# Dieter Neher

List of Publications by Year
in descending order

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| 351 | 32,169 | 2544 | 5120 |
|---|---|---|---|
| papers | citations | 96 h-index | 166 g-index |

| 362 | 362 | 362 | 22107 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Understanding and suppressing non-radiative losses in methylammonium-free wide-bandgap perovskite solar cells. Energy and Environmental Science, 2022, 15, 714-726. | 30.8 | 68 |
| 2 | Quantification of Efficiency Losses Due to Mobile Ions in Perovskite Solar Cells via Fast Hysteresis Measurements. Solar Rrl, 2022, 6, . | 5.8 | 36 |
| 3 | Reply to Comment on â€œEnhanced Charge Selectivity via Anodic-C<sub>60</sub> Layer Reduces Nonradiative Losses in Organic Solar Cellsâ€. ACS Applied Materials & Interfaces, 2022, 14, 7527-7530. | 8.0 | 2 |
| 4 | Understanding the Role of Order in Yâ€Series Nonâ€Fullerene Solar Cells to Realize High Openâ€Circuit Voltages. Advanced Energy Materials, 2022, 12, . | 19.5 | 32 |
| 5 | Understanding Performance Limiting Interfacial Recombination in pin Perovskite Solar Cells. Advanced Energy Materials, 2022, 12, . | 19.5 | 95 |
| 6 | Perovskiteâ€“organic tandem solar cells with indium oxide interconnect. Nature, 2022, 604, 280-286. | 27.8 | 181 |
| 7 | Wave Optics of Differential Absorption Spectroscopy in Thick-Junction Organic Solar Cells: Optical Artifacts and Correction Strategies. Physical Review Applied, 2022, 17, . | 3.8 | 3 |
| 8 | Revealing the doping density in perovskite solar cells and its impact on device performance. Applied Physics Reviews, 2022, 9, . | 11.3 | 19 |
| 9 | Effects of energetic disorder in bulk heterojunction organic solar cells. Energy and Environmental Science, 2022, 15, 2806-2818. | 30.8 | 57 |
| 10 | On the Interplay between CT and Singlet Exciton Emission in Organic Solar Cells with Small Driving Force and Its Impact on Voltage Loss. Advanced Energy Materials, 2022, 12, . | 19.5 | 10 |
| 11 | Determination of the charge carrier density in organic solar cells: A tutorial. Journal of Applied Physics, 2022, 131, . | 2.5 | 13 |
| 12 | Quantifying Quasiâ€Fermi Level Splitting and Openâ€Circuit Voltage Losses in Highly Efficient Nonfullerene Organic Solar Cells. Solar Rrl, 2021, 5, 2000649. | 5.8 | 19 |
| 13 | Tuning halide perovskite energy levels. Energy and Environmental Science, 2021, 14, 1429-1438. | 30.8 | 124 |
| 14 | A History and Perspective of Nonâ€Fullerene Electron Acceptors for Organic Solar Cells. Advanced Energy Materials, 2021, 11, 2003570. | 19.5 | 323 |
| 15 | Bi-functional interfaces by poly(ionic liquid) treatment in efficient pin and nip perovskite solar cells. Energy and Environmental Science, 2021, 14, 4508-4522. | 30.8 | 76 |
| 16 | Spinâ€“spin interactions and spin delocalisation in a doped organic semiconductor probed by EPR spectroscopy. Physical Chemistry Chemical Physics, 2021, 23, 13827-13841. | 2.8 | 11 |
| 17 | Large-Grain Double Cation Perovskites with 18 Î¼s Lifetime and High Luminescence Yield for Efficient Inverted Perovskite Solar Cells. ACS Energy Letters, 2021, 6, 1045-1054. | 17.4 | 54 |
| 18 | Enhanced Charge Selectivity via Anodic-C<sub>60</sub> Layer Reduces Nonradiative Losses in Organic Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 12603-12609. | 8.0 | 9 |

| # | Article | IF | Citations |
