ziruo Hong

List of Publications by Citations

91 papers	24,995 citations	51 h-index	93 g-index
93 ext. papers	26,716 ext. citations	11.5 avg, IF	6.89 L-index

#	Paper	IF	Citations
91	Photovoltaics. Interface engineering of highly efficient perovskite solar cells. *Science*, **2014**, 345, 542-6	33.3	5272
90	Planar heterojunction perovskite solar cells via vapor-assisted solution process. *Journal of the American Chemical Society*, **2014**, 136, 622-5	16.4	1921
89	Solution-processed hybrid perovskite photodetectors with high detectivity. *Nature Communications*, **2014**, 5, 5404	17.4	1749
88	Improved air stability of perovskite solar cells via solution-processed metal oxide transport layers. *Nature Nanotechnology*, **2016**, 11, 75-81	28.7	1614
87	Low-temperature solution-processed perovskite solar cells with high efficiency and flexibility. *ACS Nano*, **2014**, 8, 1674-80	16.7	1216
86	Controllable self-induced passivation of hybrid lead iodide perovskites toward high performance solar cells. *Nano Letters*, **2014**, 14, 4158-63	11.5	1143
85	Recent Progress in Polymer Solar Cells: Manipulation of Polymer:Fullerene Morphology and the Formation of Efficient Inverted Polymer Solar Cells. *Advanced Materials*, **2009**, 21, 1434-1449	24	1142
84	25th anniversary article: a decade of organic/polymeric photovoltaic research. *Advanced Materials*, **2013**, 25, 6642-71	24	978
83	Low-Bandgap Near-IR Conjugated Polymers/Molecules for Organic Electronics. *Chemical Reviews*, **2015**, 115, 12633-65	68.1	863
82	Under the spotlight: The organic–inorganic hybrid halide perovskite for optoelectronic applications. *Nano Today*, **2015**, 10, 355-396	17.9	700
81	Moisture assisted perovskite film growth for high performance solar cells. *Applied Physics Letters*, **2014**, 105, 183902	3.4	598
80	Interface investigation and engineering – achieving high performance polymer photovoltaic devices. *Journal of Materials Chemistry*, **2010**, 20, 2575		521
79	Solution-processed small-molecule solar cells: breaking the 10% power conversion efficiency. *Scientific Reports*, **2013**, 3, 3356	4.9	511
78	High-efficiency robust perovskite solar cells on ultrathin flexible substrates. *Nature Communications*, **2016**, 7, 10214	17.4	444
77	Multifunctional Fullerene Derivative for Interface Engineering in Perovskite Solar Cells. *Journal of the American Chemical Society*, **2015**, 137, 15540-7	16.4	433
76	10.2% power conversion efficiency polymer tandem solar cells consisting of two identical sub-cells. *Advanced Materials*, **2013**, 25, 3973-8	24	403
75	Plasmonic polymer tandem solar cell. *ACS Nano*, **2011**, 5, 6210-7	16.7	304

74	Highly efficient tandem polymer photovoltaic cells. *Advanced Materials*, **2010**, 22, 380-3	24	304
73	Efficient Polymer Solar Cells with Thin Active Layers Based on Alternating Polyfluorene Copolymer/Fullerene Bulk Heterojunctions. *Advanced Materials*, **2009**, 21, 4238-4242	24	240
72	Recent trends in polymer tandem solar cells research. *Progress in Polymer Science*, **2013**, 38, 1909-1928	29.6	232
71	Perovskite Solar Cells Employing Dopant-Free Organic Hole Transport Materials with Tunable Energy Levels. *Advanced Materials*, **2016**, 28, 440-6	24	217
70	A robust inter-connecting layer for achieving high performance tandem polymer solar cells. *Advanced Materials*, **2011**, 23, 3465-70	24	214
69	A dopant-free organic hole transport material for efficient planar heterojunction perovskite solar cells. *Journal of Materials Chemistry A*, **2015**, 3, 11940-11947	13	182
68	Tandem polymer photovoltaic cells□current status, challenges and future outlook. *Energy and Environmental Science*, **2011**, 4, 1606	35.4	179
67	Squaraine dyes for organic photovoltaic cells. *Journal of Materials Chemistry A*, **2015**, 3, 14517-14534	13	167
66	A metal-oxide interconnection layer for polymer tandem solar cells with an inverted architecture. *Advanced Materials*, **2011**, 23, 1282-6	24	159
65	Pure Formamidinium-Based Perovskite Light-Emitting Diodes with High Efficiency and Low Driving Voltage. *Advanced Materials*, **2017**, 29, 1603826	24	145
64	Co-evaporated bulk heterojunction solar cells with >6.0% efficiency. *Advanced Materials*, **2012**, 24, 2768-73	24	143
63	A bis-salicylaldiminato Schiff base and its zinc complex as new highly fluorescent red dopants for high performance organic electroluminescence devices. *Chemical Communications*, **2003**, 1664-1665	5.8	141
62	Integrated perovskite/bulk-heterojunction toward efficient solar cells. *Nano Letters*, **2015**, 15, 662-8	11.5	129
61	Effect of Carbon Chain Length in the Substituent of PCBM-like Molecules on Their Photovoltaic Properties. *Advanced Functional Materials*, **2010**, 20, 1480-1487	15.6	128
60	Perovskite/polymer monolithic hybrid tandem solar cells utilizing a low-temperature, full solution process. *Materials Horizons*, **2015**, 2, 203-211	14.4	127
59	High-efficiency polymer tandem solar cells with three-terminal structure. *Advanced Materials*, **2010**, 22, E77-80	24	119
58	Toward Highly Sensitive Polymer Photodetectors by Molecular Engineering. *Advanced Materials*, **2015**, 27, 6496-503	24	114
57	High efficiency polymer solar cells with vertically modulated nanoscale morphology. *Nanotechnology*, **2009**, 20, 165202	3.4	111

