Hong Lin

List of Publications by Year
in descending order

88 papers	5,228 citations	101543 36 h-index	85541 71 g-index
90 all docs	90 docs citations	90 times ranked	7844 citing authors

#	Article	IF	Citations
1	Enhancing the Brightness of Cesium Lead Halide Perovskite Nanocrystal Based Green Light-Emitting Devices through the Interface Engineering with Perfluorinated Ionomer. Nano Letters, 2016, 16, 1415-1420.	9.1	685
2	Charge selective contacts, mobile ions and anomalous hysteresis in organicâ€“inorganic perovskite solar cells. Materials Horizons, 2015, 2, 315-322.	12.2	366
3	Allâ€Carbonâ€Electrodeâ€Based Endurable Flexible Perovskite Solar Cells. Advanced Functional Materials, 2018, 28, 1706777.	14.9	242
4	Experimental and simulation-based understanding of morphology controlled barium titanate nanoparticles under co-adsorption of surfactants. CrystEngComm, 2017, 19, 3288-3298.	2.6	190
5	Aluminum-Doped Zinc Oxide as Highly Stable Electron Collection Layer for Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 7826-7833.	8.0	188
6	Nucleation, Growth, and Structural Transformations of Perovskite Nanocrystals. Chemistry of Materials, 2017, 29, 1302-1308.	6.7	188
7	Perovskite solar cells: must lead be replaced â€“ and can it be done?. Science and Technology of Advanced Materials, 2018, 19, 425-442.	6.1	151
8	High Efficiency Inverted Planar Perovskite Solar Cells with Solution-Processed NiO_x Hole Contact. ACS Applied Materials & Interfaces, 2017, 9, 2439-2448.	8.0	139
9	Iodide-reduced graphene oxide with dopant-free spiro-OMeTAD for ambient stable and high-efficiency perovskite solar cells. Journal of Materials Chemistry A, 2015, 3, 15996-16004.	10.3	134
10	Carbon Nanotube Based Inverted Flexible Perovskite Solar Cells with Allâ€Inorganic Charge Contacts. Advanced Functional Materials, 2017, 27, 1703068.	14.9	132
11	Efficient Perovskite Solar Cells Depending on TiO₂ Nanorod Arrays. ACS Applied Materials & Interfaces, 2016, 8, 21358-21365.	8.0	126
12	Artemisinin-passivated mixed-cation perovskite films for durable flexible perovskite solar cells with over 21% efficiency. Journal of Materials Chemistry A, 2021, 9, 1574-1582.	10.3	126
13	Competition between Metallic and Vacancy Defect Conductive Filaments in a CH₃NH₃PbI₃-Based Memory Device. Journal of Physical Chemistry C, 2018, 122, 6431-6436.	3.1	115
14	Hybrid PbS Quantumâ€Dotâ€inâ€Perovskite for Highâ€Efficiency Perovskite Solar Cell. Small, 2018, 14, e1801016	10.0	111
15	Hematite electron-transporting layers for environmentally stable planar perovskite solar cells with enhanced energy conversion and lower hysteresis. Journal of Materials Chemistry A, 2017, 5, 1434-1441.	10.3	95
16	Flexible quintuple cation perovskite solar cells with high efficiency. Journal of Materials Chemistry A, 2019, 7, 4960-4970.	10.3	93
17	Cross-stacked superaligned carbon nanotube electrodes for efficient hole conductor-free perovskite solar cells. Journal of Materials Chemistry A, 2016, 4, 5569-5577.	10.3	92
18	Recent progress in efficient hybrid lead halide perovskite solar cells. Science and Technology of Advanced Materials, 2015, 16, 036004.	6.1	87

