Bin Wei

List of Publications by Year
in descending order

105 papers	1,904 citations	304743 22 h-index	315739 38 g-index
105 all docs	105 docs citations	105 times ranked	2153 citing authors

#	Article	IF	Citations
1	Facile Synthesis of Highly Efficient Lepidineâ€Based Phosphorescent Iridium(III) Complexes for Yellow and White Organic Lightâ€Emitting Diodes. Advanced Functional Materials, 2016, 26, 881-894.	14.9	217
2	A Multi-functional Molecular Modifier Enabling Efficient Large-Area Perovskite Light-Emitting Diodes. Joule, 2020, 4, 1977-1987.	24.0	111
3	Stable green phosphorescence organic light-emitting diodes with low efficiency roll-off using a novel bipolar thermally activated delayed fluorescence material as host. Chemical Science, 2017, 8, 1259-1268.	7.4	77
4	Stable, Glassy, and Versatile Binaphthalene Derivatives Capable of Efficient Hole Transport, Hosting, and Deepâ€Blue Light Emission. Advanced Functional Materials, 2010, 20, 2448-2458.	14.9	73
5	Efficient Deep-Blue Electrofluorescence with an External Quantum Efficiency Beyond 10%. IScience, 2018, 9, 532-541.	4.1	65
6	Progress on ultraviolet organic electroluminescence and lasing. Journal of Materials Chemistry C, 2020, 8, 14665-14694.	5.5	53
7	Exceeding 4% external quantum efficiency in ultraviolet organic light-emitting diode using PEDOT:PSS/MoO<i>x</i> double-stacked hole injection layer. Applied Physics Letters, 2017, 110, .	3.3	47
8	Solution-processed aqueous composite hole injection layer of PEDOT:PSS+MoO for efficient ultraviolet organic light-emitting diode. Organic Electronics, 2017, 46, 7-13.	2.6	46
9	Solution-Processed Double-Junction Quantum-Dot Light-Emitting Diodes with an EQE of Over 40%. ACS Applied Materials & Interfaces, 2019, 11, 1065-1070.	8.0	44
10	Facile synthesis of solution-processed MoS₂ nanosheets and their application in high-performance ultraviolet organic light-emitting diodes. Journal of Materials Chemistry C, 2019, 7, 926-936.	5.5	38
11	Improved hole-transporting properties of Ir complex-doped organic layer for high-efficiency organic light-emitting diodes. Organic Electronics, 2013, 14, 124-130.	2.6	33
12	Hybrid plasmonic nano-emitters with controlled single quantum emitter positioning on the local excitation field. Nature Communications, 2020, 11, 3414.	12.8	33
13	High-performance flexible inverted organic light-emitting diodes by exploiting MoS₂ nanopillar arrays as electron-injecting and light-coupling layers. Nanoscale, 2017, 9, 14602-14611.	5.6	32
14	Iridium(<scp>iii</scp>) complexes bearing oxadiazol-substituted amide ligands: color tuning and application in highly efficient phosphorescent organic light-emitting diodes. Journal of Materials Chemistry C, 2017, 5, 9146-9156.	5.5	31
15	Enhanced photovoltaic performance in inverted polymer solar cells using Li ion doped ZnO cathode buffer layer. Organic Electronics, 2016, 36, 50-56.	2.6	29
16	Toward improved stability of nonfullerene organic solar cells: Impact of interlayer and builtâ€in potential. EcoMat, 2021, 3, e12134.	11.9	28
17	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.	2.6	26
18	Effect of ZnO Electron Extraction Layer on Charge Recombination and Collection Properties in Organic Solar Cells. ACS Applied Energy Materials, 2019, 2, 7385-7392.	5.1	26

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19	Highly efficient green phosphorescent organic light-emitting diodes with low efficiency roll-off based on iridium(<scp>iii</scp>) complexes bearing oxadiazol-substituted amide ligands. Journal of Materials Chemistry C, 2016, 4, 5469-5475.	5.5	25
20	Functional versatile bipolar 3,3â€²-dimethyl-9,9â€²-bianthracene derivatives as an efficient host and deep-blue emitter. Dyes and Pigments, 2018, 148, 329-340.	3.7	25
21	Ultravioletâ€Durable Flexible Nonfullerene Organic Solar Cells Realized by a Hybrid Nanostructured Transparent Electrode. Solar Rrl, 2020, 4, 1900522.	5.8	24
