journal of Physical Chemistry C, 2020, 124, 11863-11869.                                | 3.1  | 9         |
| 23 | Efficiency enhancement of small molecule organic solar cells using hexapropyltruxene as an interface layer. Journal of Materials Chemistry C, 2020, 8, 4909-4918.  | 5.5  | 5         |
| 24 | Azetidinium as cation in lead mixed halide perovskite nanocrystals of optoelectronic quality. AIP Advances, 2020, 10, 025001.  | 1.3  | 0         |
| 25 | Tuning the ambipolar behaviour of organic field effect transistors via band engineering. AIP Advances, 2019, 9, .  | 1.3  | 20        |
| 26 | Controlling energy levels and Fermi level en route to fully tailored energetics in organic semiconductors. Nature Communications, 2019, 10, 5538.  | 12.8 | 38        |
| 27 | Solubilization of Carbon Nanotubes with Ethylene-Vinyl Acetate for Solution-Processed Conductive Films and Charge Extraction Layers in Perovskite Solar Cells. ACS Applied Materials & Diterfaces, 2019, 11, 1185-1191.  | 8.0  | 31        |
| 28 | Naphthalenetetracarboxylic Diimide Derivatives: Molecular Structure, Thin Film Properties and Solar Cell Applications. Zeitschrift Fur Physikalische Chemie, 2018, 232, 1717-1732.                                       | 2.8  | 4         |
| 29 | Femtosecond Dynamics of Photoexcited C <sub>60</sub> Films. Journal of Physical Chemistry Letters, 2018, 9, 1885-1892.   | 4.6  | 22        |
| 30 | Carbon Nanotubes for Quantum Dot Photovoltaics with Enhanced Light Management and Charge Transport. ACS Photonics, 2018, 5, 4854-4863.   | 6.6  | 4         |
| 31 | Hole Transport in Low-Donor-Content Organic Solar Cells. Journal of Physical Chemistry Letters, 2018, 9, 5496-5501.  | 4.6  | 33        |
| 32 | Key Tradeoffs Limiting the Performance of Organic Photovoltaics. Advanced Energy Materials, 2018, 8, 1703551.  | 19.5 | 71        |
| 33 | Organic Semiconductors â~†., 2018, , .   |      | 1         |
| 34 | Modification of the fluorinated tin oxide/electron-transporting material interface by a strong reductant and its effect on perovskite solar cell efficiency. Molecular Systems Design and Engineering, 2018, 3, 741-747. | 3.4  | 9         |
| 35 | Exciton Diffusion Length and Charge Extraction Yield in Organic Bilayer Solar Cells. Advanced Materials, 2017, 29, 1604424.  | 21.0 | 36        |
| 36 | Intrinsic non-radiative voltage losses in fullerene-based organic solar cells. Nature Energy, 2017, 2, .   | 39.5 | 494       |

| #  | Article  | IF          | CITATIONS     |
|----|--|-------------|---------------|
| 37 | Dicyanovinylene-Substituted Oligothiophenes for Organic Solar Cells. Advances in Polymer Science, 2017, , 51-75.   | 0.8         | 6             |
| 38 | MINERVA: A facility to study Microstructure and INterface Evolution in Realtime under VAcuum. Review of Scientific Instruments, 2017, 88, 103901.  | 1.3         | 11            |
| 39 | In-situ observation of stacking fault evolution in vacuum-deposited C60. Applied Physics Letters, 2017, 111, 233305.   | 3.3         | 4             |
| 40 | Managing BHJ microstructural evolution for long-term photoconversion efficiency (Conference) Tj ETQq0 0 0 rgE  | 3T /Overloo | :k 10 Tf 50 6 |
| 41 | Cross-Linkable Fullerene Derivatives for Solution-Processed n–i–p Perovskite Solar Cells. ACS Energy Letters, 2016, 1, 648-653.  | 17.4        | 67            |
| 42 | EU COST Action MP1307 $\hat{a} \in ``Unravelling the degradation mechanisms of emerging solar cell technologies. , 2016, , .$  |             | 0             |
| 43 | Plenary session 1: Engineering leadership & En |             | 0             |