56	A Series of Squaraine Dyes: Effects of Side Chain and the Number of Hydroxyl Groups on Material Properties and Photovoltaic Performance. *Chemistry of Materials*, **2014**, 26, 1356-1364	9.6	97
55	Solution-processed small molecules using different electron linkers for high-performance solar cells. *Advanced Materials*, **2013**, 25, 4657-62	24	92
54	Low-Temperature TiOx Compact Layer for Planar Heterojunction Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2016**, 8, 11076-83	9.5	91
53	Synthesis, crystal structure and electroluminescent properties of a Schiff base zinc complex. *Inorganica Chimica Acta*, **2006**, 359, 2246-2251	2.7	90
52	Multi-source/component spray coating for polymer solar cells. *ACS Nano*, **2010**, 4, 4744-52	16.7	87
51	A New Family of Isophorone-Based Dopants for Red Organic Electroluminescent Devices. *Chemistry of Materials*, **2003**, 15, 1486-1490	9.6	84
50	Working Mechanism for Flexible Perovskite Solar Cells with Simplified Architecture. *Nano Letters*, **2015**, 15, 6514-20	11.5	82
49	J-aggregation of a squaraine dye and its application in organic photovoltaic cells. *Journal of Materials Chemistry C*, **2013**, 1, 6547	7.1	75
48	Anthracene derivative for a non-doped blue-emitting organic electroluminescence device with both excellent color purity and high efficiency. *Chemical Physics Letters*, **2004**, 397, 1-4	2.5	73
47	Synthesis, photoluminescence and electroluminescence of new 1H-pyrazolo[3,4-b]quinoxaline derivatives. *Journal of Materials Chemistry*, **2003**, 13, 1894		66
46	The study of solvent additive effects in efficient polymer photovoltaics via impedance spectroscopy. *Solar Energy Materials and Solar Cells*, **2014**, 130, 20-26	6.4	65
45	Unraveling the High Open Circuit Voltage and High Performance of Integrated Perovskite/Organic Bulk-Heterojunction Solar Cells. *Nano Letters*, **2017**, 17, 5140-5147	11.5	61
44	Solution-processed organic photovoltaic cells based on a squaraine dye. *Physical Chemistry Chemical Physics*, **2012**, 14, 14661-6	3.6	61
43	Infrared and visible emission from organic electroluminescent devices based on praseodymium complex. *Applied Physics Letters*, **2001**, 79, 1942-1944	3.4	58
42	High-efficiency simple planar heterojunction organic thin-film photovoltaics with horizontally oriented amorphous donors. *Solar Energy Materials and Solar Cells*, **2012**, 98, 472-475	6.4	56
41	Highly efficient organic pin photovoltaic cells based on tetraphenyldibenzoperiflanthene and fullerene C70. *Energy and Environmental Science*, **2013**, 6, 249-255	35.4	53
40	White light emitting organic electroluminescent devices using lanthanide dinuclear complexes. *Journal of Luminescence*, **1999**, 82, 105-109	3.8	51
39	Spectrally-narrow blue light-emitting organic electroluminescent devices utilizing thulium complexes. *Synthetic Metals*, **1999**, 104, 165-168	3.6	50