22	Mixed-Dimensional MXene-Based Composite Electrodes Enable Mechanically Stable and Efficient Flexible Perovskite Light-Emitting Diodes. Nano Letters, 2022, 22, 4246-4252.	9.1	24
23	Organic solid laser pumped by an organic light-emitting diode. Optics Express, 2006, 14, 9436.	3.4	23
24	Carrier transfer and luminescence characteristics of concentration-dependent phosphorescent Ir(ppy)3 doped CBP film. Optics and Laser Technology, 2014, 56, 20-24.	4.6	23
25	High-Efficiency Near Ultraviolet and Blue Organic Light-Emitting Diodes Using Star-Shaped Material as Emissive and Hosting Molecules. Journal of Display Technology, 2014, 10, 642-646.	1.2	23
26	Magnetic nanoparticles/PEDOT:PSS composite hole-injection layer for efficient organic light-emitting diodes. Journal of Materials Chemistry C, 2018, 6, 4903-4911.	5.5	23
27	Towards all-solution-processed top-illuminated flexible organic solar cells using ultrathin Ag-modified graphite-coated poly(ethylene terephthalate) substrates. Nanophotonics, 2019, 8, 297-306.	6.0	22
28	Highly efficient and foldable top-emission organic light-emitting diodes based on Ag-nanoparticles modified graphite electrode. Organic Electronics, 2019, 64, 146-153.	2.6	22
29	Extremely high external quantum efficiency of inverted organic light-emitting diodes with low operation voltage and reduced efficiency roll-off by using sulfide-based double electron injection layers. RSC Advances, 2016, 6, 55626-55634.	3.6	21
30	Highly-efficient solution-processed green phosphorescent organic light-emitting diodes with reduced efficiency roll-off using ternary blend hosts. Journal of Materials Chemistry C, 2019, 7, 11109-11117.	5.5	20
31	Highly Stable Grapheneâ€Based Flexible Hybrid Transparent Conductive Electrodes for Organic Solar Cells. Advanced Materials Interfaces, 2022, 9, .	3.7	19
32	Remarkable improvement in electroluminescence benefited from appropriate electron injection and transporting in ultraviolet organic light-emitting diode. Optics and Laser Technology, 2016, 82, 199-202.	4.6	18
33	Efficient blue electroluminescence of iridium(III) complexes with oxadiazol-substituted amide ancillary ligands. Dyes and Pigments, 2017, 145, 116-125.	3.7	18
34	Tunable hole injection of solution-processed polymeric carbon nitride towards efficient organic light-emitting diode. Applied Physics Letters, 2018, 112, .	3.3	18
35	High-performance light-soaking-free polymer solar cells based on a LiF modified ZnO electron extraction layer. Journal of Materials Chemistry C, 2019, 7, 9354-9361.	5.5	18
36	Highly efficient ultraviolet organic light-emitting diodes and interface study using impedance spectroscopy. Optik, 2015, 126, 1595-1597.	2.9	17

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37	Solution-processed Ag-nanowire/ZnO-nanoparticle composite transparent electrode for flexible organic solar cells. Nanotechnology, 2016, 27, 505208.	2.6	17
38	Sol-gel processed vanadium oxide as efficient hole injection layer in visible and ultraviolet organic light-emitting diodes. Optics and Laser Technology, 2019, 113, 239-245.	4.6	17
39	Highly thermally-stable 4,4â€²-bis(4â€³-triphenylsilylphenyl)-1,1â€²- binaphthalene as the ultraviolet amplified spontaneous emitter, efficient host and deep-blue emitting material. Dyes and Pigments, 2016, 130, 266-272.	3.7	16
40	Switching the resistive memory behavior from binary to ternary logic<i>via</i>subtle polymer donor and molecular acceptor design. Journal of Materials Chemistry C, 2021, 9, 5643-5651.	5.5	16
41	A MoSe₂ quantum dot modified hole extraction layer enables binary organic solar cells with improved efficiency and stability. Journal of Materials Chemistry A, 2021, 9, 16500-16509.	10.3	16
42	High Coupling Efficiency of Microcavity Organic Light-Emitting Diode with Optical Fiber for as Light Source for Optical Interconnects. Japanese Journal of Applied Physics, 2007, 46, 642-646.	1.5	15
