Baiquan Liu

List of Publications by Year
in descending order

66 papers	2,630 citations	136740 32 h-index	189595 50 g-index
67 all docs	67 docs citations	67 times ranked	2537 citing authors

#	Article	IF	Citations
1	On the Current Saturation of Vertical Transistors With Conductive Network Electrodes. IEEE Transactions on Electron Devices, 2022, 69, 248-253.	1.6	3
2	Strategies for Applications of Oxide-Based Thin Film Transistors. Electronics (Switzerland), 2022, 11, 960.	1.8	14
3	Deepâ€Redâ€Emitting Colloidal Quantum Well Lightâ€Emitting Diodes Enabled through a Complex Design of Core/Crown/Double Shell Heterostructure. Small, 2022, 18, e2106115.	5.2	15
4	Management of electroluminescence from silver-doped colloidal quantum well light-emitting diodes. Cell Reports Physical Science, 2022, 3, 100860.	2.8	10
5	Understanding the Structure and Energy Transfer Process of Undoped Ultrathin Emitting Nanolayers Within Interface Exciplexes. Frontiers in Chemistry, 2022, 10, 887900.	1.8	4
6	High-Performance Deep Red Colloidal Quantum Well Light-Emitting Diodes Enabled by the Understanding of Charge Dynamics. ACS Nano, 2022, 16, 10840-10851.	7.3	21
7	Advances in Perovskite Light-Emitting Diodes Possessing Improved Lifetime. Nanomaterials, 2021, 11, 103.	1.9	15
8	Revealing Charge Transport and Device Operations of Organic Ambipolar Transistors and Inverters by Fourâ€Probe Measurement. Advanced Electronic Materials, 2021, 7, 2001134.	2.6	4
9	Blue Molecular Emitter-Free and Doping-Free White Organic Light-Emitting Diodes With High Color Rendering. IEEE Electron Device Letters, 2021, 42, 387-390.	2.2	22
10	Editorial: Advanced Nanomaterials for Light-Emitting Diodes and Solar Cells. Frontiers in Chemistry, 2021, 9, 741760.	1.8	1
11	51.2: Invited Paper: Approaches to achieve highâ€performance colloidal quantum wells lightâ€emitting diodes. Digest of Technical Papers SID International Symposium, 2021, 52, 614-614.	0.1	0
12	Strategies to enhance photocatalytic activity of graphite carbon nitride-based photocatalysts. Materials and Design, 2021, 210, 110040.	3.3	51
13	Record High External Quantum Efficiency of 19.2% Achieved in Lightâ€Emitting Diodes of Colloidal Quantum Wells Enabled by Hotâ€Injection Shell Growth. Advanced Materials, 2020, 32, e1905824.	11.1	95
14	Spectrally Wide-Range-Tunable, Efficient, and Bright Colloidal Light-Emitting Diodes of Quasi-2D Nanoplatelets Enabled by Engineered Alloyed Heterostructures. Chemistry of Materials, 2020, 32, 7874-7883.	3.2	29
15	Emergence of Impurity-Doped Nanocrystal Light-Emitting Diodes. Nanomaterials, 2020, 10, 1226.	1.9	10
16	Lightâ€Emitting Diodes with Cuâ€Doped Colloidal Quantum Wells: From Ultrapure Green, Tunable Dualâ€Emission to White Light. Small, 2019, 15, 1901983.	5.2	45
17	Device Engineering for All-Inorganic Perovskite Light-Emitting Diodes. Nanomaterials, 2019, 9, 1007.	1.9	31
18	Electrically control amplified spontaneous emission in colloidal quantum dots. Science Advances, 2019, 5, eaav3140.	4.7	43

