Song Chen

List of Publications by Year
in descending order

48 papers	4,379 citations	172457 29 h-index	182427 51 g-index
51 all docs	51 docs citations	51 times ranked	5816 citing authors

#	Article	IF	Citations
1	High-efficiency inverted dithienogermoleâ€“thienopyrrolodione-based polymer solar cells. Nature Photonics, 2012, 6, 115-120.	31.4	903
2	Dithienogermole As a Fused Electron Donor in Bulk Heterojunction Solar Cells. Journal of the American Chemical Society, 2011, 133, 10062-10065.	13.7	693
3	Solutionâ€Processed Nickel Oxide Hole Transport Layers in High Efficiency Polymer Photovoltaic Cells. Advanced Functional Materials, 2013, 23, 2993-3001.	14.9	461
4	Metal oxides for interface engineering in polymer solar cells. Journal of Materials Chemistry, 2012, 22, 24202.	6.7	331
5	Inverted Polymer Solar Cells with Reduced Interface Recombination. Advanced Energy Materials, 2012, 2, 1333-1337.	19.5	210
6	Properties of interlayer for organic photovoltaics. Materials Today, 2013, 16, 424-432.	14.2	168
7	On the degradation mechanisms of quantum-dot light-emitting diodes. Nature Communications, 2019, 10, 765.	12.8	167
8	High efficiency solution-processed thin-film Cu(In,Ga)(Se,S)₂solar cells. Energy and Environmental Science, 2016, 9, 3674-3681.	30.8	105
9	Study of Arylamine-Substituted Porphyrins as Hole-Transporting Materials in High-Performance Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 13231-13239.	8.0	97
10	Dielectric Effect on the Photovoltage Loss in Organic Photovoltaic Cells. Advanced Materials, 2014, 26, 6125-6131.	21.0	95
11	Structural engineering of porphyrin-based small molecules as donors for efficient organic solar cells. Chemical Science, 2016, 7, 4301-4307.	7.4	72
12	Porphyrin-based thick-film bulk-heterojunction solar cells for indoor light harvesting. Journal of Materials Chemistry C, 2018, 6, 9111-9118.	5.5	67
13	Solution-processed new porphyrin-based small molecules as electron donors for highly efficient organic photovoltaics. Chemical Communications, 2015, 51, 14439-14442.	4.1	66
14	New Terthiophene-Conjugated Porphyrin Donors for Highly Efficient Organic Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 30176-30183.	8.0	61
15	Photoâ€Carrier Recombination in Polymer Solar Cells Based on P3HT and Siloleâ€Based Copolymer. Advanced Energy Materials, 2011, 1, 963-969.	19.5	52
16	Loss Mechanisms in Thickâ€Film Lowâ€Bandgap Polymer Solar Cells. Advanced Energy Materials, 2013, 3, 909-916.	19.5	52
17	Defect-Induced Loss Mechanisms in Polymerâ€“Inorganic Planar Heterojunction Solar Cells. ACS Applied Materials & Interfaces, 2013, 5, 7215-7218.	8.0	51
18	Charge transfer-induced photoluminescence in ZnO nanoparticles. Nanoscale, 2019, 11, 8736-8743.	5.6	48