| 44 | Structured Organic–Inorganic Perovskite toward a Distributed Feedback Laser. Advanced Materials, 2016, 28, 923-929.  | 21.0        | 257           |
| 45 | Reply to 'Tandem organic solar cells revisited'. Nature Photonics, 2016, 10, 355-355.  | 31.4        | 4             |
| 46 | Measurement of Small Molecular Dopant F4TCNQ and C <sub>60</sub> F <sub>36</sub> Diffusion in Organic Bilayer Architectures. ACS Applied Materials & Diffusion in Interfaces, 2015, 7, 28420-28428.  | 8.0         | 82            |
| 47 | Mixed interlayers at the interface between PEDOT:PSS and conjugated polymers provide charge transport control. Journal of Materials Chemistry C, 2015, 3, 2664-2676.   | 5.5         | 26            |
| 48 | Characterization of tandem organic solar cells. Nature Photonics, 2015, 9, 478-479.  | 31.4        | 52            |
| 49 | Enhanced Amplified Spontaneous Emission in Perovskites Using a Flexible Cholesteric Liquid Crystal Reflector. Nano Letters, 2015, 15, 4935-4941.   | 9.1         | 117           |
| 50 | A charge carrier transport model for donor-acceptor blend layers. Journal of Applied Physics, 2015, 117, .   | 2.5         | 11            |
| 51 | Determining doping efficiency and mobility from conductivity and Seebeck data of n-doped C <sub>60</sub> layers. Physica Status Solidi (B): Basic Research, 2015, 252, 1877-1883.  | 1.5         | 12            |
| 52 | Experimental and theoretical study of phase separation in ZnPc:C60 blends. Organic Electronics, 2015, 27, 183-191.   | 2.6         | 5             |
| 53 | Optical properties and limiting photocurrent of thin-film perovskite solar cells. Energy and Environmental Science, 2015, 8, 602-609.  | 30.8        | 417           |
| 54 | Doped-carbazolocarbazoles as hole transporting materials in small molecule solar cells with different architectures. Organic Electronics, 2015, 17, 28-32.   | 2.6         | 6             |

| #  | Article  | IF   | Citations |
|----|--|------|-----------|
| 55 | Characterization of tandem organic solar cells comprising subcells of identical absorber material. Progress in Photovoltaics: Research and Applications, 2015, 23, 1353-1356.  | 8.1  | 8         |
| 56 | Molecular doping for control of gate bias stress in organic thin film transistors. Applied Physics Letters, 2014, 104, 013507.   | 3.3  | 40        |
| 57 | Improved organic p-i-n type solar cells with n-doped fluorinated hexaazatrinaphthylene derivatives HATNA-F6 and HATNA-F12 as transparent electron transport material. Journal of Applied Physics, 2014, 115, 054515. | 2.5  | 23        |
| 58 | Built-in voltage of organic bulk heterojuction p-i-n solar cells measured by electroabsorption spectroscopy. AIP Advances, 2014, 4, .  | 1.3  | 11        |
| 59 | Coevaporated calciumâ€silver metal alloys as contact for highly transparent organic solar cells. Energy Science and Engineering, 2014, 2, 77-85.   | 4.0  | 4         |
| 60 | Increased Openâ€Circuit Voltage of Organic Solar Cells by Reduced Donorâ€Acceptor Interface Area. Advanced Materials, 2014, 26, 3839-3843.   | 21.0 | 181       |
| 61 | Highly efficient p-dopants in amorphous hosts. Organic Electronics, 2014, 15, 365-371.   | 2.6  | 35        |
| 62 | Efficient charge generation by relaxed charge-transfer states at organic interfaces. Nature Materials, 2014, 13, 63-68.  | 27.5 | 667       |
| 63 | Direct Electrical Evidence of Plasmonic Near-Field Enhancement in Small Molecule Organic Solar<br>Cells. Journal of Physical Chemistry C, 2014, 118, 15128-15135.  | 3.1  | 21        |