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19	To Be Higher and Strongerâ€"Metal Oxide Electron Transport Materials for Perovskite Solar Cells. Small, 2020, 16, e1902579.	10.0	80
20	Ni-doped Î±-Fe 2 O 3 as electron transporting material for planar heterojunction perovskite solar cells with improved efficiency, reduced hysteresis and ultraviolet stability. Nano Energy, 2017, 38, 193-200.	16.0	75
21	Enhancing the Performance of Perovskite Solar Cells by Hybridizing SnS Quantum Dots with CH₃NH₃PbI₃. Small, 2017, 13, 1700953.	10.0	73
22	Boosting Multiple Interfaces by Co-Doped Graphene Quantum Dots for High Efficiency and Durability Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 13941-13949.	8.0	69
23	Efficiently Improving the Stability of Inverted Perovskite Solar Cells by Employing Polyethylenimine-Modified Carbon Nanotubes as Electrodes. ACS Applied Materials & Interfaces, 2018, 10, 31384-31393.	8.0	68
24	Enhancing electron transport via graphene quantum dot/SnO₂ composites for efficient and durable flexible perovskite photovoltaics. Journal of Materials Chemistry A, 2019, 7, 1878-1888.	10.3	67
25	In situ formation of a 2D/3D heterostructure for efficient and stable CsPbI₂Br solar cells. Journal of Materials Chemistry A, 2019, 7, 22675-22682.	10.3	63
26	Critical roles of potassium in charge-carrier balance and diffusion induced defect passivation for efficient inverted perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 5666-5676.	10.3	62
27	Improved efficient perovskite solar cells based on Ta-doped TiO₂nanorod arrays. Nanoscale, 2017, 9, 18897-18907.	5.6	59
28	Type-II Quantum-Dot-Sensitized Solar Cell Spanning the Visible and Near-Infrared Spectrum. Journal of Physical Chemistry C, 2013, 117, 22203-22210.	3.1	58
29	Working from Both Sides: Composite Metallic Semitransparent Top Electrode for High Performance Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 4523-4531.	8.0	56
30	Dual Role of Amino-Functionalized Graphene Quantum Dots in NiO_x Films for Efficient Inverted Flexible Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 8342-8350.	8.0	56
31	Thiazole-Induced Surface Passivation and Recrystallization of CH₃NH₃PbI₃ Films for Perovskite Solar Cells with Ultrahigh Fill Factors. ACS Applied Materials & Interfaces, 2018, 10, 42436-42443.	8.0	49
32	A novel 2D perovskite as surface â€œpatchesâ€•for efficient flexible perovskite solar cells. Journal of Materials Chemistry A, 2020, 8, 7808-7818.	10.3	48
33	Synergistic effect of charge separation and defect passivation using zinc porphyrin dye incorporation for efficient and stable perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 26334-26341.	10.3	44
34	Low temperature reduction of free-standing graphene oxide papers with metal iodides for ultrahigh bulk conductivity. Scientific Reports, 2014, 4, 3965.	3.3	43
35	CH₃NH₃PbI₃ grain growth and interfacial properties in meso-structured perovskite solar cells fabricated by two-step deposition. Science and Technology of Advanced Materials, 2017, 18, 253-262.	6.1	42
36	Ultrathin Zn2SnO4 (ZTO) passivated ZnO nanocone arrays for efficient and stable perovskite solar cells. Chemical Engineering Journal, 2019, 361, 60-66.	12.7	39

