Jason A RÃ¶hr

List of Publications by Year
in descending order

26 papers	2,925 citations	361388 20 h-index	552766 26 g-index
28 all docs	28 docs citations	28 times ranked	4055 citing authors

#	Article	IF	Citations
1	Identifying optimal photovoltaic technologies for underwater applications. IScience, 2022, 25, 104531.	4.1	5
2	Narrowing the Phase Distribution of Quasiâ€2D Perovskites for Stable Deepâ€Blue Electroluminescence. Advanced Science, 2022, 9, .	11.2	22
3	CO2 doping of organic interlayers for perovskite solar cells. Nature, 2021, 594, 51-56.	27.8	120
4	Mutually-dependent kinetics and energetics of photocatalyst/co-catalyst/two-redox liquid junctions. Energy and Environmental Science, 2020, 13, 162-173.	30.8	29
5	Perovskite Solar Cells with Enhanced Fill Factors Using Polymer-Capped Solvent Annealing. ACS Applied Energy Materials, 2020, 3, 7231-7238.	5.1	19
6	Analytical description of mixed ohmic and space-charge-limited conduction in single-carrier devices. Journal of Applied Physics, 2020, 128, .	2.5	29
7	Efficiency Limits of Underwater Solar Cells. Joule, 2020, 4, 840-849.	24.0	47
8	Flexible 3D Porous MoS₂/CNTs Architectures with ZT of 0.17 at Room Temperature for Wearable Thermoelectric Applications. Advanced Functional Materials, 2020, 30, 2002508.	14.9	31
9	Elucidating charge separation in particulate photocatalysts using nearly intrinsic semiconductors with small asymmetric band bending. Sustainable Energy and Fuels, 2019, 3, 850-864.	4.9	30
10	Direct Determination of Built-in Voltages in Asymmetric Single-Carrier Devices. Physical Review Applied, 2019, 11, .	3.8	19
11	Analysis of the Voltage Losses in CZTSSe Solar Cells of Varying Sn Content. Journal of Physical Chemistry Letters, 2019, 10, 2829-2835.	4.6	38
12	The role of adsorbates in the green emission and conductivity of zinc oxide. Communications Chemistry, 2019, 2, .	4.5	24
13	Stable Water Oxidation in Acid Using Manganese-Modified TiO₂ Protective Coatings. ACS Applied Materials & Interfaces, 2018, 10, 18805-18815.	8.0	24
14	Charge Transport in Spiro-OMeTAD Investigated through Space-Charge-Limited Current Measurements. Physical Review Applied, 2018, 9, .	3.8	42
15	Exploring the validity and limitations of the Mottâ€“Gurney law for charge-carrier mobility determination of semiconducting thin-films. Journal of Physics Condensed Matter, 2018, 30, 105901.	1.8	102
16	An Alkylated Indacenodithieno[3,2â€b]thiopheneâ€Based Nonfullerene Acceptor with High Crystallinity Exhibiting Single Junction Solar Cell Efficiencies Greater than 13% with Low Voltage Losses. Advanced Materials, 2018, 30, 1705209.	21.0	474
17	The role of fullerenes in the environmental stability of polymer:fullerene solar cells. Energy and Environmental Science, 2018, 11, 417-428.	30.8	117
18	Energy-Conversion Properties of Si/GaAs Mesowires Containing fewer Threading Dislocations. , 2018, , .		0

#	Article	IF	Citations
19	Tunable nano-interfaces between MnO_x and layered double hydroxides boost oxygen evolving electrocatalysis. Journal of Materials Chemistry A, 2018, 6, 21918-21926.	10.3	29
20	Ultrafast proton-assisted tunneling through ZrO₂ in dye-sensitized SnO₂-core/ZrO₂-shell films. Chemical Communications, 2018, 54, 7971-7974.	4.1	5
21	On the correct interpretation of the low voltage regime in intrinsic single-carrier devices. Journal of Physics Condensed Matter, 2017, 29, 205901.	1.8	33
22	Reducing the efficiencyâ€“stabilityâ€“cost gap of organic photovoltaics with highly efficient and stable small molecule acceptor ternary solar cells. Nature Materials, 2017, 16, 363-369.	27.5	921
23	Organic photovoltaic greenhouses: a unique application for semi-transparent PV?. Energy and Environmental Science, 2015, 8, 1317-1328.	30.8	222
24	A Rhodanine Flanked Nonfullerene Acceptor for Solution-Processed Organic Photovoltaics. Journal of the American Chemical Society, 2015, 137, 898-904.	13.7	446
25	Doping incorporation paths in catalyst-free Be-doped GaAs nanowires. Applied Physics Letters, 2013, 102, .	3.3	58
26	A Compact Electron Transport Layer Using a Heated Tinâ€Oxide Colloidal Solution for Efficient Perovskite Solar Cells. Solar Rrl, 0, , 2100794.	5.8	2