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| 19 | Adjusting the energy of interfacial states in organic photovoltaics for maximum efficiency. Nature Communications, 2021, 12, 1772. | 12.8 | 27 |
| 20 | 27.9% Efficient Monolithic Perovskite/Silicon Tandem Solar Cells on Industry Compatible Bottom Cells. Solar Rrl, 2021, 5, 2100244. | 5.8 | 59 |
| 21 | Explaining the Fillâ€Factor and Photocurrent Losses of Nonfullerene Acceptorâ€Based Solar Cells by Probing the Longâ€Range Charge Carrier Diffusion and Drift Lengths. Advanced Energy Materials, 2021, 11, 2100804. | 19.5 | 23 |
| 22 | Pathways toward 30% Efficient Singleâ€Junction Perovskite Solar Cells and the Role of Mobile Ions. Solar Rrl, 2021, 5, 2100219. | 5.8 | 48 |
| 23 | 2D/3D perovskite engineering eliminates interfacial recombination losses in hybrid perovskite solar cells. CheM, 2021, 7, 1903-1916. | 11.7 | 108 |
| 24 | Universal Current Losses in Perovskite Solar Cells Due to Mobile Ions. Advanced Energy Materials, 2021, 11, 2101447. | 19.5 | 52 |
| 25 | Halogenâ€Bonded Holeâ€Transport Material Suppresses Charge Recombination and Enhances Stability of Perovskite Solar Cells. Advanced Energy Materials, 2021, 11, 2101553. | 19.5 | 44 |
| 26 | General Rules for the Impact of Energetic Disorder and Mobility on Nongeminate Recombination in Phase-Separated Organic Solar Cells. Physical Review Applied, 2021, 16, . | 3.8 | 8 |
| 27 | Infrared spectroscopy depth profiling of organic thin films. Materials Horizons, 2021, 8, 1461-1471. | 12.2 | 10 |
| 28 | Nano-emitting Heterostructures Violate Optical Reciprocity and Enable Efficient Photoluminescence in Halide-Segregated Methylammonium-Free Wide Bandgap Perovskites. ACS Energy Letters, 2021, 6, 419-428. | 17.4 | 31 |
| 29 | Excitons Dominate the Emission from PM6:Y6 Solar Cells, but This Does Not Help the Open-Circuit Voltage of the Device. ACS Energy Letters, 2021, 6, 557-564. | 17.4 | 57 |
| 30 | Roadmap on organicâ€“inorganic hybrid perovskite semiconductors and devices. APL Materials, 2021, 9, . | 5.1 | 102 |
| 31 | Orders of Recombination in Complete Perovskite Solar Cells â€“ Linking Timeâ€Resolved and Steadyâ€State Measurements. Advanced Energy Materials, 2021, 11, 2101823. | 19.5 | 31 |
| 32 | Revealing Fundamental Efficiency Limits of Monolithic Perovskite/Silicon Tandem Photovoltaics through Subcell Characterization. ACS Energy Letters, 2021, 6, 3982-3991. | 17.4 | 22 |
| 33 | Perfluorinated Self-Assembled Monolayers Enhance the Stability and Efficiency of Inverted Perovskite Solar Cells. ACS Nano, 2020, 14, 1445-1456. | 14.6 | 115 |
| 34 | Organic Solar Cells with Large Insensitivity to Donor Polymer Molar Mass across All Acceptor Classes. ACS Applied Polymer Materials, 2020, 2, 5300-5308. | 4.4 | 7 |
| 35 | Halide Segregation versus Interfacial Recombination in Bromide-Rich Wide-Gap Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 2728-2736. | 17.4 | 114 |
| 36 | Defect/Interface Recombination Limited Quasi-Fermi Level Splitting and Open-Circuit Voltage in Mono- and Triple-Cation Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 37647-37656. | 8.0 | 28 |

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| 37 | Putting Order into PM6:Y6 Solar Cells to Reduce the Langevin Recombination in 400â€‰nm Thick Junction. Solar Rrl, 2020, 4, 2000498. | 5.8 | 49 |
| 38 | Monolithic perovskite/silicon tandem solar cell with >29% efficiency by enhanced hole extraction. Science, 2020, 370, 1300-1309. | 12.6 | 1,120 |
