Chun-Chao Chen

List of Publications by Year
in descending order

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51 papers	9,018 citations	201575 27 h-index	223716 46 g-index
51 all docs	51 docs citations	51 times ranked	8107 citing authors

#	Article	IF	Citations
1	A polymer tandem solar cell with 10.6% power conversion efficiency. Nature Communications, 2013, 4, 1446.	5.8	2,612
2	Tandem polymer solar cells featuring a spectrally matched low-bandgap polymer. Nature Photonics, 2012, 6, 180-185.	15.6	1,374
3	Single-junction organic solar cells with over 19% efficiency enabled by a refined double-fibril network morphology. Nature Materials, 2022, 21, 656-663.	13.3	1,214
4	An Efficient Tripleâ€Junction Polymer Solar Cell Having a Power Conversion Efficiency Exceeding 11%. Advanced Materials, 2014, 26, 5670-5677.	11.1	752
5	Solution-processed small-molecule solar cells: breaking the 10% power conversion efficiency. Scientific Reports, 2013, 3, 3356.	1.6	542
6	Visibly Transparent Polymer Solar Cells Produced by Solution Processing. ACS Nano, 2012, 6, 7185-7190.	7.3	492
7	10.2% Power Conversion Efficiency Polymer Tandem Solar Cells Consisting of Two Identical Subâ€Cells. Advanced Materials, 2013, 25, 3973-3978.	11.1	419
8	High-performance semi-transparent polymer solar cells possessing tandem structures. Energy and Environmental Science, 2013, 6, 2714.	15.6	170
9	Perovskite/polymer monolithic hybrid tandem solar cells utilizing a low-temperature, full solution process. Materials Horizons, 2015, 2, 203-211.	6.4	148
10	Intramolecular Electric Field Construction in Metal Phthalocyanine as Dopantâ€Free Hole Transporting Material for Stable Perovskite Solar Cells with >21â€‰% Efficiency. Angewandte Chemie - International Edition, 2021, 60, 6294-6299.	7.2	101
11	Electrostatic Selfâ€Assembly Conjugated Polyelectrolyteâ€Surfactant Complex as an Interlayer for High Performance Polymer Solar Cells. Advanced Functional Materials, 2012, 22, 3284-3289.	7.8	97
12	Sideâ€Chain Tunability via Triple Component Random Copolymerization for Better Photovoltaic Polymers. Advanced Energy Materials, 2014, 4, 1300864.	10.2	81
13	Downward Homogenized Crystallization for Inverted Wideâ€Bandgap Mixedâ€Halide Perovskite Solar Cells with 21% Efficiency and Suppressed Photoâ€Induced Halide Segregation. Advanced Functional Materials, 2022, 32, .	7.8	63
14	A Selenophene Containing Benzodithiophene-alt-thienothiophene Polymer for Additive-Free High Performance Solar Cell. Macromolecules, 2015, 48, 562-568.	2.2	59
15	Compositional optimization of a 2Dâ€“3D heterojunction interface for 22.6% efficient and stable planar perovskite solar cells. Journal of Materials Chemistry A, 2020, 8, 25831-25841.	5.2	59
16	Design of Low Crystallinity Spiro-Typed Hole Transporting Material for Planar Perovskite Solar Cells to Achieve 21.76% Efficiency. Chemistry of Materials, 2021, 33, 285-297.	3.2	57
17	Rear Interface Engineering to Suppress Migration of Iodide Ions for Efficient Perovskite Solar Cells with Minimized Hysteresis. Advanced Functional Materials, 2022, 32, 2107823.	7.8	57
18	Tuning the Interfacial Dipole Moment of Spacer Cations for Charge Extraction in Efficient and Ultrastable Perovskite Solar Cells. Journal of Physical Chemistry C, 2021, 125, 1256-1268.	1.5	56

