

Huiqiong Zhou

List of Publications by Year in descending order

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111
papers

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citations

117571

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all docs

114
docs citations

114
times ranked

5951
citing authors

#	ARTICLE	IF	CITATIONS
1	High-Efficiency Polymer Solar Cells Enhanced by Solvent Treatment. <i>Advanced Materials</i> , 2013, 25, 1646-1652.	11.1	455
2	Polymer Homo-Tandem Solar Cells with Best Efficiency of 11.3%. <i>Advanced Materials</i> , 2015, 27, 1767-1773.	11.1	408
3	A Highly Efficient Non-Fullerene Organic Solar Cell with a Fill Factor over 0.80 Enabled by a Fine-Tuned Hole-Transporting Layer. <i>Advanced Materials</i> , 2018, 30, e1801801.	11.1	360
4	A Biopolymer Heparin Sodium Interlayer Anchoring TiO ₂ and MAPbI ₃ Enhances Trap Passivation and Device Stability in Perovskite Solar Cells. <i>Advanced Materials</i> , 2018, 30, e1706924.	11.1	199
5	Conductive Conjugated Polyelectrolyte as Hole-Transporting Layer for Organic Bulk Heterojunction Solar Cells. <i>Advanced Materials</i> , 2014, 26, 780-785.	11.1	193
6	Fine Multi-Phase Alignments in 2D Perovskite Solar Cells with Efficiency over 17% via Slow Post-Annealing. <i>Advanced Materials</i> , 2019, 31, e1903889.	11.1	178
7	Molecular Doping Enhances Photoconductivity in Polymer Bulk Heterojunction Solar Cells. <i>Advanced Materials</i> , 2013, 25, 7038-7044.	11.1	173
8	Facile Doping of Anionic Narrow-Band-Gap Conjugated Polyelectrolytes During Dialysis. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 12874-12878.	7.2	129
9	Molecular Engineering for Two-Dimensional Perovskites with Photovoltaic Efficiency Exceeding 18%. <i>Matter</i> , 2021, 4, 582-599.	5.0	123
10	High fill factor organic solar cells with increased dielectric constant and molecular packing density. <i>Joule</i> , 2022, 6, 444-457.	11.7	117
11	Interfacial Modification in Organic and Perovskite Solar Cells. <i>Advanced Materials</i> , 2019, 31, e1805708.	11.1	106
12	High-Hole-Mobility Field-Effect Transistors Based on <i>Co</i> -Benzobisthiadiazole-Quaterthiophene. <i>Advanced Materials</i> , 2012, 24, 6164-6168.	11.1	105
13	Regulating Bulk-Heterojunction Molecular Orientations through Surface Free Energy Control of Hole-Transporting Layers for High-Performance Organic Solar Cells. <i>Advanced Materials</i> , 2019, 31, e1806921.	11.1	86
14	Effects of Nonradiative Losses at Charge Transfer States and Energetic Disorder on the Open-Circuit Voltage in Nonfullerene Organic Solar Cells. <i>Advanced Functional Materials</i> , 2018, 28, 1705659.	7.8	77
15	Solution-Processed pH-Neutral Conjugated Polyelectrolyte Improves Interfacial Contact in Organic Solar Cells. <i>ACS Nano</i> , 2015, 9, 371-377.	7.3	73
16	Understanding charge transport and recombination losses in high performance polymer solar cells with non-fullerene acceptors. <i>Journal of Materials Chemistry A</i> , 2017, 5, 17230-17239.	5.2	66
17	Temperature Tunable Self-Doping in Stable Diradicaloid Thin-Film Devices. <i>Advanced Materials</i> , 2015, 27, 7412-7419.	11.1	63
18	Role of interface properties in organic solar cells: from substrate engineering to bulk-heterojunction interfacial morphology. <i>Materials Chemistry Frontiers</i> , 2020, 4, 2863-2880.	3.2	61