| 64 | Exploiting diffusion currents at Ohmic contacts for trap characterization in organic semiconductors. Organic Electronics, 2014, 15, 2428-2432.   | 2.6  | 11        |
| 65 | Electroabsorption studies of organic p-i-n solar cells: Increase of the built-in voltage by higher doping concentration in the hole transport layer. Organic Electronics, 2014, 15, 563-568.                         | 2.6  | 21        |
| 66 | Correlation between Temperature Activation of Chargeâ€Carrier Generation Efficiency and Hole Mobility in Smallâ€Molecule Donor Materials. ChemPhysChem, 2014, 15, 1049-1055.   | 2.1  | 4         |
| 67 | Electroabsorption studies of organic p-i-n solar cells: evaluating the built-in voltage. Materials Research Society Symposia Proceedings, 2014, 1639, 1.   | 0.1  | 3         |
| 68 | Selfâ€passivation of molecular nâ€type doping during air exposure using a highly efficient airâ€instable dopant. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 2188-2198.                 | 1.8  | 16        |
| 69 | Interlaboratory outdoor stability studies of flexible roll-to-roll coated organic photovoltaic modules: Stability over 10,000 h. Solar Energy Materials and Solar Cells, 2013, 116, 187-196.                         | 6.2  | 107       |
| 70 | Electric potential mapping by thickness variation: A new method for model-free mobility determination in organic semiconductor thin films. Organic Electronics, 2013, 14, 3460-3471.                                 | 2.6  | 22        |
| 71 | Doping of organic semiconductors. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 9-43.   | 1.8  | 500       |
| 72 | A top-down analysis: Determining photovoltaics R&D investments from patent analysis and R&D headcount. Energy Policy, 2013, 62, 1570-1580.   | 8.8  | 25        |

| #  | Article  | IF   | CITATIONS |
|----|--|------|-----------|
| 73 | Investigating local (photo-)current and structure of ZnPc:C60 bulk-heterojunctions. Organic Electronics, 2013, 14, 2777-2788.  | 2.6  | 10        |
| 74 | Investigation of Driving Forces for Charge Extraction in Organic Solar Cells: Transient Photocurrent Measurements on Solar Cells Showing Sâ€Shaped Current–Voltage Characteristics. Advanced Energy Materials, 2013, 3, 873-880.   | 19.5 | 103       |
| 75 | Trap states in ZnPc:C60 small-molecule organic solar cells. Physical Review B, 2013, 87, .   | 3.2  | 43        |
| 76 | Dominating recombination mechanisms in organic solar cells based on ZnPc and C60. Applied Physics Letters, 2013, 102, 163901.  | 3.3  | 55        |
| 77 | Diindenoperylene derivatives: A model to investigate the path from molecular structure via morphology to solar cell performance. Organic Electronics, 2013, 14, 1704-1714.   | 2.6  | 12        |
| 78 | Two Similar Near-Infrared (IR) Absorbing Benzannulated Aza-BODIPY Dyes as Near-IR Sensitizers for Ternary Solar Cells. ACS Applied Materials & Samp; Interfaces, 2013, 5, 5609-5616.   | 8.0  | 70        |
| 79 | Molecular ordering and charge transport in a dicyanovinyl-substituted quaterthiophene thin film. RSC Advances, 2013, 3, 12117.   | 3.6  | 20        |
| 80 | Photoconductivity as loss mechanism in organic solar cells. Physica Status Solidi - Rapid Research Letters, 2013, 7, 401-405.  | 2.4  | 16        |
| 81 | Openâ€Circuit Voltage and Effective Gap of Organic Solar Cells. Advanced Functional Materials, 2013, 23, 5814-5821.  | 14.9 | 80        |
| 82 | Correlation of Absorption Profile and Fill Factor in Organic Solar Cells: The Role of Mobility Imbalance. Advanced Energy Materials, 2013, 3, 631-638.   | 19.5 | 50        |