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19	A finely regulated quantum well structure in quasi-2D Ruddlesdenâ€“Popper perovskite solar cells with efficiency exceeding 20%. Energy and Environmental Science, 2022, 15, 296-310.	15.6	54
20	The mechanism of universal green antisolvents for intermediate phase controlled high-efficiency formamidinium-based perovskite solar cells. Materials Horizons, 2020, 7, 934-942.	6.4	51
21	Balancing crystallization rate in a mixed Snâ€“Pb perovskite film for efficient and stable perovskite solar cells of more than 20% efficiency. Journal of Materials Chemistry A, 2021, 9, 17830-17840.	5.2	51
22	10.5% efficient polymer and amorphous silicon hybrid tandem photovoltaic cell. Nature Communications, 2015, 6, 6391.	5.8	45
23	The investigation of donor-acceptor compatibility in bulk-heterojunction polymer systems. Applied Physics Letters, 2013, 103, .	1.5	43
24	Improving Structural Order for a Highâ€Performance Diketopyrrolopyrroleâ€Based Polymer Solar Cell with a Thick Active Layer. Advanced Energy Materials, 2014, 4, 1300739.	10.2	43
25	Low-Temperature Aging Provides 22% Efficient Bromine-Free and Passivation Layer-Free Planar Perovskite Solar Cells. Nano-Micro Letters, 2020, 12, 84.	14.4	33
26	Spatially Orthogonal 2D Sidechains Optimize Morphology in Allâ€Smallâ€Molecule Organic Solar Cells. Advanced Functional Materials, 2021, 31, 2100750.	7.8	32
27	Surfaceâ€Anchored Acetylcholine Regulates Bandâ€Edge States and Suppresses Ion Migration in a 21%â€Efficient Quadrupleâ€Cation Perovskite Solar Cell. Small, 2022, 18, e2105184.	5.2	30
28	Facile single-component precursor for Cu2ZnSnS4 with enhanced phase and composition controllability. Energy and Environmental Science, 2014, 7, 998.	15.6	29
29	Universal and versatile morphology engineering via hot fluorous solvent soaking for organic bulk heterojunction. Nature Communications, 2020, 11, 5585.	5.8	29
30	Chlorine-terminated MXene quantum dots for improving crystallinity and moisture stability in high-performance perovskite solar cells. Chemical Engineering Journal, 2022, 432, 134382.	6.6	29
31	Overcoming the carrier transport limitation in Ruddlesdenâ€“Popper perovskite films by using lamellar nickel oxide substrates. Journal of Materials Chemistry A, 2021, 9, 11741-11752.	5.2	28
32	Favorable grain growth of thermally stable formamidinium-methylammonium perovskite solar cells by hydrazine chloride. Chemical Engineering Journal, 2022, 430, 132730.	6.6	21
33	Organic nanocrystals induced surface passivation towards high-efficiency and stable perovskite solar cells. Nano Energy, 2021, 89, 106445.	8.2	19
34	Suppressing Residual Lead Iodide and Defects in Sequentialâ€Deposited Perovskite Solar Cell via Bidentate Potassium Dichloroacetate Ligand. ChemSusChem, 2022, 15, .	3.6	18
35	Size-tunable MoS₂nanosheets for controlling the crystal morphology and residual stress in sequentially deposited perovskite solar cells with over 22.5% efficiency. Journal of Materials Chemistry A, 2022, 10, 3605-3617.	5.2	15
36	Recent Developments in Organic Tandem Solar Cells toward High Efficiency. Advanced Energy and Sustainability Research, 2021, 2, 2000050.	2.8	12

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37	Intramolecular Electric Field Construction in Metal Phthalocyanine as Dopantâ€Free Hole Transporting Material for Stable Perovskite Solar Cells with >21â€‰% Efficiency. Angewandte Chemie, 2021, 133, 6364-6369.	1.6	11
38	Bottom Interfacial Engineering for Methylammoniumâ€Free Regularâ€Structure Planar Perovskite Solar Cells over 21%. Solar Rrl, 2021, 5, 2100285.	3.1	11
39	Low-Temperature Solution-Processed All Organic Integration for Large-Area and Flexible High-Resolution Imaging. IEEE Journal of the Electron Devices Society, 2022, 10, 821-826.	1.2	11
40	Transient and Biocompatible Resistive Switching Memory Based on Electrochemicallyâ€Deposited Zinc Oxide. Advanced Electronic Materials, 2021, 7, 2100322.	2.6	10
41	Ultralow Set Voltage and Enhanced Switching Reliability for Resistive Random-Access Memory Enabled by an Electrodeposited Nanocone Array. ACS Applied Materials & Interfaces, 2022, 14, 25710-25721.	4.0	10
42	Nitroanilines enhancing the holographic data storage characteristics of the 9,10â€phenanthrenequinoneâ€doped poly(methyl methacrylate) photopolymer. Journal of Applied Polymer Science, 2013, 127, 643-650.	1.3	7
43	Lead-free bright blue light-emitting cesium halide nanocrystals by zinc doping. RSC Advances, 2021, 11, 2437-2445.	1.7	7
44	Slotâ€Dieâ€Coated Organic Solar Cells Optimized through Multistep Crystallization Kinetics. Solar Rrl, 2022, 6, .	3.1	7
45	Solâ€“Gel-Derived Biodegradable Er-Doped ZnO/Polyethylene Glycol Nanoparticles for Cell Imaging. ACS Applied Nano Materials, 2022, 5, 7103-7112.	2.4	7
46	Large Area and Flexible Organic Active Matrix Image Sensor Array Fabricated by Solution Coating Processes at Low Temperature. , 2021, , .		1
47	Mixed dimensionality of 2D/3D heterojunctions for improving charge transport and long-term stability in high-efficiency 1.63 eV bandgap perovskite solar cells. Materials Advances, 2022, 3, 5786-5795.	2.6	1
48	Holographic recording characteristics and physical mechanism of zinc methacrylate/nitroanilineâ€coâ€doped poly(methyl methacrylate)/9,10â€phenanthrenequinone photopolymers. Polymer Engineering and Science, 2013, 53, 1297-1305.	1.5	0
49	56.1: Invited Paper: Visibly Transparent nearâ€IR Organic Photosensor for display application. Digest of Technical Papers SID International Symposium, 2019, 50, 612-612.	0.1	0
50	Frontispiece: Intramolecular Electric Field Construction in Metal Phthalocyanine as Dopantâ€Free Hole Transporting Material for Stable Perovskite Solar Cells with >21â€‰% Efficiency. Angewandte Chemie - International Edition, 2021, 60, .	7.2	0
51	Frontispiz: Intramolecular Electric Field Construction in Metal Phthalocyanine as Dopantâ€Free Hole Transporting Material for Stable Perovskite Solar Cells with >21â€‰% Efficiency. Angewandte Chemie, 2021, 133, .	1.6	0