43	A very simple method of constructing efficient inverted top-emitting organic light-emitting diode based on Ag/Al bilayer reflective cathode. Journal of Luminescence, 2012, 132, 1-5.	3.1	15
44	Electroluminescence enhancement in ultraviolet organic lightâ€emitting diode with graded holeâ€injection and â€transporting structure. Physica Status Solidi - Rapid Research Letters, 2015, 9, 353-357.	2.4	15
45	Exciplex formation and electroluminescent absorption in ultraviolet organic light-emitting diodes. Chinese Physics B, 2015, 24, 024222.	1.4	13
46	Extremely low-efficiency roll-off of phosphorescent organic light-emitting diodes at high brightness based on acridine heterocyclic derivatives. Journal of Materials Chemistry C, 2018, 6, 9713-9722.	5.5	13
47	Pseudo-Biological Highly Performance Transparent Electrodes Based on Capillary Force-Welded Hybrid AgNW Network. IEEE Access, 2019, 7, 177944-177953.	4.2	12
48	Long-lasting and efficient inverted pure blue organic light-emitting diodes by inserting an ultrathin aluminum interlayer. Journal of Alloys and Compounds, 2020, 814, 152299.	5.5	12
49	High-performance near-infrared organic phototransistors based on diketopyrrolopyrrole conjugated polymers with partial removal of long branched alkyl side chains. Journal of Materials Chemistry C, 2020, 8, 16915-16922.	5.5	12
50	Blue organic light-emitting diodes with 2-methyl-9,10-bis(naphthalen-2-yl)anthracene as hole transport and emitting layer and the impedance spectroscopy analysis. Current Applied Physics, 2014, 14, 1460-1464.	2.4	11
51	Extremely low colorâ€temperature white organic electroluminescence devices based on the control of exciton recombination zone. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 2400-2405.	1.8	11
52	Improved performance of polymer solar cells by using inorganic, organic, and doped cathode buffer layers. Chinese Physics B, 2016, 25, 038402.	1.4	11
53	Comparison of the Solution and Vacuum-Processed Squaraine:Fullerene Small-Molecule Bulk Heterojunction Solar Cells. Frontiers in Chemistry, 2018, 6, 412.	3.6	11
54	Solution-processed ZnO/MoS2 quantum dots electron extraction layer for high performance inverted organic photovoltaics. Organic Electronics, 2019, 75, 105381.	2.6	11

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55	Efficient Organic Light Emitting Diodes Using Solution-Processed Alkali Metal Carbonate Doped ZnO as Electron Injection Layer. Frontiers in Chemistry, 2019, 7, 226.	3.6	11
56	Efficiently luminescent mononuclear copper iodide complexes with sterically hindered iminephosphine chelating ligands. New Journal of Chemistry, 2021, 45, 8763-8768.	2.8	11
57	Sunlight-like white organic light-emitting diodes with inorganic/organic nanolaminate distributed Bragg reflector (DBR) anode microcavity by using atomic layer deposition. Organic Electronics, 2016, 33, 88-94.	2.6	10
58	Robust Sub-10 nm Pattern of Standing Sugar Cylinders via Rapid â€œMicrowave Cookingâ€ Macromolecules, 2019, 52, 8751-8758.	4.8	10
59	Multifunctional Organic Emitters for Highâ€Performance and Lowâ€Cost Organic Lightâ€Emitting Didoes. Chemical Record, 2019, 19, 1768-1778.	5.8	10
60	Deep-blue organic light-emitting diodes based on multi-tert-butyl modified naphthylene. Journal of Industrial and Engineering Chemistry, 2021, 102, 44-50.	5.8	10
61	Super color purity green organic light-emitting diodes with ZrO2/zircone nanolaminates as a distributed Bragg reflector deposited by atomic layer deposition. Nanotechnology, 2017, 28, 044002.	2.6	9
62	High-Performance White Organic Light-Emitting Diodes Using Distributed Bragg Reflector by Atomic Layer Deposition. Applied Sciences (Switzerland), 2019, 9, 1415.	2.5	9
63	Hybrid nanostructured plasmonic electrodes for flexible organic light-emitting diodes. Nanotechnology, 2020, 31, 375203.	2.6	9