| 39 | 25.1% Highâ€Efficiency Monolithic Perovskite Silicon Tandem Solar Cell with a High Bandgap Perovskite Absorber. Solar Rrl, 2020, 4, 2000152. | 5.8 | 81 |
| 40 | Position-locking of volatile reaction products by atmosphere and capping layers slows down photodecomposition of methylammonium lead triiodide perovskite. RSC Advances, 2020, 10, 17534-17542. | 3.6 | 16 |
| 41 | Managing Phase Purities and Crystal Orientation for Highâ€Performance and Photostable Cesium Lead Halide Perovskite Solar Cells. Solar Rrl, 2020, 4, 2000213. | 5.8 | 17 |
| 42 | On the Origin of the Ideality Factor in Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 2000502. | 19.5 | 175 |
| 43 | Large Conduction Band Energy Offset Is Critical for High Fill Factors in Inorganic Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 2343-2348. | 17.4 | 20 |
| 44 | How To Quantify the Efficiency Potential of Neat Perovskite Films: Perovskite Semiconductors with an Implied Efficiency Exceeding 28%. Advanced Materials, 2020, 32, e2000080. | 21.0 | 134 |
| 45 | Comparing the excited-state properties of a mixed-cationâ€“mixed-halide perovskite to methylammonium lead iodide. Journal of Chemical Physics, 2020, 152, 104703. | 3.0 | 18 |
| 46 | On the Question of the Need for a Builtâ€in Potential in Perovskite Solar Cells. Advanced Materials Interfaces, 2020, 7, 2000041. | 3.7 | 79 |
| 47 | Quantitative Analysis of Doping-Induced Polarons and Charge-Transfer Complexes of Poly(3-hexylthiophene) in Solution. Journal of Physical Chemistry B, 2020, 124, 7694-7708. | 2.6 | 47 |
| 48 | The optical signatures of molecular-doping induced polarons in poly(3-hexylthiophene-2,5-diyl): individual polymer chainsversusaggregates. Journal of Materials Chemistry C, 2020, 8, 2870-2879. | 5.5 | 32 |
| 49 | Sub-picosecond charge-transfer at near-zero driving force in polymer:non-fullerene acceptor blends and bilayers. Nature Communications, 2020, 11, 833. | 12.8 | 130 |
| 50 | Barrierless Free Charge Generation in the Highâ€Performance PM6:Y6 Bulk Heterojunction Nonâ€Fullerene Solar Cell. Advanced Materials, 2020, 32, e1906763. | 21.0 | 258 |
| 51 | Extraordinarily long diffusion length in PM6:Y6 organic solar cells. Journal of Materials Chemistry A, 2020, 8, 7854-7860. | 10.3 | 74 |
| 52 | Perovskite semiconductors for next generation optoelectronic applications. APL Materials, 2019, 7, . | 5.1 | 21 |
| 53 | The Analysis of Sensitive Materials Using EBSD: The Importance of Beam Conditions and Detector Sensitivity. Microscopy and Microanalysis, 2019, 25, 2394-2395. | 0.4 | 3 |
| 54 | Strong light-matter coupling for reduced photon energy losses in organic photovoltaics. Nature Communications, 2019, 10, 3706. | 12.8 | 72 |

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| 55 | On the origin of open-circuit voltage losses in flexible n-i-p perovskite solar cells. Science and Technology of Advanced Materials, 2019, 20, 786-795. | 6.1 | 15 |
| 56 | The impact of energy alignment and interfacial recombination on the internal and external open-circuit voltage of perovskite solar cells. Energy and Environmental Science, 2019, 12, 2778-2788. | 30.8 | 570 |
| 57 | On the Relation between the Openâ€Circuit Voltage and Quasiâ€Fermi Level Splitting in Efficient Perovskite Solar Cells. Advanced Energy Materials, 2019, 9, 1901631. | 19.5 | 275 |