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37	Exfoliated Fluorographene Quantum Dots as Outstanding Passivants for Improved Flexible Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 22992-23001.	8.0	38
38	Perovskite/Poly[bis(4-phenyl)(2,4,6-trimethylphenyl)amine] Bulk Heterojunction for High-Efficient Carbon-Based Large-Area Solar Cells by Gradient Engineering. ACS Applied Materials & Interfaces, 2018, 10, 42328-42334.	8.0	37
39	Recent Advances in Carbon Nanotube Utilizations in Perovskite Solar Cells. Advanced Functional Materials, 2021, 31, 2004765.	14.9	37
40	Allâ€Solutionâ€Processed Cu₂ZnSnS₄ Solar Cells with Selfâ€Depleted Na₂S Back Contact Modification Layer. Advanced Functional Materials, 2018, 28, 1703369.	14.9	36
41	Enhanced Photocatalytic Property of Î³-CsPbI₃ Perovskite Nanocrystals with WS₂. ACS Sustainable Chemistry and Engineering, 2020, 8, 1219-1229.	6.7	33
42	Goethite Quantum Dots as Multifunctional Additives for Highly Efficient and Stable Perovskite Solar Cells. Small, 2019, 15, e1904372.	10.0	32
43	In situ growth of Î±-CsPbI3 perovskite nanocrystals on the surface of reduced graphene oxide with enhanced stability and carrier transport quality. Journal of Materials Chemistry C, 2019, 7, 6795-6804.	5.5	31
44	Improved Moisture Stability of Perovskite Solar Cells Using N719 Dye Molecules. Solar Rrl, 2019, 3, 1900345.	5.8	30
45	Perovskite solar cell-thermoelectric tandem system with a high efficiency of over 23%. Materials Today Energy, 2019, 12, 363-370.	4.7	30
46	Bifacial Modified Charge Transport Materials for Highly Efficient and Stable Inverted Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 17861-17870.	8.0	29
47	Preheating-assisted deposition of solution-processed perovskite layer for an efficiency-improved inverted planar composite heterojunction solar cell. RSC Advances, 2016, 6, 30978-30985.	3.6	28
48	Strain-Induced Type II Band Alignment Control in CdSe Nanoplatelet/ZnS-Sensitized Solar Cells. Journal of Physical Chemistry C, 2017, 121, 11136-11143.	3.1	28
49	An Excellent Modifier: Carbon Quantum Dots for Highly Efficient Carbonâ€Electrodeâ€Based Methylammonium Lead Iodide Solar Cells. Solar Rrl, 2019, 3, 1900146.	5.8	27
50	Atomic Chromium Coordinated Graphitic Carbon Nitride for Bioinspired Antibiofouling in Seawater. Advanced Science, 2022, 9, e2105346.	11.2	27
51	Bending Durable and Recyclable Mesostructured Perovskite Solar Cells Based on Superaligned ZnO Nanorod Electrode. Solar Rrl, 2018, 2, 1700194.	5.8	25
52	Role of alkyl chain length in diaminoalkane linked 2D Ruddlesdenâ€“Popper halide perovskites. CrystEngComm, 2018, 20, 6704-6712.	2.6	25
53	Facile in situ synthesis of dendrite-like ZnO/ZnTe core/shell nanorod heterostructures for sensitized solar cells. Journal of Materials Chemistry C, 2016, 4, 4740-4747.	5.5	24
54	Highly efficient inverted perovskite solar cells based on self-assembled graphene derivatives. Journal of Materials Chemistry A, 2018, 6, 20702-20711.	10.3	22

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55	Cesium-Containing Perovskite Solar Cell Based on Graphene/TiO₂ Electron Transport Layer. ChemistrySelect, 2017, 2, 9433-9437.	1.5	21
56	Rational Design of Solution-Processed Tiâ€“Feâ€“O Ternary Oxides for Efficient Planar CH₃NH₃PbI₃ Perovskite Solar Cells with Suppressed Hysteresis. ACS Applied Materials & Interfaces, 2017, 9, 34833-34843.	8.0	21
57	Low-cost preparation of a conductive and catalytic graphene film from chemical reduction with AlI3. Carbon, 2012, 50, 3497-3502.	10.3	20
58	Study of Quantum Dot/Inorganic Layer/Dye Molecule Sandwich Structure for Electrochemical Solar Cells. Journal of Physical Chemistry C, 2012, 116, 15185-15191.	3.1	18
59	Preparation of aluminum doped zinc oxide films with low resistivity and outstanding transparency by a solâ€“gel method for potential applications in perovskite solar cell. Thin Solid Films, 2016, 605, 208-214.	1.8	18
60	Band alignment and charge transfer in CsPbBr3â€“CdSe nanoplatelet hybrids coupled by molecular linkers. Journal of Chemical Physics, 2019, 151, 174704.	3.0	18
61	Improved phase stability of Î³-CsPbI₃ perovskite nanocrystals using the interface effect using iodine modified graphene oxide. Journal of Materials Chemistry C, 2020, 8, 2569-2578.	5.5	18
62	Inhibition of charge transfer and recombination processes in CdS/N719 co-sensitized solar cell with high conversion efficiency. Electrochimica Acta, 2016, 191, 16-22.	5.2	17
63	Improved charge separation and transport efficiency in panchromatic-sensitized solar cells with co-sensitization of PbS/CdS/ZnS quantum dots and dye molecules. RSC Advances, 2016, 6, 21156-21164.	3.6	17
64	Flash-evaporation printing methodology for perovskite thin films. NPG Asia Materials, 2017, 9, e395-e395.	7.9	17
65	Cost effective synthesis of p-type Zn-doped MgAgSb by planetary ball-milling with enhanced thermoelectric properties. RSC Advances, 2018, 8, 35353-35359.	3.6	17
66	A highly-efficient concentrated perovskite solar cell-thermoelectric generator tandem system. Journal of Energy Chemistry, 2021, 59, 730-735.	12.9	16
67	Tunable Crystallization and Nucleation of Planar CH₃NH₃PbI₃ through Solvent-Modified Interdiffusion. ACS Applied Materials & Interfaces, 2018, 10, 14673-14683.	8.0	14
68	Gamma-phase CsPbBr3 perovskite nanocrystals/polymethyl methacrylate electrospun nanofibrous membranes with superior photo-catalytic property. Journal of Chemical Physics, 2020, 153, 024703.	3.0	14
69	Inverted Perovskite Solar Cells with Efficient Mixedâ€Fullerene Derivative Charge Extraction Layers. ChemistrySelect, 2018, 3, 6802-6809.	1.5	13
70	Realizing zinc-doping of CdS buffer layer via partial electrolyte treatment to improve the efficiency of Cu2ZnSnS4 solar cells. Chemical Engineering Journal, 2018, 351, 791-798.	12.7	11
71	Recent progress in meniscus coating for large-area perovskite solar cells and solar modules. Sustainable Energy and Fuels, 2021, 5, 1926-1951.	4.9	11
72	Vertically aligned ZnO/ZnTe core/shell heterostructures on an AZO substrate for improved photovoltaic performance. RSC Advances, 2017, 7, 14837-14845.	3.6	10