64	High-Efficiency Organic Photovoltaic Cells With an Antimony Quantum Sheet Modified Hole Extraction Layer. IEEE Journal of Photovoltaics, 2021, 11, 111-117.	2.5	9
65	Organic light-emitting diodes using novel embedded al gird transparent electrodes. Physica E: Low-Dimensional Systems and Nanostructures, 2017, 87, 118-122.	2.7	8
66	Solution-processed WO x hole injection layer for efficient fluorescent blue organic light-emitting diode. Current Applied Physics, 2018, 18, 583-589.	2.4	8
67	Decrease of intermolecular interactions for less-doped efficient deep blue monomer light-emitting diodes. Organic Electronics, 2020, 78, 105577.	2.6	8
68	Highâ€Performance Inverted Tandem OLEDs with the Charge Generation Layer based on MoO<i>_x</i> and Ag Doped Planar Heterojunction. Advanced Optical Materials, 2022, 10, .	7.3	8
69	Synthesis of carboline-based host materials for forming copper(I) complexes as emitters: A promising strategy for achieving high-efficiency and low-cost phosphorescent organic light-emitting diodes. Dyes and Pigments, 2018, 149, 387-392.	3.7	7
70	Enhanced photovoltaic performance of inverted polymer solar cells through atomic layer deposited Al₂O₃ passivation of ZnO-nanoparticle buffer layer. Nanotechnology, 2018, 29, 395204.	2.6	7
71	The solution-processed fabrication of perovskite light-emitting diodes for low-cost and commercial applications. Journal of Materials Chemistry C, 2021, 9, 12037-12045.	5.5	7
72	Halide perovskite based light-emitting diodes: a scaling up perspective. Journal of Materials Chemistry C, 2021, 9, 7532-7538.	5.5	7

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73	Efficient and Ultravioletâ€Durable Nonfullerene Organic Solar Cells: From Interfacial Passivation and Microstructural Modification Perspectives. Advanced Materials Interfaces, 2022, 9, 2101894.	3.7	7
74	Efficiency enhancement in DIBSQ:PC71BM organic photovoltaic cells by using Liq-doped Bphen as a cathode buffer layer. Frontiers of Materials Science, 2017, 11, 233-240.	2.2	6
75	Enhanced performance in inverted organic light-emitting diodes using Li ion doped ZnO cathode buffer layer. Molecular Crystals and Liquid Crystals, 2017, 651, 118-125.	0.9	6
76	Lasing and Transport Properties of Poly[(9,9-dioctyl-2,7-divinylenefluorenylene)-alt-co-(2-methoxy-5-(2-ethylhexyloxy)-1,4-phenylene)] (POFP) for the Application of Diode-Pumped Organic Solid Lasers. Nanoscale Research Letters, 2017, 12, 602.	5.7	6
77	Deep blue exciplex tandem OLEDs using n- and p-doped planar heterojunction as a charge generation layer. Journal Physics D: Applied Physics, 2022, 55, 315103.	2.8	6
78	Thin film encapsulation for OLED display using silicon nitride and silicon oxide composite film. , 2011, , .		5
79	Temperature and Exciton Concentration Induced Excimer Emission of 4,4â€²-Bis(4â€²â€²-Triphenylsilyl) Phenyl-1,1â€²-Binaphthalene and Application for Sunlight-Like White Organic Light-Emitting Diodes. Nanoscale Research Letters, 2016, 11, 379.	5.7	5
80	Synthesis, photophysical and electroluminescent properties of iridium(<scp>iii</scp>) complexes with 2-aryl-thiazole and oxadiazol-substituted amide derivative ligands. New Journal of Chemistry, 2019, 43, 4272-4281.	2.8	5
81	Low energy consumption phosphorescent organic light-emitting diodes using phenyl anthracenone derivatives as the host featuring bipolar and thermally activated delayed fluorescence. RSC Advances, 2019, 9, 6881-6889.	3.6	5
82	Use of Hybrid PEDOT:PSS/Metal Sulfide Quantum Dots for a Hole Injection Layer in Highly Efficient Green Phosphorescent Organic Light-Emitting Diodes. Frontiers in Chemistry, 2021, 9, 657557.	3.6	5
83	An antimonene modified hole extraction layer for high efficiency PEDOT:PSS-free nonfullerene organic solar cells. Organic Electronics, 2021, 93, 106163.	2.6	5
84	Influence of thermal annealing-induced molecular aggregation on film properties and photovoltaic performance of bulk heterojunction solar cells based on a squaraine dye. Frontiers of Materials Science, 2018, 12, 139-146.	2.2	4