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19	An efficient multi-functional material based on polyether-substituted indolocarbazole for perovskite solar cells and solution-processed non-doped OLEDs. Journal of Materials Chemistry A, 2019, 7, 1539-1547.	5.2	49
20	Carbon Dots-Decorated Bi2WO6 in an Inverse Opal Film as a Photoanode for Photoelectrochemical Solar Energy Conversion under Visible-Light Irradiation. Materials, 2019, 12, 1713.	1.3	10
21	Emergence of Flexible White Organic Light-Emitting Diodes. Polymers, 2019, 11, 384.	2.0	42
22	Research Progress on Flexible Oxide-Based Thin Film Transistors. Applied Sciences (Switzerland), 2019, 9, 773.	1.3	44
23	Recent Developments in Tandem White Organic Light-Emitting Diodes. Molecules, 2019, 24, 151.	1.7	22
24	Dopingâ€Free White Organic Lightâ€Emitting Diodes. Chemical Record, 2019, 19, 1596-1610.	2.9	11
25	Low-threshold lasing from colloidal CdSe/CdSeTe core/alloyed-crown type-II heteronanoplatelets. Nanoscale, 2018, 10, 9466-9475.	2.8	43
26	Nanocrystal light-emitting diodes based on type II nanoplatelets. Nano Energy, 2018, 47, 115-122.	8.2	62
27	Highly Efficient Green Lightâ€Emitting Diodes from Allâ€Inorganic Perovskite Nanocrystals Enabled by a New Electron Transport Layer. Advanced Optical Materials, 2018, 6, 1800220.	3.6	74
28	Solvent-Assisted Surface Engineering for High-Performance All-Inorganic Perovskite Nanocrystal Light-Emitting Diodes. ACS Applied Materials & Interfaces, 2018, 10, 19828-19835.	4.0	45
29	High-Efficiency and High-Luminance Three-Color White Organic Light-Emitting Diodes with Low Efficiency Roll-Off. ECS Journal of Solid State Science and Technology, 2018, 7, R99-R103.	0.9	9
30	Efficient Bipolar Blue AIEgens for Highâ€Performance Nondoped Blue OLEDs and Hybrid White OLEDs. Advanced Functional Materials, 2018, 28, 1803369.	7.8	130
31	Emergence of White Organic Light-Emitting Diodes Based on Thermally Activated Delayed Fluorescence. Applied Sciences (Switzerland), 2018, 8, 299.	1.3	34
32	Room-Temperature Fabricated Thin-Film Transistors Based on Compounds with Lanthanum and Main Family Element Boron. Molecules, 2018, 23, 1373.	1.7	15
33	Recent Advances of Exciplex-Based White Organic Light-Emitting Diodes. Applied Sciences (Switzerland), 2018, 8, 1449.	1.3	37
34	Emergence of Nanoplatelet Light-Emitting Diodes. Materials, 2018, 11, 1376.	1.3	37
35	Extremely Simplified, High-Performance, and Doping-Free White Organic Light-Emitting Diodes Based on a Single Thermally Activated Delayed Fluorescent Emitter. ACS Energy Letters, 2018, 3, 1531-1538.	8.8	70
36	Doping-free white organic light-emitting diodes without blue molecular emitter: An unexplored approach to achieve high performance via exciplex emission. Applied Physics Letters, 2017, 110, .	1.5	39