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19	Chikungunya Outbreak in Guangdong Province, China, 2010. <i>Emerging Infectious Diseases</i> , 2012, 18, 493-495.	2.0	60
20	Fluorination with an enlarged dielectric constant prompts charge separation and reduces bimolecular recombination in non-fullerene organic solar cells with a high fill factor and efficiency >13%. <i>Nano Energy</i> , 2019, 56, 494-501.	8.2	59
21	Exquisite modulation of ZnO nanoparticle electron transporting layer for high-performance fullerene-free organic solar cell with inverted structure. <i>Journal of Materials Chemistry A</i> , 2019, 7, 3570-3576.	5.2	58
22	Management of the crystallization in two-dimensional perovskite solar cells with enhanced efficiency within a wide temperature range and high stability. <i>Nano Energy</i> , 2019, 58, 706-714.	8.2	52
23	Water-Assisted Crystal Growth in Quasi-2D Perovskites with Enhanced Charge Transport and Photovoltaic Performance. <i>Advanced Energy Materials</i> , 2020, 10, 2001832.	10.2	52
24	Polyamino acid interlayer facilitates electron extraction in narrow band gap fullerene-free organic solar cells with an outstanding short-circuit current. <i>Nano Energy</i> , 2018, 50, 169-175.	8.2	50
25	On the Understandings of Dielectric Constant and Its Impacts on the Photovoltaic Efficiency in Organic Solar Cells. <i>Chinese Journal of Chemistry</i> , 2021, 39, 381-390.	2.6	48
26	High-Performance Solution-Processed Small-Molecule Solar Cells Based on a Dithienogermole-Containing Molecular Donor. <i>Advanced Energy Materials</i> , 2015, 5, 1400987.	10.2	45
27	Nanoscale heterogeneous distribution of surface energy at interlayers in organic bulk-heterojunction solar cells. <i>Joule</i> , 2021, 5, 3154-3168.	11.7	45
28	Temperature-dependent charge transport in solution-processed perovskite solar cells with tunable trap concentration and charge recombination. <i>Journal of Materials Chemistry C</i> , 2017, 5, 9376-9382.	2.7	44
29	Facile development of CoAl-LDHs/RGO nanocomposites as photocatalysts for efficient hydrogen generation from water splitting under visible-light irradiation. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 1753-1760.	3.0	44
30	Recent progress in cathode interlayer materials for non-fullerene organic solar cells. <i>EcoMat</i> , 2022, 4, .	6.8	44
31	Understanding the Impact of Bismuth Heterovalent Doping on the Structural and Photophysical Properties of $\text{CH}_3\text{NH}_3\text{PbBr}_3$ Halide Perovskite Crystals with Near-IR Photoluminescence. <i>Chemistry - A European Journal</i> , 2019, 25, 5480-5488.	1.7	42
32	Halogen bonding reduces intrinsic traps and enhances charge mobilities in halide perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2019, 7, 6840-6848.	5.2	41
33	Polydopamine/ZnO electron transport layers enhance charge extraction in inverted non-fullerene organic solar cells. <i>Journal of Materials Chemistry C</i> , 2019, 7, 10795-10801.	2.7	38
34	Long-term stable and highly efficient perovskite solar cells with a formamidinium chloride (FACl) additive. <i>Journal of Materials Chemistry A</i> , 2020, 8, 17756-17764.	5.2	38
35	The epidemiological characteristics and genetic diversity of dengue virus during the third largest historical outbreak of dengue in Guangdong, China, in 2014. <i>Journal of Infection</i> , 2016, 72, 80-90.	1.7	37
36	A polyaspartic acid sodium interfacial layer enhances surface trap passivation in perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2019, 7, 23895-23903.	5.2	37