| 58 | Charge Transport Layers Limiting the Efficiency of Perovskite Solar Cells: How To Optimize Conductivity, Doping, and Thickness. ACS Applied Energy Materials, 2019, 2, 6280-6287. | 5.1 | 110 |
| 59 | Nonradiative Recombination in Perovskite Solar Cells: The Role of Interfaces. Advanced Materials, 2019, 31, e1902762. | 21.0 | 422 |
| 60 | Decoding Charge Recombination through Charge Generation in Organic Solar Cells. Solar Rrl, 2019, 3, 1900184. | 5.8 | 41 |
| 61 | Voltage-Dependent Photoluminescence and How It Correlates with the Fill Factor and Open-Circuit Voltage in Perovskite Solar Cells. ACS Energy Letters, 2019, 4, 2887-2892. | 17.4 | 86 |
| 62 | Correction to â€œHow to Make over 20% Efficient Perovskite Solar Cells in Regular (nâ€“iâ€“p) and Inverted (pâ€“iâ€“n) Architecturesâ€• Chemistry of Materials, 2019, 31, 8576-8576. | 6.7 | 3 |
| 63 | High open circuit voltages in pin-type perovskite solar cells through strontium addition. Sustainable Energy and Fuels, 2019, 3, 550-563. | 4.9 | 57 |
| 64 | Unraveling the Electronic Properties of Lead Halide Perovskites with Surface Photovoltage in Photoemission Studies. ACS Applied Materials & Interfaces, 2019, 11, 21578-21583. | 8.0 | 44 |
| 65 | Rationalizing the Molecular Design of Holeâ€Selective Contacts to Improve Charge Extraction in Perovskite Solar Cells. Advanced Energy Materials, 2019, 9, 1900990. | 19.5 | 56 |
| 66 | Recombination between Photogenerated and Electrode-Induced Charges Dominates the Fill Factor Losses in Optimized Organic Solar Cells. Journal of Physical Chemistry Letters, 2019, 10, 3473-3480. | 4.6 | 26 |
| 67 | The Role of Bulk and Interface Recombination in Highâ€Efficiency Lowâ€Dimensional Perovskite Solar Cells. Advanced Materials, 2019, 31, e1901090. | 21.0 | 59 |
| 68 | Impact of molecular quadrupole moments on the energy levels at organic heterojunctions. Nature Communications, 2019, 10, 2466. | 12.8 | 101 |
| 69 | Effect of H- and J-Aggregation on the Photophysical and Voltage Loss of Boron Dipyrromethene Small Molecules in Vacuum-Deposited Organic Solar Cells. Journal of Physical Chemistry Letters, 2019, 10, 2684-2691. | 4.6 | 32 |
| 70 | Direct observation of state-filling at hybrid tin oxide/organic interfaces. Applied Physics Letters, 2019, 114, . | 3.3 | 4 |
| 71 | Equilibrated Charge Carrier Populations Govern Steady-State Nongeminate Recombination in Disordered Organic Solar Cells. Journal of Physical Chemistry Letters, 2019, 10, 1374-1381. | 4.6 | 18 |
| 72 | Emissive and charge-generating donorâ€“acceptor interfaces for organic optoelectronics with low voltage losses. Nature Materials, 2019, 18, 459-464. | 27.5 | 131 |

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| 73 | Mixtures of Dopant-Free Spiro-OMeTAD and Water-Free PEDOT as a Passivating Hole Contact in Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 9172-9181. | 8.0 | 28 |
| 74 | Impact of Bimolecular Recombination on the Fill Factor of Fullerene and Nonfullerene-Based Solar Cells: A Comparative Study of Charge Generation and Extraction. Journal of Physical Chemistry C, 2019, 123, 6823-6830. | 3.1 | 20 |
| 75 | Reliability of charge carrier recombination data determined with charge extraction methods. Journal of Applied Physics, 2019, 126, . | 2.5 | 13 |
| 76 | Energy-Gap Law for Photocurrent Generation in Fullerene-Based Organic Solar Cells: The Case of Low-Donor-Content Blends. Journal of the American Chemical Society, 2019, 141, 2329-2341. | 13.7 | 54 |