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37	Manipulation of exciton distribution for high-performance fluorescent/phosphorescent hybrid white organic light-emitting diodes. Journal of Materials Chemistry C, 2017, 5, 7668-7683.	2.7	95
38	High-Performance Blue Molecular Emitter-Free and Doping-Free Hybrid White Organic Light-Emitting Diodes: an Alternative Concept To Manipulate Charges and Excitons Based on Exciplex and Electroplex Emission. ACS Photonics, 2017, 4, 1566-1575.	3.2	73
39	Regulating Charge and Exciton Distribution in High-Performance Hybrid White Organic Light-Emitting Diodes with n-Type Interlayer Switch. Nano-Micro Letters, 2017, 9, 37.	14.4	37
40	Doping-free tandem white organic light-emitting diodes. Science Bulletin, 2017, 62, 1193-1200.	4.3	37
41	High-Performance Doping-Free Hybrid White OLEDs Based on Blue Aggregation-Induced Emission Luminogens. ACS Applied Materials & Interfaces, 2017, 9, 34162-34171.	4.0	66
42	High-performance hybrid white organic light-emitting diodes exploiting blue thermally activated delayed fluorescent dyes. Dyes and Pigments, 2017, 147, 83-89.	2.0	32
43	Strategies to Achieve High-Performance White Organic Light-Emitting Diodes. Materials, 2017, 10, 1378.	1.3	43
44	Manipulation of Charge and Exciton Distribution Based on Blue Aggregationâ€Induced Emission Fluorophors: A Novel Concept to Achieve Highâ€Performance Hybrid White Organic Lightâ€Emitting Diodes. Advanced Functional Materials, 2016, 26, 776-783.	7.8	194
45	High-performance doping-free hybrid white organic light-emitting diodes: The exploitation of ultrathin emitting nanolayers (<1 nm). Nano Energy, 2016, 26, 26-36.	8.2	88
46	Coffee-Ring-Free Quantum Dot Thin Film Using Inkjet Printing from a Mixed-Solvent System on Modified ZnO Transport Layer for Light-Emitting Devices. ACS Applied Materials & Interfaces, 2016, 8, 26162-26168.	4.0	219
47	Improved performance of inverted quantum dots light emitting devices by introducing double hole transport layers. Organic Electronics, 2016, 31, 82-89.	1.4	59
48	Efficient single-emitting layer hybrid white organic light-emitting diodes with low efficiency roll-off, stable color and extremely high luminance. Journal of Industrial and Engineering Chemistry, 2015, 30, 85-91.	2.9	20
49	Harnessing charge and exciton distribution towards extremely high performance: the critical role of guests in single-emitting-layer white OLEDs. Materials Horizons, 2015, 2, 536-544.	6.4	48
50	A hostâ€“guest system comprising high guest concentration to achieve simplified and high-performance hybrid white organic light-emitting diodes. Journal of Materials Chemistry C, 2015, 3, 6359-6366.	2.7	38
51	High-performance hybrid white organic light-emitting diodes employing p-type interlayers. Journal of Industrial and Engineering Chemistry, 2015, 27, 240-244.	2.9	19
52	An ideal host-guest system to accomplish high-performance greenish yellow and hybrid white organic light-emitting diodes. Organic Electronics, 2015, 27, 29-34.	1.4	28
53	Regulating charges and excitons in simplified hybrid white organic light-emitting diodes: The key role of concentration in single dopant hostâ€“guest systems. Organic Electronics, 2014, 15, 2616-2623.	1.4	32
54	Simplified hybrid white organic light-emitting diodes with efficiency/efficiency roll-off/color rendering index/color-stability trade-off. Physica Status Solidi - Rapid Research Letters, 2014, 8, 719-723.	1.2	14

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55	Investigation and optimization of each organic layer: A simple but effective approach towards achieving high-efficiency hybrid white organic light-emitting diodes. Organic Electronics, 2014, 15, 926-936.	1.4	36
56	Very-High Color Rendering Index Hybrid White Organic Light-Emitting Diodes with Double Emitting Nanolayers. Nano-Micro Letters, 2014, 6, 335-339.	14.4	34
57	The effect of spacer in hybrid white organic light emitting diodes. Science Bulletin, 2014, 59, 3090-3097.	1.7	14
58	Extremely stable-color flexible white organic light-emitting diodes with efficiency exceeding 100 lm W^{â˜'1}. Journal of Materials Chemistry C, 2014, 2, 9836-9841.	2.7	48
59	Simultaneous achievement of low efficiency roll-off and stable color in highly efficient single-emitting-layer phosphorescent white organic light-emitting diodes. Journal of Materials Chemistry C, 2014, 2, 5870-5877.	2.7	23
60	Hybrid white organic light emitting diodes with low efficiency roll-off, stable color and extreme brightness. Journal of Luminescence, 2014, 151, 161-164.	1.5	17
61	Efficient hybrid white organic light-emitting diodes with extremely long lifetime: the effect of n-type interlayer. Scientific Reports, 2014, 4, 7198.	1.6	42
62	Investigation on spacers and structures: A simple but effective approach toward high-performance hybrid white organic light emitting diodes. Synthetic Metals, 2013, 184, 5-9.	2.1	16
63	Highly efficient red phosphorescent organic light-emitting diodes based on solution processed emissive layer. Journal of Luminescence, 2013, 142, 35-39.	1.5	22
64	Comprehensive Study on the Electron Transport Layer in Blue Flourescent Organic Light-Emitting Diodes. ECS Journal of Solid State Science and Technology, 2013, 2, R258-R261.	0.9	24
65	High-Performance Hybrid White Organic Light-Emitting Diodes Comprising Ultrathin Blue and Orange Emissive Layers. Applied Physics Express, 2013, 6, 122101.	1.1	22
66	White Organic Light-Emitting Diodes with Thermally Activated Delayed Fluorescence Emitters. , 0, , .		1