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37	Interfacial Chemical Bridge Constructed by Zwitterionic Sulfamic Acid for Efficient and Stable Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , 2020, 3, 3186-3192.	2.5	37
38	Cathode interfacial layer-free all small-molecule solar cells with efficiency over 12%. <i>Journal of Materials Chemistry A</i> , 2019, 7, 15944-15950.	5.2	36
39	On the understanding of energy loss and device fill factor trade-offs in non-fullerene organic solar cells with varied energy levels. <i>Nano Energy</i> , 2020, 75, 105032.	8.2	34
40	Molecular dispersion enhances photovoltaic efficiency and thermal stability in quasi-bilayer organic solar cells. <i>Science China Chemistry</i> , 2021, 64, 116-126.	4.2	34
41	Ultra-narrow bandgap non-fullerene organic solar cells with low voltage losses and a large photocurrent. <i>Journal of Materials Chemistry A</i> , 2018, 6, 19934-19940.	5.2	33
42	Regulating phase separation and molecular stacking by introducing siloxane to small-molecule donors enables high efficiency all-small-molecule organic solar cells. <i>Energy and Environmental Science</i> , 2022, 15, 2937-2947.	15.6	33
43	Synthesis, characterization and magnetic properties of transition metal salen complexes intercalated into layered MnPS ₃ . <i>Journal of Alloys and Compounds</i> , 2007, 432, 247-252.	2.8	31
44	Understanding Temperature-Dependent Charge Extraction and Trapping in Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2020, 30, 2000550.	7.8	31
45	Pseudohalide-Assisted Growth of Oriented Large Grains for High-Performance and Stable 2D Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2022, 7, 1842-1849.	8.8	29
46	Incorporating an Inert Polymer into the Interlayer Passivates Surface Defects in Methylammonium Lead Halide Perovskite Solar Cells. <i>Chemistry - A European Journal</i> , 2017, 23, 14650-14657.	1.7	28
47	High efficiency non-fullerene organic solar cells without electron transporting layers enabled by Lewis base anion doping. <i>Nano Energy</i> , 2018, 51, 736-744.	8.2	28
48	A conjugated microporous polymer film fabricated by <i>in situ</i> electro-chemical deposition as a hole transporting layer in organic photovoltaics. <i>Journal of Materials Chemistry C</i> , 2018, 6, 9044-9048.	2.7	27
49	Similar or different: the same Spiro-core but different alkyl chains with apparently improved device performance of perovskite solar cells. <i>Science China Chemistry</i> , 2019, 62, 739-745.	4.2	27
50	On the understanding of energetic disorder, charge recombination and voltage losses in all-polymer solar cells. <i>Journal of Materials Chemistry C</i> , 2018, 6, 7855-7863.	2.7	26
51	Control of Nanomorphology in Fullerene-Free Organic Solar Cells by Lewis Acid Doping with Enhanced Photovoltaic Efficiency. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 667-677.	4.0	24
52	Non-Preheating Processed Quasi-2D Perovskites for Efficient and Stable Solar Cells. <i>Small</i> , 2020, 16, e1906997.	5.2	24
53	A surface modifier enhances the performance of the all-inorganic CsPbI ₂ Br perovskite solar cells with efficiencies approaching 15%. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 17847-17856.	1.3	23
54	A Comparative Study on Hole Transfer Inversely Correlated with Driving Force in Two Non-Fullerene Organic Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 4110-4116.	2.1	21

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55	Recent advances in non-fullerene organic photovoltaics enabled by green solvent processing. <i>Nanotechnology</i> , 2022, 33, 072002.	1.3	20
56	Understanding the Passivation Mechanisms and Opto-Electronic Spectral Response in Methylammonium Lead Halide Perovskite Single Crystals. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 35580-35588.	4.0	19
57	A biopolymeric buffer layer improves device efficiency and stability in inverted organic solar cells. <i>Journal of Materials Chemistry C</i> , 2020, 8, 15795-15803.	2.7	18
58	Enhancement of the Photoresponse in Organic Field-Effect Transistors by Incorporating Thin DNA Layers. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 244-249.	7.2	17
59	Improved electron extraction by a ZnO nanoparticle interlayer for solution-processed polymer solar cells. <i>RSC Advances</i> , 2017, 7, 12400-12406.	1.7	17
60	Effects of processing additives in non-fullerene organic bulk heterojunction solar cells with efficiency >11%. <i>Chinese Chemical Letters</i> , 2019, 30, 217-221.	4.8	17
61	Air-stable formamidinium/methylammonium mixed lead iodide perovskite integral microcrystals with low trap density and high photo-responsivity. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 3106-3113.	1.3	16
62	The Positive Function of Incorporation of Small Molecules into Perovskite Materials for High-Efficient Stable Solar Cells. <i>Solar Rrl</i> , 2019, 3, 1800327.	3.1	16
63	Sequential molecular doping of non-fullerene organic solar cells without hole transport layers. <i>Journal of Materials Chemistry C</i> , 2020, 8, 158-164.	2.7	16
64	Built-in voltage enhanced by <i>in situ</i> electrochemical polymerized undoped conjugated hole-transporting modifiers in organic solar cells. <i>Journal of Materials Chemistry C</i> , 2020, 8, 2676-2681.	2.7	16
65	Enhanced Photoelectrochemical Detection of Bioaffinity Reactions by Vertically Oriented Au Nanobranches Complexed with a Biotinylated Polythiophene Derivative. <i>Sensors</i> , 2009, 9, 1094-1107.	2.1	15
66	Transformation of Tourism in Beijing after the 2008 Summer Olympics: An Analysis of the Impacts in 2014. <i>International Journal of Tourism Research</i> , 2016, 18, 277-285.	2.1	15
67	Electron Transport and Nanomorphology in Solution-Processed Polymeric Semiconductor Doped with an Air-Stable Organometallic Dimer. <i>Advanced Electronic Materials</i> , 2017, 3, 1600546.	2.6	15
68	Returning ex-patriot Chinese to Guangdong, China, increase the risk for local transmission of Zika virus. <i>Journal of Infection</i> , 2017, 75, 356-367.	1.7	15
69	High-Efficiency and Stable Perovskite Solar Cells Enabled by Low-Dimensional Perovskite Surface Modifiers. <i>Solar Rrl</i> , 2022, 6, .	3.1	15
70	Solution-Based In Situ Synthesis and Fabrication of Ultrasensitive CdSe Photoconductors. <i>Advanced Materials</i> , 2010, 22, 5366-5369.	11.1	14
71	High-Efficient Charge Generation in Single-Donor-Based p-n Structure Organic Solar Cells. <i>Solar Rrl</i> , 2020, 4, 1900580.	3.1	14
72	Efficient and Stable Quasi-2D Perovskite Solar Cells Enabled by Thermal-Aged Precursor Solution. <i>Advanced Functional Materials</i> , 2021, 31, 2107675.	7.8	14