| 83 | Evaluation and Control of the Orientation of Small Molecules for Strongly Absorbing Organic Thin Films. Journal of Physical Chemistry C, 2013, 117, 11600-11609.   | 3.1  | 50        |
| 84 | Temperature dependent behavior of flat and bulk heterojunction organic solar cells. Materials Research Society Symposia Proceedings, 2013, 1493, 269-273.  | 0.1  | 3         |
| 85 | Correlation of open-circuit voltage and energy levels in zinc-phthalocyanine: C <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow></mml:mrow><mml:mn>60</mml:mn></mml:msub></mml:math> bulk heterojunction solar cells with varied mixing ratio. Physical Review B, 2013, 88 | 3.2  | 71        |
| 86 | Fermi level shift and doping efficiency in <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>p</mml:mi></mml:math> -doped small molecule organic semiconductors: A photoelectron spectroscopy and theoretical study. Physical Review B, 2012, 86, .                                      | 3.2  | 152       |
| 87 | <i>In-situ</i> conductivity and Seebeck measurements of highly efficient n-dopants in fullerene C60. Applied Physics Letters, 2012, 100, .   | 3.3  | 112       |
| 88 | Temperature Activation of the Photoinduced Charge Carrier Generation Efficiency in Quaterthiophene:C <sub>60</sub> Mixed Films. Journal of Physical Chemistry C, 2012, 116, 25097-25105.   | 3.1  | 9         |
| 89 | Morphology and molecular orientation of ethyl-substituted dicyanovinyl-sexithiophene films for photovoltaic applications. Thin Solid Films, 2012, 525, 97-105.   | 1.8  | 20        |
| 90 | 2-(2-Methoxyphenyl)-1,3-dimethyl-1 <i>H</i> -benzoimidazol-3-ium Iodide as a New Air-Stable n-Type Dopant for Vacuum-Processed Organic Semiconductor Thin Films. Journal of the American Chemical Society, 2012, 134, 3999-4002.   | 13.7 | 145       |

| #   | Article   | IF   | Citations |
|-----|---|------|-----------|
| 91  | Phase separation analysis of bulk heterojunctions in small-molecule organic solar cells using zinc-phthalocyanine and C60. Physical Review B, 2012, 85, .   | 3.2  | 53        |
| 92  | A comparison of two air-stable molecular n-dopants for C60. Organic Electronics, 2012, 13, 3319-3325.   | 2.6  | 28        |
| 93  | Measurements of Efficiency Losses in Blend and Bilayer-Type Zinc Phthalocyanine/C <sub>60</sub> High-Vacuum-Processed Organic Solar Cells. Journal of Physical Chemistry C, 2012, 116, 16384-16390. | 3.1  | 35        |
| 94  | Photoelectron spectroscopy investigations of recombination contacts for tandem organic solar cells. Applied Physics Letters, 2012, 100, .   | 3.3  | 14        |
| 95  | Comparative Study of Microscopic Charge Dynamics in Crystalline Acceptor-Substituted Oligothiophenes. Journal of the American Chemical Society, 2012, 134, 6052-6056.                               | 13.7 | 78        |
| 96  | Correlation of π-Conjugated Oligomer Structure with Film Morphology and Organic Solar Cell Performance. Journal of the American Chemical Society, 2012, 134, 11064-11067.                           | 13.7 | 260       |
| 97  | Optimum mobility, contact properties, and open-circuit voltage of organic solar cells: A drift-diffusion simulation study. Physical Review B, 2012, 85, .   | 3.2  | 174       |
| 98  | Impedance model of trap states for characterization of organic semiconductor devices. Journal of Applied Physics, 2012, 111, .  | 2.5  | 52        |
| 99  | The effect of barrier performance on the lifetime of small-molecule organic solar cells. Solar Energy<br>Materials and Solar Cells, 2012, 97, 102-108.  | 6.2  | 66        |
| 100 | Organic solar cells based on a novel infrared absorbing aza-bodipy dye. Solar Energy Materials and Solar Cells, 2012, 99, 176-181.  | 6.2  | 54        |