85	Performance enhancement of small molecular solar cells via luminescent sensitizer 4,5-bis(carbazol-9-yl)-1,2-dicyanobenzene (2CzPN). Journal Physics D: Applied Physics, 2020, 53, 125102.	2.8	4
86	Polarity-dependent solvatochromic properties of thermally activated delayed fluorescence with donorâ€“acceptor constituents under different excitation energies. Journal of Materials Chemistry C, 2021, 9, 13935-13941.	5.5	4
87	Transfer-Printed Nanoscale Poly(3-hexylthiophene-2,5-diyl) Layers for Organic Photodetectors. ACS Applied Nano Materials, 2021, 4, 10725-10734.	5.0	4
88	Enhanced Charge Collection in Nonâ€Fullerene Organic Solar Cells Using Iridium Complex as an Electron Extraction Layer. Advanced Materials Interfaces, 2021, 8, 2100850.	3.7	4
89	Reliability of organic light-emitting diodes in low-temperature environment*. Chinese Physics B, 2020, 29, 128503.	1.4	4
90	Enhancing the Light Outputâ€Coupling of Inverted Topâ€Emitting Organic Lightâ€Emitting Diodes by Using the Localized Surface Plasmon Resonance of Ag Nanoparticles. Advanced Materials Interfaces, 2022, 9, .	3.7	4

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91	The Feasibility of Using Magnetron Sputtered MoO x as Effective Hole Injection Layer in Organic Light-Emitting Diode. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1800166.	1.8	3
92	Thermally stable inverted organic light-emitting diodes using Ag-doped 4,7-diphenyl-1,10-phenanthroline as an electron injection layer. Organic Electronics, 2021, 99, 106307.	2.6	3
93	Highly thermal-stable organic light-emitting diodes with a bulk heterojunction interfacial modification layer. Japanese Journal of Applied Physics, 2022, 61, 070910.	1.5	3
94	High color rendering index and chromaticâ€stable white organic lightâ€emitting diodes with singleâ€host double emissive layer structure. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 958-962.	1.8	2
95	Efficient and chromaticity-stable flexible white organic light-emitting devices based on organicâ€“inorganic hybrid color-conversion electrodes. RSC Advances, 2019, 9, 22577-22585.	3.6	2
96	Improved green thermal activated delayed fluorescence OLEDs based on thermally evaporated distributed Bragg reflector (DBR) of MgF₂/ZnS. Nanotechnology, 2021, 32, 455203.	2.6	2
97	Low roll-off efficiency and chromatic-stable white organic light-emitting diodes based on excimer emission. , 2011, , .		1
98	Ultrahigh-luminance organic light-emitting diodes using LiF/MgAg as cathode for the application of both surface emission. Molecular Crystals and Liquid Crystals, 2017, 651, 142-147.	0.9	1
99	Investigation of post-thermal annealing-induced enhancement in photovoltaic performance for squaraine-based organic solar cells. Frontiers of Materials Science, 2020, 14, 81-88.	2.2	1
100	Improved stability of blue TADF organic electroluminescent diodes via OXD-7 based mixed host. Frontiers of Optoelectronics, 2021, 14, 491-498.	3.7	1
101	Toward Improved Device Efficiency and Stability of Organic Lightâ€Emitting Diodes via External Pressure Treatment. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2100120.	1.8	1
102	Biomimetic Superhydrophobic Films with an Extremely Low Roll-Off Angle Modified by F16CuPc via Two-Step Fabrication. Nanomaterials, 2022, 12, 953.	4.1	1
103	Toward Improved Device Efficiency and Stability of Organic Lightâ€Emitting Diodes via External Pressure Treatment. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2170042.	1.8	0
104	Steerable fabrication of MoS2 nanoarray through one-step vacuum thermal evaporation technology. Journal of Materials Science, 2021, 56, 16558-16569.	3.7	0
105	Low Energy-Consumption Inverted Orange Organic Light-Emitting Diodes with Reduced Efficiency Roll-Off. Materials Science Forum, 0, 976, 104-109.	0.3	0