| 77 | Constructing the Electronic Structure of CH<sub>3</sub>NH<sub>3</sub>PbI<sub>3</sub> and CH<sub>3</sub>NH<sub>3</sub>PbBr<sub>3</sub> Perovskite Thin Films from Single-Crystal Band Structure Measurements. Journal of Physical Chemistry Letters, 2019, 10, 601-609. | 4.6 | 78 |
| 78 | Fluorination of Organic Spacer Impacts on the Structural and Optical Response of 2D Perovskites. Frontiers in Chemistry, 2019, 7, 946. | 3.6 | 14 |
| 79 | Impact of Triplet Excited States on the Openâ€Circuit Voltage of Organic Solar Cells. Advanced Energy Materials, 2018, 8, 1800451. | 19.5 | 36 |
| 80 | Mixed Domains Enhance Charge Generation and Extraction in Bulkâ€Heterojunction Solar Cells with Smallâ€Molecule Donors. Advanced Energy Materials, 2018, 8, 1702941. | 19.5 | 43 |
| 81 | The Role of Mobility on Charge Generation, Recombination, and Extraction in Polymerâ€Based Solar Cells. Advanced Energy Materials, 2018, 8, 1703355. | 19.5 | 82 |
| 82 | On the Molecular Origin of Charge Separation at the Donorâ€“Acceptor Interface. Advanced Energy Materials, 2018, 8, 1702232. | 19.5 | 51 |
| 83 | Charge Generation and Recombination in an Organic Solar Cell with Low Energetic Offsets. Advanced Energy Materials, 2018, 8, 1701073. | 19.5 | 60 |
| 84 | From Recombination Dynamics to Device Performance: Quantifying the Efficiency of Exciton Dissociation, Charge Separation, and Extraction in Bulk Heterojunction Solar Cells with Fluorineâ€Substituted Polymer Donors. Advanced Energy Materials, 2018, 8, 1701678. | 19.5 | 33 |
| 85 | Alkyl Branching Position in Diketopyrrolopyrrole Polymers: Interplay between Fibrillar Morphology and Crystallinity and Their Effect on Photogeneration and Recombination in Bulk-Heterojunction Solar Cells. Chemistry of Materials, 2018, 30, 6801-6809. | 6.7 | 13 |
| 86 | Stark effect of hybrid charge transfer states at planar ZnO/organic interfaces. Physical Review B, 2018, 98, . | 3.2 | 12 |
| 87 | Boron dipyrromethene (BODIPY) with meso-perfluorinated alkyl substituents as near infrared donors in organic solar cells. Journal of Materials Chemistry A, 2018, 6, 18583-18591. | 10.3 | 34 |
| 88 | Probing the pathways of free charge generation in organic bulk heterojunction solar cells. Nature Communications, 2018, 9, 2038. | 12.8 | 104 |
| 89 | Interface Engineering of Solution-Processed Hybrid Organohalide Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 21681-21687. | 8.0 | 89 |
| 90 | Visualization and suppression of interfacial recombination for high-efficiency large-area pin perovskite solar cells. Nature Energy, 2018, 3, 847-854. | 39.5 | 721 |

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| 91 | Cs<sub>x</sub>FA<sub>1â€“x</sub>Pb(I<sub>1â€“y</sub>Br<sub>y</sub>)<sub>3</sub> Perovskite Compositions: the Appearance of Wrinkled Morphology and its Impact on Solar Cell Performance. Journal of Physical Chemistry C, 2018, 122, 17123-17135. | 3.1 | 42 |
| 92 | Measuring Aging Stability of Perovskite Solar Cells. Joule, 2018, 2, 1019-1024. | 24.0 | 115 |
| 93 | How to Make over 20% Efficient Perovskite Solar Cells in Regular (nâ€“pâ€“n) and Inverted (pâ€“nâ€“p) Architectures. Chemistry of Materials, 2018, 30, 4193-4201. | 6.7 | 473 |
| 94 | Absorption Tails of Donor:C<sub>60</sub> Blends Provide Insight into Thermally Activated Charge-Transfer Processes and Polaron Relaxation. Journal of the American Chemical Society, 2017, 139, 1699-1704. | 13.7 | 73 |