| 101 | Effect of film thickness, type of buffer layer, and substrate temperature on the morphology of dicyanovinyl-substituted sexithiophene films. Thin Solid Films, 2012, 520, 2479-2487.                | 1.8  | 14        |
| 102 | Structural phase transition in pentacene caused by molecular doping and its effect on charge carrier mobility. Organic Electronics, 2012, 13, 58-65.  | 2.6  | 105       |
| 103 | Probing the effect of substrate heating during deposition of DCV4T:C60 blend layers for organic solar cells. Organic Electronics, 2012, 13, 623-631.  | 2.6  | 22        |
| 104 | Fluorinated Zinc Phthalocyanine as Donor for Efficient Vacuumâ€Deposited Organic Solar Cells. Advanced Functional Materials, 2012, 22, 405-414.   | 14.9 | 70        |
| 105 | Interrelation between Crystal Packing and Smallâ€Molecule Organic Solar Cell Performance. Advanced Materials, 2012, 24, 675-680.  | 21.0 | 129       |
| 106 | Homoleptic Co(ii), Ni(ii), Cu(ii), Zn(ii) and Hg(ii) complexes of bis-(phenyl)-diisoindol-aza-methene. Dalton Transactions, 2011, 40, 3476.   | 3.3  | 37        |
| 107 | Molecules for organic electronics studied one by one. Physical Chemistry Chemical Physics, 2011, 13, 14421.   | 2.8  | 6         |
| 108 | Organic Semiconductors., 2011,, 448-507.  |      | 9         |

| #   | Article   | IF   | Citations |
|-----|---|------|-----------|
| 109 | Investigation of C60F36 as low-volatility $\langle i \rangle p \langle i \rangle$ -dopant in organic optoelectronic devices. Journal of Applied Physics, 2011, 109, .                                     | 2.5  | 55        |
| 110 | Improved efficiency and lifetime in small molecule organic solar cells with optimized conductive polymer electrodes. Applied Physics Letters, $2011, 99, \ldots$  | 3.3  | 39        |
| 111 | Tetrapropyl-tetraphenyl-diindenoperylene derivative as a green absorber for high-voltage stable organic solar cells. Physical Review B, 2011, 83, .   | 3.2  | 14        |
| 112 | Side Chain Variations on a Series of Dicyanovinyl-Terthiophenes: A Photoinduced Absorption Study. Journal of Physical Chemistry A, 2011, 115, 8437-8446.  | 2.5  | 29        |
| 113 | Imbalanced mobilities causing S-shaped IV curves in planar heterojunction organic solar cells. Applied Physics Letters, 2011, 98, .   | 3.3  | 203       |
| 114 | Improved photocurrent by using n-doped 2,3,8,9,14,15-hexachloro-5,6,11,12,17,18-hexaazatrinaphthylene as optical spacer layer in p-i-n type organic solar cells. Journal of Applied Physics, 2011, 110, . | 2.5  | 18        |
| 115 | Effect of concentration gradients in ZnPc:C60 bulk heterojunction organic solar cells. Solar Energy Materials and Solar Cells, 2011, , .  | 6.2  | 5         |
| 116 | Increase of charge carrier lifetime in dicyanovinyl–quinquethiophene: fullerene blends upon deposition on heated substrates. Organic Electronics, 2011, 12, 2258-2267.                                    | 2.6  | 10        |
| 117 | Dicyanovinyl sexithiophene as donor material in organic planar heterojunction solar cells:<br>Morphological, optical, and electrical properties. Organic Electronics, 2011, 12, 2243-2252.                | 2.6  | 6         |
| 118 | An inter-laboratory stability study of roll-to-roll coated flexible polymer solar modules. Solar Energy Materials and Solar Cells, 2011, 95, 1398-1416.   | 6.2  | 132       |
| 119 | Consensus stability testing protocols for organic photovoltaic materials and devices. Solar Energy Materials and Solar Cells, 2011, 95, 1253-1267.  | 6.2  | 812       |