#	Article	IF	Citations
19	Origin of Subthreshold Turn-On in Quantum-Dot Light-Emitting Diodes. ACS Nano, 2019, 13, 8229-8236.	14.6	46
20	On the Study of Exciton Binding Energy with Direct Charge Generation in Photovoltaic Polymers. Advanced Electronic Materials, 2016, 2, 1600200.	5.1	45
21	A visible-near-infrared absorbing Aâ€“Ï€₂â€“Dâ€“Ï€₁â€“Dâ€“Ï€₂â€“A type dimeric-porphyrin donor for high-performance organic solar cells. Journal of Materials Chemistry A, 2017, 5, 25460-25468.	10.3	45
22	Designâ€toâ€Device Approach Affords Panchromatic Coâ€Sensitized Solar Cells. Advanced Energy Materials, 2019, 9, 1802820.	19.5	40
23	Solution processed multilayer cadmium-free blue/violet emitting quantum dots light emitting diodes. Applied Physics Letters, 2012, 101, 053303.	3.3	39
24	Improved Photovoltaic Properties of Donorâ€“Acceptor Copolymers by Introducing Quinoxalino[2,3-<i>b</i>â€²]porphyrin as a Light-Harvesting Unit. Macromolecules, 2015, 48, 287-296.	4.8	38
25	High-detectivity panchromatic photodetectors for the near infrared region based on a dimeric porphyrin small molecule. Journal of Materials Chemistry C, 2018, 6, 3341-3345.	5.5	37
26	Energy Level Alignment and Subâ€Bandgap Charge Generation in Polymer:Fullerene Bulk Heterojunction Solar Cells. Advanced Materials, 2013, 25, 2434-2439.	21.0	35
27	Positive Aging Effect of ZnO Nanoparticles Induced by Surface Stabilization. Journal of Physical Chemistry Letters, 2020, 11, 5863-5870.	4.6	34
28	Phenylene-bridged perylenediimide-porphyrin acceptors for non-fullerene organic solar cells. Sustainable Energy and Fuels, 2018, 2, 2616-2624.	4.9	30
29	Bis[di(4-methoxyphenyl)amino]carbazole-capped indacenodithiophenes as hole transport materials for highly efficient perovskite solar cells: the pronounced positioning effect of a donor group on the cell performance. Journal of Materials Chemistry A, 2019, 7, 10200-10205.	10.3	30
30	Hierarchical Assembly of Nanocellulose into Filaments by Flow-Assisted Alignment and Interfacial Complexation: Conquering the Conflicts between Strength and Toughness. ACS Applied Materials & Interfaces, 2020, 12, 32090-32098.	8.0	29
31	Highlyâ€Transparent and Trueâ€Colored Semitransparent Indoor Photovoltaic Cells. Small Methods, 2020, 4, 2000136.	8.6	28
32	Hole injection polymer effect on degradation of organic light-emitting diodes. Organic Electronics, 2013, 14, 2518-2522.	2.6	26
33	Luminescence and Stability Enhancement of CsPbBr₃ Perovskite Quantum Dots through Surface Sacrificial Coating. Advanced Optical Materials, 2021, 9, 2100474.	7.3	22
34	Multiple electron transporting layers and their excellent properties based on organic solar cell. Scientific Reports, 2017, 7, 9571.	3.3	20
35	Understanding the performance and loss-mechanisms in donorâ€“acceptor polymer based solar cells: Photocurrent generation, charge separation and carrier transport. Solar Energy Materials and Solar Cells, 2011, 95, 2502-2510.	6.2	16
36	6â€2: <i>Invited Paper</i>: Key Challenges towards the Commercialization of Quantumâ€Dot Lightâ€Emitting Diodes. Digest of Technical Papers SID International Symposium, 2017, 48, 55-57.	0.3	15

#	Article	IF	Citations
37	Highly Stable SnO₂-Based Quantum-Dot Light-Emitting Diodes with the Conventional Device Structure. ACS Nano, 2022, 16, 9631-9639.	14.6	14
38	Synthesis and characterization of porphyrinâ€based Dâ€Ï€â€A conjugated polymers for polymer solar cells. Journal of Polymer Science Part A, 2013, 51, 2243-2251.	2.3	12
39	Direct Observation of the Charge Transfer States from a Non-Fullerene Organic Solar Cell with a Small Driving Force. Journal of Physical Chemistry Letters, 2021, 12, 10595-10602.	4.6	12
40	<i>Î²</i>â€Functionalized Imidazoleâ€Fused Porphyrinâ€Donorâ€Based Dyes: Effect of Ï€â€Linker and Acceptor on Optoelectronic and Photovoltaic Properties. ChemistrySelect, 2018, 3, 2558-2564.	1.5	11
41	Perovskite Solar Cells with Front Surface Gradient. Advanced Energy Materials, 2021, 11, 2101080.	19.5	11
42	Cupric oxide nanowires assembled by nanoparticles in situ with enhancing electrocatalytic oxidation of ascorbic acid. Applied Surface Science, 2014, 292, 291-296.	6.1	8
43	Tuning electronic properties of molecular acceptor-Ï€-porphyrin-Ï€-acceptor donors via Ï€-linkage structural engineering. Organic Electronics, 2019, 73, 146-151.	2.6	8
44	Inverted Polymer Solar Cells. IEEE Photonics Journal, 2012, 4, 625-628.	2.0	6
45	Perovskite Quantum Dots with Ultrahigh Solid-State Photoluminescence Quantum Efficiency, Superior Stability, and Uncompromised Electrical Conductivity. Journal of Physical Chemistry Letters, 2021, 12, 9115-9123.	4.6	6
46	Nanocrystalâ€enabled front surface bandgap gradient for the reduction of surface recombination in inverted perovskite solar cells. Solar Rrl, 2021, 5, 2100489.	5.8	3
47	Structure influence of alkyl chains of thienothiophene-porphyrins on the performance of organic solar cells. Materials Reports Energy, 2021, 1, 100066.	3.2	2
48	Energy Level Alignment and Subâ€Bandgap Charge Generation in Polymer:Fullerene Bulk Heterojunction Solar Cells (Adv. Mater. 17/2013). Advanced Materials, 2013, 25, 2433-2433.	21.0	1