| 95 | Intrinsic non-radiative voltage losses in fullerene-based organic solar cells. Nature Energy, 2017, 2, . | 39.5 | 494 |
| 96 | Efficient Light Management by Textured Nanoimprinted Layers for Perovskite Solar Cells. ACS Photonics, 2017, 4, 1232-1239. | 6.6 | 103 |
| 97 | It Takes Two to Tangoâ€”Double-Layer Selective Contacts in Perovskite Solar Cells for Improved Device Performance and Reduced Hysteresis. ACS Applied Materials & Interfaces, 2017, 9, 17245-17255. | 8.0 | 107 |
| 98 | Charge Generation and Mobility-Limited Performance of Bulk Heterojunction Solar Cells with a Higher Adduct Fullerene. Journal of Physical Chemistry C, 2017, 121, 10305-10316. | 3.1 | 11 |
| 99 | â€œThe Easier the Betterâ€•Preparation of Efficient Photocatalystsâ€”Metastable Poly(heptazine imide) Salts. Advanced Materials, 2017, 29, 1700555. | 21.0 | 206 |
| 100 | Approaching the fill factor Shockleyâ€“Queisser limit in stable, dopant-free triple cation perovskite solar cells. Energy and Environmental Science, 2017, 10, 1530-1539. | 30.8 | 311 |
| 101 | Reduced Interfaceâ€Mediated Recombination for High Openâ€Circuit Voltages in CH<sub>3</sub>NH<sub>3</sub>PbI<sub>3</sub> Solar Cells. Advanced Materials, 2017, 29, 1700159. | 21.0 | 210 |
| 102 | Incorporating Fluorine Substitution into Conjugated Polymers for Solar Cells: Three Different Means, Same Results. Journal of Physical Chemistry C, 2017, 121, 2059-2068. | 3.1 | 22 |
| 103 | Lead Halide Perovskites as Charge Generation Layers for Electron Mobility Measurement in Organic Semiconductors. ACS Applied Materials & Interfaces, 2017, 9, 42011-42019. | 8.0 | 5 |
| 104 | Reducing Voltage Losses in Cascade Organic Solar Cells while Maintaining High External Quantum Efficiencies. Advanced Energy Materials, 2017, 7, 1700855. | 19.5 | 122 |
| 105 | Impact of interfacial molecular orientation on radiative recombination and charge generation efficiency. Nature Communications, 2017, 8, 79. | 12.8 | 198 |
| 106 | Intercalated vs Nonintercalated Morphologies in Donorâ€“Acceptor Bulk Heterojunction Solar Cells: PBTTT:Fullerene Charge Generation and Recombination Revisited. Journal of Physical Chemistry Letters, 2017, 8, 4061-4068. | 4.6 | 15 |
| 107 | Effect of the RC time on photocurrent transients and determination of charge carrier mobilities. Journal of Applied Physics, 2017, 122, 195501. | 2.5 | 9 |
| 108 | Synthesis of High-Crystallinity DPP Polymers with Balanced Electron and Hole Mobility. Chemistry of Materials, 2017, 29, 10220-10232. | 6.7 | 40 |

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| 109 | Potassium Poly(heptazine imides) from Aminotetrazoles: Shifting Band Gaps of Carbon Nitrideâ€like Materials for More Efficient Solar Hydrogen and Oxygen Evolution. ChemCatChem, 2017, 9, 167-174. | 3.7 | 151 |
| 110 | Dispersive and steady-state recombination in organic disordered semiconductors. Physical Review B, 2017, 96, . | 3.2 | 24 |
| 111 | Metal nanoparticle mediated space charge and its optical control in an organic hole-only device. Applied Physics Letters, 2016, 108, 153302. | 3.3 | 4 |
| 112 | Dispersive Non-Geminate Recombination in an Amorphous Polymer:Fullerene Blend. Scientific Reports, 2016, 6, 26832. | 3.3 | 53 |
| 113 | Free carrier generation and recombination in PbS quantum dot solar cells. Applied Physics Letters, 2016, 108, . | 3.3 | 16 |