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73	Laser-Induced Flash-Evaporation Printing CH₃NH₃PbI₃ Thin Films for High-Performance Planar Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 26206-26212.	8.0	10
74	Solution-processed Kesterite Cu₂ZnSnS₄ as Efficient Hole Extraction Layer for Inverted Perovskite Solar Cells. Chemistry Letters, 2018, 47, 817-820.	1.3	9
75	Reduced Graphene Oxide/CZTS_xSe_{1â€x} Composites as a Novel Holeâ€Transport Functional Layer in Perovskite Solar Cells. ChemElectroChem, 2019, 6, 1500-1507.	3.4	9
76	Perovskite photodetectors prepared by flash evaporation printing. RSC Advances, 2017, 7, 34795-34800.	3.6	8
77	High Efficient Large-area Perovskite Solar Cells Based on Paintable Carbon Electrode with NiO Nanocrystal-carbon Intermediate Layer. Chemistry Letters, 2019, 48, 734-737.	1.3	8
78	Suppressed phase transition of a Rb/K incorporated inorganic perovskite with a water-repelling surface. Nanoscale, 2020, 12, 6571-6581.	5.6	8
79	New insights into the origin of hysteresis behavior in perovskite solar cells. Physical Chemistry Chemical Physics, 2018, 20, 16285-16293.	2.8	7
80	Efficient Inorganic Cesium Lead Mixedâ€Halide Perovskite Solar Cells Prepared by Flashâ€Evaporation Printing. Energy Technology, 2019, 7, 1800986.	3.8	7
81	Role of TiO₂ Thickness on Depletion Properties of TiO₂/CH₃NH₃PbI₃ Heterojunction. Chemistry Letters, 2018, 47, 1055-1058.	1.3	4
82	All Solutionâ€Processed Cu₂ZnSnS₄ Solar Cell by Using Highâ€Boilingâ€Point Solvent Treated Ballâ€Milling Process with Efficiency Exceeding 6%. ChemistrySelect, 2019, 4, 982-989.	1.5	4
83	Perovskite Solar Cells: Allâ€Carbonâ€Electrodeâ€Based Endurable Flexible Perovskite Solar Cells (Adv.) Tj ETQq1 1 0.784314 rgBT /Ov	14.9	3
84	The effect of dispersion of TiO2 nanoparticles on preparation of flexible dye-sensitized photoanodes. Science China: Physics, Mechanics and Astronomy, 2012, 55, 1203-1209.	5.1	2
85	Electrolyte-dependent photovoltaic responses in dye-sensitized solar cells. Frontiers of Optoelectronics in China, 2011, 4, 45-52.	0.2	1
86	Allâ€Layer Sputteringâ€Free Cu2Zn1â€xCdxSnS4 Solar Cell with Efficiency Exceeding 7.5%. ChemistrySelect, 2019, 4, 5979-5983.	1.5	1
87	Improved Moisture Stability of Perovskite Solar Cells Using N719 Dye Molecules. Solar Rrl, 2019, 3, 1970115.	5.8	1
88	Effect of cationic groups in organic sulfide electrolyte on the performance of CdS quantum dot sensitized solar cells. Science Bulletin, 2014, 59, 3209-3215.	1.7	0