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73	Light Managements and Transparent Electrodes for Semitransparent Organic and Perovskite Solar Cells. <i>Solar Rrl</i> , 2022, 6, .	3.1	14
74	The intercalation of C60-containing PEO into layered MnPS3. <i>Polymer</i> , 2007, 48, 3256-3261.	1.8	13
75	Understanding the temperature-dependent charge transport, structural variation and photoluminescent properties in methylammonium lead halide perovskite single crystals. <i>Journal of Materials Chemistry C</i> , 2018, 6, 6556-6564.	2.7	13
76	Revealing the Interfacial Photoreduction of MoO ₃ with P3HT from the Molecular Weight-Dependent α -Burn-In α -Degradation of P3HT:PC ₆₁ BM Solar Cells. <i>ACS Applied Energy Materials</i> , 2020, 3, 9714-9723.	2.5	13
77	Evolutionary and phylogenetic analyses of Dengue virus serotype I in Guangdong Province, China, between 1985 and 2015. <i>Virus Research</i> , 2018, 256, 201-208.	1.1	12
78	The epidemiological characteristics and molecular phylogeny of the dengue virus in Guangdong, China, 2015. <i>Scientific Reports</i> , 2018, 8, 9976.	1.6	11
79	A universal approach for optimizing charge extraction in electron transporting layer-free organic solar cells <i>via</i> Lewis base doping. <i>Journal of Materials Chemistry A</i> , 2019, 7, 25808-25817.	5.2	11
80	Entecavir-associated myopathy: A case report and literature review. <i>Muscle and Nerve</i> , 2014, 49, 610-614.	1.0	10
81	A family cluster of imported ZIKV cases: Viremia period may be longer than previously reported. <i>Journal of Infection</i> , 2016, 73, 300-303.	1.7	10
82	Intercalation of amino acids into layered MnPS3: Synthesis, characterization and magnetic properties. <i>Materials Research Bulletin</i> , 2006, 41, 2161-2167.	2.7	9
83	Synthesis and Luminescent Properties of Two Copolymers Containing Dithienothiophene and Fluorene. <i>Chemistry Letters</i> , 2007, 36, 1206-1207.	0.7	9
84	Improved Electron Transport with Reduced Contact Resistance in Na-Doped Polymer Field-Effect Transistors with a Dimeric Dopant. <i>Macromolecular Rapid Communications</i> , 2018, 39, e1700726.	2.0	9
85	Retardation of Trap-Assisted Recombination in Lead Halide Perovskite Solar Cells by a Dimethylbiguanide Anchor Layer. <i>Chemistry - A European Journal</i> , 2018, 25, 1076-1082.	1.7	9
86	Mediated Non-geminate Recombination in Ternary Organic Solar Cells Through a Liquid Crystal Guest Donor. <i>Frontiers in Chemistry</i> , 2020, 8, 21.	1.8	9
87	An inorganic-organic intercalated nanocomposite, BEDT-TTF into layered MnPS3. <i>Journal of Inclusion Phenomena and Macrocyclic Chemistry</i> , 2008, 62, 293-296.	1.6	8
88	Rapid Production of Virus Protein Microarray Using Protein Microarray Fabrication through Gene Synthesis (PAGES). <i>Molecular and Cellular Proteomics</i> , 2017, 16, 288-299.	2.5	8
89	Serologic and behavioral risk survey of workers with wildlife contact in China. <i>PLoS ONE</i> , 2018, 13, e0194647.	1.1	8
90	Fast Field-Insensitive Charge Extraction Enables High Fill Factors in Polymer Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 38460-38469.	4.0	8