38	Energy transfer process from polymer to rare earth complexes. *Synthetic Metals*, **1997**, 91, 151-154	3.6	48
37	A triphenylamine derivative as an efficient organic light color-conversion material for white LEDs. *Journal of Luminescence*, **2008**, 128, 67-73	3.8	47
36	Optical and electrical properties of a squaraine dye in photovoltaic cells. *Applied Physics Letters*, **2012**, 101, 083904	3.4	46
35	Europium complexes as emitters in organic electroluminescent devices. *Synthetic Metals*, **1997**, 91, 267-269	3.6	45
34	Enhanced electroluminescence of europium(III) complex by terbium(III) substitution in organic light emitting diodes. *Thin Solid Films*, **2000**, 363, 208-210	2.2	43
33	A schiff base zinc complex and its electroluminescent properties. *Thin Solid Films*, **2007**, 515, 4080-4084	2.2	42
32	10.5% efficient polymer and amorphous silicon hybrid tandem photovoltaic cell. *Nature Communications*, **2015**, 6, 6391	17.4	38
31	Triphenylamine-functionalized rhenium (I) complex as a highly efficient yellow-green emitter in electrophosphorescent devices. *Applied Physics Letters*, **2006**, 89, 243511	3.4	36
30	The Critical Role of Processing and Morphology in Determining Degradation Rates in Polymer Solar Cells. *Advanced Energy Materials*, **2011**, 1, 124-131	21.8	35
29	Natural Photosynthetic Carotenoids for Solution-Processed Organic Bulk-Heterojunction Solar Cells. *Journal of Physical Chemistry C*, **2013**, 117, 804-811	3.8	34
28	Organic electroluminescent devices using terbium chelates as the emitting layers. *Synthetic Metals*, **1997**, 91, 263-265	3.6	33
27	Observation of red intraligand electrophosphorescence from a stilbene-containing Re(I) complex. *Applied Physics Letters*, **2004**, 85, 4786-4788	3.4	33
26	White light emission from OEL devices based on organic dysprosium-complex. *Synthetic Metals*, **2000**, 111-112, 43-45	3.6	32
25	Soluble squaraine derivatives for 4.9% efficient organic photovoltaic cells. *RSC Advances*, **2014**, 4, 42804-42807	3.7	26
24	Improved performance of electrophosphorescent devices based on Re(CO)3Cl-dipyrido[3,2-a:2?,3?-c]phenazine. *Applied Physics Letters*, **2006**, 88, 093507	3.4	24
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22	Fullerene derivatives as electron donor for organic photovoltaic cells. *Applied Physics Letters*, **2013**, 103, 203301	3.4	21
21	The effect of processing solvent dependent film aggregation on the photovoltaic performance of squaraine:PC71BM bulk heterojunction solar cells. *Organic Electronics*, **2017**, 51, 62-69	3.5	20

20	A terbium (III) complex with triphenylamine-functionalized ligand for organic electroluminescent device. *Journal of Luminescence*, **2008**, 128, 620-624	3.8	19
19	Dicyano-functionalized chlorophyll derivatives with ambipolar characteristic for organic photovoltaics. *Organic Electronics*, **2013**, 14, 1972-1979	3.5	18
18	A squaraine dye as molecular sensitizer for increasing light harvesting in polymer solar cells. *Synthetic Metals*, **2014**, 192, 10-14	3.6	17
17	Development of Solar Cells Based on Synthetic Near-Infrared Absorbing Purpurins 2: Use of Fullerene and Its Derivative As Electron Acceptors for Favorable Charge Separation. *Journal of Physical Chemistry C*, **2012**, 116, 21244-21254	3.8	17
16	High fill factor and thermal stability of bilayer organic photovoltaic cells with an inverted structure. *Applied Physics Letters*, **2015**, 106, 053305	3.4	16
15	Chloroboron (III) subnaphthalocyanine as an electron donor in bulk heterojunction photovoltaic cells. *Nanotechnology*, **2013**, 24, 484007	3.4	16
14	Electron-transport properties of rare earth chelates in organic electroluminescent devices. *Synthetic Metals*, **1997**, 91, 271-273	3.6	13
13	Fullerene C70 as a p-type donor in organic photovoltaic cells. *Applied Physics Letters*, **2014**, 105, 093301	3.4	12
12	Solution-processed organic photovoltaics based on indoline dye molecules developed in dye-sensitized solar cells. *Molecules*, **2013**, 18, 3107-17	4.8	12
11	Organic Light-Emitting Diode Using Eu3+ Polymer Complex as an Emitter. *Japanese Journal of Applied Physics*, **1999**, 38, L46-L48	1.4	12
10	A morphology control layer of a pyrene dimer enhances the efficiency in small molecule organic photovoltaic cells. *Journal of Materials Chemistry C*, **2014**, 2, 501-509	7.1	10
9	Highly efficient electrophosphorescence devices based on iridium complexes with high efficiency over a wide range of current densities. *Journal Physics D: Applied Physics*, **2008**, 41, 245101	3	10
8	Rhenium(I) complex as an electron acceptor in a photovoltaic device. *Journal of Alloys and Compounds*, **2007**, 432, L15-L17	5.7	9
7	Comparison of the Solution and Vacuum-Processed Squaraine:Fullerene Small-Molecule Bulk Heterojunction Solar Cells. *Frontiers in Chemistry*, **2018**, 6, 412	5	8
6	Tandem Solar Cell：Concept and Practice in Organic Solar Cells. *Topics in Applied Physics*, **2015**, 315-346	0.5	6
5	Soluble dendrimers europium(III) β-diketonate complex for organic memory devices. *Thin Solid Films*, **2008**, 516, 3123-3127	2.2	6
4	Redistribution of carriers in OEL devices by inserting a thin charge-carrier blocking layer. *Synthetic Metals*, **1997**, 91, 275-277	3.6	4
3	Indoline-based donor molecule for efficient co-evaporated organic photovoltaics. *Organic Electronics*, **2013**, 14, 2210-2215	3.5	2

2	Preparation, photo- and electro-luminescent properties of a novel complex of Tb (III) with a tripod ligand. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2008**, 69, 654-8	4.4	2
1	Inverted Planar Structure of Perovskite Solar Cells **2016**, 307-324		1