| 120 | Synthesis of thiophene-substituted aza-BODIPYs and their optical and electrochemical properties. Tetrahedron, 2011, 67, 7148-7155.  | 1.9  | 83        |
| 121 | Determining the C60 molecular arrangement in thin films by means of X-ray diffraction. Journal of Applied Crystallography, 2011, 44, 983-990.   | 4.5  | 28        |
| 122 | Dicyanovinyl–Substituted Oligothiophenes: Structureâ€Property Relationships and Application in Vacuumâ€Processed Small Molecule Organic Solar Cells. Advanced Functional Materials, 2011, 21, 897-910.    | 14.9 | 246       |
| 123 | Influence of Holeâ€Transport Layers and Donor Materials on Openâ€Circuit Voltage and Shape of <i>lâ€" V</i> Curves of Organic Solar Cells. Advanced Functional Materials, 2011, 21, 2140-2149.            | 14.9 | 263       |
| 124 | Efficient Organic Tandem Solar Cells based on Small Molecules. Advanced Functional Materials, 2011, 21, 3019-3028.  | 14.9 | 216       |
| 125 | Synthesis and Characterization of Nearâ€Infrared Absorbing Benzannulated Azaâ€BODIPY Dyes. Chemistry - A European Journal, 2011, 17, 2939-2947.   | 3.3  | 151       |
| 126 | The influence of substrate heating on morphology and layer growth in C60:ZnPc bulk heterojunction solar cells. Organic Electronics, 2011, 12, 435-441.  | 2.6  | 61        |

| #   | Article  | IF  | Citations |
|-----|--|-----|-----------|
| 127 | Tetrabutyl-tetraphenyl-diindenoperylene derivatives as alternative green donor in bulk heterojunction organic solar cells. Solar Energy Materials and Solar Cells, 2011, 95, 630-635.                | 6.2 | 7         |
| 128 | Total charge amount as indicator for the degradation of small molecule organic solar cells. Solar Energy Materials and Solar Cells, 2011, 95, 1278-1283.   | 6.2 | 15        |
| 129 | The role of energy level matching in organic solar cells—Hexaazatriphenylene hexacarbonitrile as transparent electron transport material. Solar Energy Materials and Solar Cells, 2011, 95, 927-932. | 6.2 | 40        |
| 130 | Water and oxygen induced degradation of small molecule organic solar cells. Solar Energy Materials and Solar Cells, 2011, 95, 1268-1277.   | 6.2 | 126       |
| 131 | Zinc phthalocyanine â€" Influence of substrate temperature, film thickness, and kind of substrate on the morphology. Thin Solid Films, 2011, 519, 3939-3945.   | 1.8 | 84        |
| 132 | Near-infrared absorbing semitransparent organic solar cells. Applied Physics Letters, 2011, 99, .  | 3.3 | 48        |
| 133 | Quantitative estimation of electronic quality of zinc phthalocyanine thin films. Physical Review B, 2011, 84, .  | 3.2 | 10        |
| 134 | Highly efficient semitransparent tandem organic solar cells with complementary absorber materials. Applied Physics Letters, 2011, 99, 043301.  | 3.3 | 60        |
| 135 | X-ray investigation of the morphology of DCV6T-Bu4films for organic solar cells. Acta<br>Crystallographica Section A: Foundations and Advances, 2010, 66, s97-s98.                                   | 0.3 | 1         |
| 136 | Organic solar cells with very high fill factor and voltage using tetrapropylâ€tetraphenylâ€diindenoperylene as green donor. Physica Status Solidi - Rapid Research Letters, 2010, 4, 329-331.        | 2.4 | 10        |
| 137 | On the communication of scientific data: The Full-Metadata Format. Computer Physics Communications, 2010, 181, 651-662.  | 7.5 | 13        |
| 138 | Sonnige Aussichten mit organischen Solarzellen. Forschung, 2010, 35, 22-27.  | 0.0 | 0         |
| 139 | Conductivity, charge carrier mobility and ageing of ZnPc/C60 solar cells. Optical Materials, 2010, 32, 1676-1680.  | 3.6 | 21        |
