David Becker-Koch

List of Publications by Year
in descending order

23 papers	915 citations	623734 14 h-index	642732 23 g-index
24 all docs	24 docs citations	24 times ranked	1639 citing authors

#	Article	IF	Citations
1	Role of Microstructure in Oxygen Induced Photodegradation of Methylammonium Lead Triiodide Perovskite Films. Advanced Energy Materials, 2017, 7, 1700977.	19.5	183
2	Roomâ€Temperature Stimulated Emission and Lasing in Recrystallized Cesium Lead Bromide Perovskite Thin Films. Advanced Materials, 2019, 31, e1903717.	21.0	148
3	High performance planar perovskite solar cells by ZnO electron transport layer engineering. Nano Energy, 2017, 39, 400-408.	16.0	120
4	Small grains as recombination hot spots in perovskite solar cells. Matter, 2021, 4, 1683-1701.	10.0	73
5	Efficient and Stable PbS Quantum Dot Solar Cells by Triple-Cation Perovskite Passivation. ACS Nano, 2020, 14, 384-393.	14.6	58
6	Stability of Quantum Dot Solar Cells: A Matter of (Life)Time. Advanced Energy Materials, 2021, 11, 2003457.	19.5	57
7	Efficient Thermally Evaporated Î³â€CsPbI₃ Perovskite Solar Cells. Advanced Energy Materials, 2021, 11, 2100299.	19.5	35
8	Enhancing the Openâ€Circuit Voltage of Perovskite Solar Cells by up to 120 mV Using Ï€â€Extended Phosphoniumfluorene Electrolytes as Hole Blocking Layers. Advanced Energy Materials, 2019, 9, 1901257.	19.5	31
9	<i>N</i>-Heteroacenes as a New Class of Non-Fullerene Electron Acceptors for Organic Bulk-Heterojunction Photovoltaic Devices. Solar Rrl, 2017, 1, 1700053.	5.8	30
10	Oxygen-Induced Doping as a Degradation Mechanism in Highly Efficient Organic Solar Cells. ACS Applied Energy Materials, 2019, 2, 1943-1950.	5.1	29
11	Ligand dependent oxidation dictates the performance evolution of high efficiency PbS quantum dot solar cells. Sustainable Energy and Fuels, 2020, 4, 108-115.	4.9	27
12	Traps and transport resistance are the next frontiers for stable non-fullerene acceptor solar cells. Nature Communications, 2022, 13, .	12.8	23
13	Doped Organic Hole Extraction Layers in Efficient PbS and AgBiS₂ Quantum Dot Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 18750-18757.	8.0	16
14	Highly efficient modulation doping: A path toward superior organic thermoelectric devices. Science Advances, 2022, 8, eabl9264.	10.3	15
15	The effect of side-chain length on the microstructure and processing window of zone-cast naphthalene-based bispentalenes. Journal of Materials Chemistry C, 2019, 7, 13493-13501.	5.5	14
16	Fluorination of Organic Spacer Impacts on the Structural and Optical Response of 2D Perovskites. Frontiers in Chemistry, 2019, 7, 946.	3.6	14
17	Acquisition of photoelectron diffraction patterns with a two-dimensional wide-angle electron analyzer. Journal of Electron Spectroscopy and Related Phenomena, 2014, 197, 30-36.	1.7	9
18	Probing charge transfer states at organic and hybrid internal interfaces by photothermal deflection spectroscopy. Journal of Physics Condensed Matter, 2019, 31, 124001.	1.8	9

#	Article	IF	Citations
19	Temperature-dependent morphology-electron mobility correlations of naphthalene diimide-indacenodithiophene copolymers prepared <i>via</i> direct arylation polymerization. Materials Advances, 2021, 2, 7881-7890.	5.4	6
20	Oxygen-induced degradation in AgBiS₂ nanocrystal solar cells. Nanoscale, 2022, 14, 3020-3030.	5.6	6
21	Influence of synthetic pathway, molecular weight and side chains on properties of indacenodithiophene-benzothiadiazole copolymers made by direct arylation polycondensation. Journal of Materials Chemistry C, 2021, 9, 4597-4606.	5.5	5
22	Laser printed metal halide perovskites. JPhys Materials, 2020, 3, 034010.	4.2	5
23	Modelling Self-Absorption Induced Red-Shift of the Photoluminescence of Perovskite Thin Films to Estimate the Internal Photoluminescence Quantum Efficiency and Escape Probability. , 0, , .		0