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91	Enhanced stability in perovskite solar cells <i>via</i> room-temperature processing. <i>Journal of Materials Chemistry C</i> , 2021, 9, 14749-14756.	2.7	8
92	Strongly Reduced Non-Radiative Voltage Losses in Organic Solar Cells Prepared with Sequential Film Deposition. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 10663-10670.	2.1	8
93	Synthesis, structure and material properties of thiopyranylidene-based asymmetrical squaraines. <i>Dyes and Pigments</i> , 2018, 154, 137-144.	2.0	7
94	Genomic and biological features of a novel orbivirus isolated from mosquitoes, in China. <i>Virus Research</i> , 2020, 285, 197990.	1.1	7
95	Peculiar Steric Hindrance Assists Monoclinic Phase Formation toward High-Quality All-Inorganic Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 11228-11237.	2.1	7
96	A New Organic-Inorganic Hybrid Nanocomposite, BEDT-TTF Intercalated into Layered FePS ₃ . <i>Journal of Inclusion Phenomena and Macrocyclic Chemistry</i> , 2005, 53, 205-209.	1.6	6
97	Interrater reliability and radiation dosage of oblique coronal computed tomography for sacroiliitis in comparison with axial computed tomography. <i>British Journal of Radiology</i> , 2018, 91, 20150700.	1.0	6
98	Ambipolar charge transport in a bis-diketopyrrolopyrrole small molecule semiconductor with tunable energetic disorder. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 1787-1793.	1.3	6
99	Hydroquinolalithium as a Highly Effective Solution-Processable Cathode Interfacial Material in Inverted Perovskite Solar Cells with an Efficiency Over 19%. <i>Solar Rrl</i> , 2018, 2, 1800084.	3.1	6
100	Rational Design of 2D Conjugated Polysquaraines for Both Fullerene and Nonfullerene Polymer Solar Cells. <i>Macromolecular Chemistry and Physics</i> , 2020, 221, 1900439.	1.1	6
101	Synthesis and Magnetic Characterization of TTM-TTF intercalated into Lamellar MnPS ₃ . <i>Synthetic Metals</i> , 2005, 152, 485-488.	2.1	5
102	Identification and genetic characterization of Zika virus isolated from an imported case in China. <i>Infection, Genetics and Evolution</i> , 2017, 48, 40-46.	1.0	4
103	Synthesis and characterization of intercalation compounds of stilbazolium chromophores into layered vanadyl phosphate. <i>Journal of Materials Chemistry</i> , 2005, 15, 1637.	6.7	3
104	New Configuration of Solid-State Neutron Detector Made Possible with Solution-Based Semiconductor Processing. <i>Advanced Functional Materials</i> , 2012, 22, 3279-3283.	7.8	3
105	The effect of one- or two-dimensional conjugated benzodithiophene in polymeric donors on the device performance of non-fullerene organic solar cells. <i>Dyes and Pigments</i> , 2019, 163, 221-226.	2.0	2
106	Adenosine Triphosphate Disodium Modified Hole Transport Layer for Efficient Inverted Perovskite Solar Cells. <i>ChemNanoMat</i> , 2022, 8, .	1.5	2
107	Community based serosurvey of naïve population indicate no local circulation of Zika virus in a hyper endemic area of China 2016. <i>Journal of Infection</i> , 2019, 79, 61-74.	1.7	1
108	Effect of defects on the electronic structure of a PbI ₂ /MoS ₂ van der Waals heterostructure: A first-principles study. <i>Science China: Physics, Mechanics and Astronomy</i> , 2020, 63, 1.	2.0	1

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109	The Role of Ending Groups in Non-Fullerene Acceptors for Interfacial Modification in Perovskite Solar Cells. Solar Rrl, 0, , .	3.1	1
110	Interfacial Molecular Doping at Donor and Acceptor Interface in Bilayer Organic Solar Cells. Solar Rrl, 0, , .	3.1	1
111	Evaluation of a real-time impedance analysis platform on fungal infection. Journal of Microbiological Methods, 2017, 136, 88-93.	0.7	0