| 140 | Improved photon harvesting by employing C 70 in bulk heterojunction solar cells. , 2010, , .   |     | 2         |
| 141 | Efficient and long-term stable organic vacuum deposited tandem solar cells. Proceedings of SPIE, 2010,   | 0.8 | 6         |
| 142 | Increase in internal quantum efficiency in small molecular oligothiophene: C60 mixed heterojunction solar cells by substrate heating. Applied Physics Letters, 2010, 97, 073503.                     | 3.3 | 57        |
| 143 | Highly doped layers as efficient electron–hole recombination contacts for tandem organic solar cells. Journal of Applied Physics, 2010, 108, 033108.   | 2.5 | 66        |
| 144 | Controlled current matching in small molecule organic tandem solar cells using doped spacer layers. Journal of Applied Physics, 2010, 107, .   | 2.5 | 92        |

| #   | Article  | IF   | Citations |
|-----|--|------|-----------|
| 145 | Correlation between morphology and performance of low bandgap oligothiophene:C60 mixed heterojunctions in organic solar cells. Journal of Applied Physics, 2010, 107, .  | 2.5  | 55        |
| 146 | Selective absorption enhancement in organic solar cells using light incoupling layers. Journal of Applied Physics, 2010, 107, 053117.  | 2.5  | 33        |
| 147 | Light Incoupling & Dptical Optimisation of Organic Solar Cells. , 2010, , .  |      | 0         |
| 148 | Comparison of different conditions for accelerated ageing of small molecule organic solar cells. , 2010, , .   |      | 8         |
| 149 | Detection of trap charge in small molecular organic bulk heterojunction solar cells. Physical Review B, 2010, 82, .  | 3.2  | 25        |
| 150 | Numerical drift-diffusion modeling of organic solar cells in comparison with experimental data series. , $2010,  ,  .$   |      | 1         |
| 151 | Charge Carrier Mobility and Ageing of ZnPc/C60 Solar Cells. Molecular Crystals and Liquid Crystals, 2010, 522, 61/[361]-74/[374].  | 0.9  | 0         |
| 152 | Optimization of organic tandem solar cells based on small molecules. , 2010, , .   |      | 3         |
| 153 | Organic thin-film layer investigation with pair-distribution function technique. Acta Crystallographica Section A: Foundations and Advances, 2010, 66, s73-s73.  | 0.3  | 0         |
| 154 | Optimizing the morphology of metal multilayer films for indium tin oxide (ITO)-free inverted organic solar cells. Journal of Applied Physics, 2009, $105$ , .  | 2.5  | 72        |
| 155 | Antenna effects and improved efficiency in multiple heterojunction photovoltaic cells based on pentacene, zinc phthalocyanine, and C60. Journal of Applied Physics, 2009, 106, .   | 2.5  | 42        |
| 156 | Efficient semitransparent small-molecule organic solar cells. Applied Physics Letters, 2009, 95, .   | 3.3  | 37        |
| 157 | Organic thin film photovoltaic cells based on planar and mixed heterojunctions between fullerene and a low bandgap oligothiophene. Journal of Applied Physics, 2009, 106, .  | 2.5  | 40        |
| 158 | Characterization of effective charge carrier mobility in ZnPc/C60 solar cells after ageing. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 2864-2866.  | 0.8  | 3         |
| 159 | Surface Engineering Using Kumada Catalyst-Transfer Polycondensation (KCTP): Preparation and Structuring of Poly(3-hexylthiophene)-Based Graft Copolymer Brushes. Journal of the American Chemical Society, 2009, 131, 153-161. | 13.7 | 102       |
| 160 | Thick C60:ZnPc bulk heterojunction solar cells with improved performance by film deposition on heated substrates. Applied Physics Letters, 2009, 94, .   | 3.3  | 100       |