| 114 | Charge carrier recombination dynamics in perovskite and polymer solar cells. Applied Physics Letters, 2016, 108, . | 3.3 | 42 |
| 115 | Dualâ€Characteristic Transistors Based on Semiconducting Polymer Blends. Advanced Electronic Materials, 2016, 2, 1600267. | 5.1 | 20 |
| 116 | Surface Structure of Semicrystalline Naphthalene Diimideâ€“Bithiophene Copolymer Films Studied with Atomic Force Microscopy. Macromolecules, 2016, 49, 6549-6557. | 4.8 | 13 |
| 117 | A New Figure of Merit for Organic Solar Cells with Transport-limited Photocurrents. Scientific Reports, 2016, 6, 24861. | 3.3 | 98 |
| 118 | Coulomb Enhanced Charge Transport in Semicrystalline Polymer Semiconductors. Advanced Functional Materials, 2016, 26, 8011-8022. | 14.9 | 24 |
| 119 | pâ€Type Doping of Poly(3â€hexylthiophene) with the Strong Lewis Acid Tris(pentafluorophenyl)borane. Advanced Electronic Materials, 2016, 2, 1600204. | 5.1 | 80 |
| 120 | Role of Intrinsic Photogeneration in Single Layer and Bilayer Solar Cells with C<sub>60</sub> and PCBM. Journal of Physical Chemistry C, 2016, 120, 25083-25091. | 3.1 | 39 |
| 121 | The impact of molecular weight, air exposure and molecular doping on the charge transport properties and electronic defects in dithienyl-diketopyrrolopyrrole-thieno[3,2-b]thiophene copolymers. Journal of Materials Chemistry C, 2016, 4, 10827-10838. | 5.5 | 11 |
| 122 | Fluorine-containing low-energy-gap organic dyes with low voltage losses for organic solar cells. Synthetic Metals, 2016, 222, 232-239. | 3.9 | 4 |
| 123 | The Role of Space Charge Effects on the Competition between Recombination and Extraction in Solar Cells with Low-Mobility Photoactive Layers. Journal of Physical Chemistry Letters, 2016, 7, 4716-4721. | 4.6 | 37 |
| 124 | Charge-Transferâ€“Solvent Interaction Predefines Doping Efficiency in p-Doped P3HT Films. Chemistry of Materials, 2016, 28, 4432-4439. | 6.7 | 65 |
| 125 | Spatial Orientation and Order of Structure-Defining Subunits in Thin Films of a High Mobility n-Type Copolymer. Macromolecules, 2016, 49, 1798-1806. | 4.8 | 9 |
| 126 | Effect of Solvent Additive on Generation, Recombination, and Extraction in PTB7:PCBM Solar Cells: A Conclusive Experimental and Numerical Simulation Study. Journal of Physical Chemistry C, 2015, 119, 8310-8320. | 3.1 | 96 |

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| 127 | Hybrid Organic/Inorganic Thinâ€Film Multijunction Solar Cells Exceeding 11% Power Conversion Efficiency. Advanced Materials, 2015, 27, 1262-1267. | 21.0 | 40 |
| 128 | Light-Tunable Plasmonic Nanoarchitectures Using Gold Nanoparticleâ€“Azobenzene-Containing Cationic Surfactant Complexes. Journal of Physical Chemistry C, 2015, 119, 3762-3770. | 3.1 | 27 |
| 129 | Charge Transfer Absorption and Emission at ZnO/Organic Interfaces. Journal of Physical Chemistry Letters, 2015, 6, 500-504. | 4.6 | 37 |
| 130 | Charge transfer in and conductivity of molecularly doped thiopheneâ€based copolymers. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 58-63. | 2.1 | 43 |
| 131 | Colorâ€Tunable Photoluminescence and NIR Electroluminescence in Carbon Nitride Thin Films and Lightâ€Emitting Diodes. Advanced Optical Materials, 2015, 3, 913-917. | 7.3 | 115 |
| 132 | Impact of charge transport on currentâ€“voltage characteristics and power-conversion efficiency of organic solar cells. Nature Communications, 2015, 6, 6951. | 12.8 | 255 |
