Christian M Wolff

List of Publications by Year
in descending order

41 papers	5,688 citations	172457 29 h-index	302126 39 g-index
42 all docs	42 docs citations	42 times ranked	6821 citing authors

#	Article	IF	Citations
1	Laser Patterned Flexible 4T Perovskiteâ€Cu(In,Ga)Se₂ Tandem Miniâ€module with Over 18% Efficiency. Solar Rrl, 2022, 6, .	5.8	6
2	Tuning halide perovskite energy levels. Energy and Environmental Science, 2021, 14, 1429-1438.	30.8	124
3	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
4	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
5	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
6	Perfluorinated Self-Assembled Monolayers Enhance the Stability and Efficiency of Inverted Perovskite Solar Cells. ACS Nano, 2020, 14, 1445-1456.	14.6	115
7	Halide Segregation versus Interfacial Recombination in Bromide-Rich Wide-Gap Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 2728-2736.	17.4	114
8	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
9	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
10	On the Origin of the Ideality Factor in Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 2000502.	19.5	175
11	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
12	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
13	Barrierless Free Charge Generation in the Highâ€Performance PM6:Y6 Bulk Heterojunction Nonâ€Fullerene Solar Cell. Advanced Materials, 2020, 32, e1906763.	21.0	258
14	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
15	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
16	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
17	Nonradiative Recombination in Perovskite Solar Cells: The Role of Interfaces. Advanced Materials, 2019, 31, e1902762.	21.0	422
18	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

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19	High open circuit voltages in pin-type perovskite solar cells through strontium addition. Sustainable Energy and Fuels, 2019, 3, 550-563.	4.9	57
20	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
21	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
22	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
23	The Role of Bulk and Interface Recombination in Highâ€Efficiency Lowâ€Dimensional Perovskite Solar Cells. Advanced Materials, 2019, 31, e1901090.	21.0	59
24	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
25	Constructing the Electronic Structure of CH₃NH₃PbI₃ and CH₃NH₃PbBr₃ Perovskite Thin Films from Single-Crystal Band Structure Measurements. Journal of Physical Chemistry Letters, 2019, 10, 601-609.	4.6	78
26	All-in-one visible-light-driven water splitting by combining nanoparticulate and molecular co-catalysts on CdS nanorods. Nature Energy, 2018, 3, 862-869.	39.5	356
27	Visualization and suppression of interfacial recombination for high-efficiency large-area pin perovskite solar cells. Nature Energy, 2018, 3, 847-854.	39.5	721
28	Cs_xFA_{1â€“x}Pb(I_{1â€“y}Br_y)₃ 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
29	Measuring Aging Stability of Perovskite Solar Cells. Joule, 2018, 2, 1019-1024.	24.0	115
30	How to Make over 20% Efficient Perovskite Solar Cells in Regular (nâ€“i–p) and Inverted (pâ€“i–n) Architectures. Chemistry of Materials, 2018, 30, 4193-4201.	6.7	473
31	Efficient Light Management by Textured Nanoimprinted Layers for Perovskite Solar Cells. ACS Photonics, 2017, 4, 1232-1239.	6.6	103
32	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
33	â€œThe Easier the Betterâ€•Preparation of Efficient Photocatalystsâ€”Metastable Poly(heptazine imide) Salts. Advanced Materials, 2017, 29, 1700555.	21.0	206
34	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
35	Reduced Interfaceâ€Mediated Recombination for High Openâ€Circuit Voltages in CH₃NH₃PbI₃ Solar Cells. Advanced Materials, 2017, 29, 1700159.	21.0	210
36	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

#	Article	IF	Citations
37	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
38	Charge carrier recombination dynamics in perovskite and polymer solar cells. Applied Physics Letters, 2016, 108, .	3.3	42
39	Hybrid Multilayer Design for Efficient Perovskite-based Solar Cells. , 0, , .		0
40	The Efficiency Potential of Perovskite Solar Cells. , 0, , .		0
41	Degradation due to Transverse Ion Migration in Perovskite Devices. , 0, , .		0