| 161 | Transparent conductive layers for organic solar cells: simulation and experiment. Proceedings of SPIE, 2009, , .   | 0.8  | 7         |
| 162 | Improved bulk heterojunction organic solar cells employing C70 fullerenes. Applied Physics Letters, 2009, 94, 223307.  | 3.3  | 98        |

| #   | Article   | IF  | Citations |
|-----|---|-----|-----------|
| 163 | High throughput testing platform for organic Solar Cells. Progress in Photovoltaics: Research and Applications, 2008, 16, 561-576.  | 8.1 | 34        |
| 164 | Light trapping in organic solar cells. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 2862-2874.  | 1.8 | 74        |
| 165 | Small-molecule solar cells—status and perspectives. Nanotechnology, 2008, 19, 424001.   | 2.6 | 269       |
| 166 | Efficient p-i-n type organic solar cells incorporating 1,4,5,8-naphthalenetetracarboxylic dianhydride as transparent electron transport material. Journal of Applied Physics, 2008, 104, 034506.                    | 2.5 | 52        |
| 167 | Pentacene homojunctions: Electron and hole transport properties and related photovoltaic responses. Physical Review B, 2008, 77, .  | 3.2 | 71        |
| 168 | Origin of open circuit voltage in planar and bulk heterojunction organic thin-film photovoltaics depending on doped transport layers. Journal of Applied Physics, 2008, 104, 043107.                                | 2.5 | 116       |
| 169 | Comment on "Roles of donor and acceptor nanodomains in 6% efficient thermally annealed polymer photovoltaics―[Appl. Phys. Lett. 90, 163511 (2007)]. Applied Physics Letters, 2008, 92, 076101.                      | 3.3 | 9         |
| 170 | Transparent electrode materials for solar cells. Proceedings of SPIE, 2008, , .   | 0.8 | 18        |
| 171 | Characterisation of different hole transport materials as used in organic p-i-n solar cells. Proceedings of SPIE, 2008, , .   | 0.8 | 12        |
| 172 | Recent progress in organic solar cells based on small molecules. Proceedings of SPIE, 2008, , .   | 0.8 | 2         |
| 173 | Dicyanovinyl-quinquethiophenes with varying alkyl chain lengths: Investigation of their performance in organic devices. Journal of Applied Physics, 2008, 104, 074511.  | 2.5 | 40        |
| 174 | Analyzing poly(3-hexyl-thiophene):1-(3-methoxy-carbonyl)propyl-1-phenyl-(6,6)C61 bulk-heterojunction solar cells by UV-visible spectroscopy and optical simulations. Journal of Applied Physics, 2007, 102, 054502. | 2.5 | 23        |
| 175 | Efficiency limiting factors of organic bulk heterojunction solar cells identified by electrical impedance spectroscopy. Solar Energy Materials and Solar Cells, 2007, 91, 390-393.                                  | 6.2 | 229       |
| 176 | The influence of doping on the performance of organic bulk heterojunction solar cells., 2006, 6192, 324.  |     | 0         |
| 177 | Datamining and analysis of the key parameters in organic solar cells. , 2006, , .   |     | 5         |
| 178 | Optical near field phenomena in planar and structured organic solar cells. , 2006, , .  |     | 6         |
| 179 | Electroabsorption studies of organic bulk-heterojunction solar cells. Thin Solid Films, 2005, 493, 170-174.   | 1.8 | 21        |
| 180 | Organic solar cells using inverted layer sequence. Thin Solid Films, 2005, 491, 298-300.  | 1.8 | 177       |

| #   | Article   | IF | CITATIONS |
|-----|---|----|-----------|
| 181 | Functional substrates for flexible organic photovoltaic cells. , 2005, 5938, 593802.    |    | 1         |
| 182 | Thermally Evaporated Donor Molecules for Low-Voltage Loss Organic Solar Cells. , 0, , . |    | 0         |