| 133 | Infrared Transition Moment Orientational Analysis on the Structural Organization of the Distinct Molecular Subunits in Thin Layers of a High Mobility n-Type Copolymer. Journal of the American Chemical Society, 2015, 137, 6034-6043. | 13.7 | 18 |
| 134 | Competition between recombination and extraction of free charges determines the fill factor of organic solar cells. Nature Communications, 2015, 6, 7083. | 12.8 | 517 |
| 135 | Highly Crystalline Films of PCPDTBT with Branched Side Chains by Solvent Vapor Crystallization: Influence on Optoâ€Electronic Properties. Advanced Materials, 2015, 27, 1223-1228. | 21.0 | 51 |
| 136 | P3HT-Based Solar Cells: Structural Properties and Photovoltaic Performance. Advances in Polymer Science, 2014, , 181-232. | 0.8 | 11 |
| 137 | Charge Separation in PCPDTBT:PCBM Blends from an EPR Perspective. Journal of Physical Chemistry C, 2014, 118, 28482-28493. | 3.1 | 61 |
| 138 | Nongeminate and Geminate Recombination in PTB7:PCBM Solar Cells. Advanced Functional Materials, 2014, 24, 1306-1311. | 14.9 | 142 |
| 139 | SiO2/carbon nitride composite materials: The role of surfaces for enhanced photocatalysis. Catalysis Today, 2014, 225, 185-190. | 4.4 | 56 |
| 140 | A Conclusive View on Charge Generation, Recombination, and Extraction in Asâ€Prepared and Annealed P3HT:PCBM Blends: Combined Experimental and Simulation Work. Advanced Energy Materials, 2014, 4, 1301401. | 19.5 | 104 |
| 141 | Charge Transport Anisotropy in Highly Oriented Thin Films of the Acceptor Polymer P(NDI2ODâ€T2). Advanced Energy Materials, 2014, 4, 1301659. | 19.5 | 116 |
| 142 | Overcoming Geminate Recombination and Enhancing Extraction in Solutionâ€Processed Small Molecule Solar Cells. Advanced Energy Materials, 2014, 4, 1400230. | 19.5 | 76 |
| 143 | On the Efficiency of Charge Transfer State Splitting in Polymer:Fullerene Solar Cells. Advanced Materials, 2014, 26, 2533-2539. | 21.0 | 106 |
| 144 | Organic Solar Cells: On the Efficiency of Charge Transfer State Splitting in Polymer:Fullerene Solar Cells (Adv. Mater. 16/2014). Advanced Materials, 2014, 26, 2607-2607. | 21.0 | 0 |

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| 145 | Correlated Donor/Acceptor Crystal Orientation Controls Photocurrent Generation in Allâ€Polymer Solar Cells. Advanced Functional Materials, 2014, 24, 4068-4081. | 14.9 | 144 |
| 146 | The Role of Regioregularity, Crystallinity, and Chain Orientation on Electron Transport in a High-Mobility n-Type Copolymer. Journal of the American Chemical Society, 2014, 136, 4245-4256. | 13.7 | 226 |
| 147 | Efficient charge generation by relaxed charge-transfer states at organic interfaces. Nature Materials, 2014, 13, 63-68. | 27.5 | 667 |
| 148 | In Situ Formation of Heterojunctions in Modified Graphitic Carbon Nitride: Synthesis and Noble Metal Free Photocatalysis. Chemistry of Materials, 2014, 26, 5812-5818. | 6.7 | 192 |
| 149 | Simultaneous extraction of charge density dependent mobility and variable contact resistance from thin film transistors. Applied Physics Letters, 2014, 104, 193501. | 3.3 | 37 |
| 150 | Tuning the Work Function of Polar Zinc Oxide Surfaces using Modified Phosphonic Acid Selfâ€Assembled Monolayers. Advanced Functional Materials, 2014, 24, 7014-7024. | 14.9 | 160 |
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