Zuliang Du

List of Publications by Year
in descending order

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Version: 2024-02-01

49 papers	2,487 citations	304368 22 h-index	197535 49 g-index
49 all docs	49 docs citations	49 times ranked	2295 citing authors

#	Article	IF	Citations
1	Visible quantum dot light-emitting diodes with simultaneous high brightness and efficiency. Nature Photonics, 2019, 13, 192-197.	15.6	596
2	The self-powered CO2 gas sensor based on gas discharge induced by triboelectric nanogenerator. Nano Energy, 2018, 53, 898-905.	8.2	146
3	Managing and maximizing the output power of a triboelectric nanogenerator by controlled tipâ€“electrode air-discharging and application for UV sensing. Nano Energy, 2018, 44, 208-216.	8.2	145
4	Highâ€Efficiency Green InP Quantum Dotâ€Based Electroluminescent Device Comprising Thickâ€Shell Quantum Dots. Advanced Optical Materials, 2019, 7, 1801602.	3.6	137
5	Super color purity green quantum dot light-emitting diodes fabricated by using CdSe/CdS nanoplatelets. Nanoscale, 2016, 8, 12182-12188.	2.8	111
6	High-efficiency, deep blue ZnCdS/Cd_xZn_{1â^'x}S/ZnS quantum-dot-light-emitting devices with an EQE exceeding 18%. Nanoscale, 2018, 10, 5650-5657.	2.8	103
7	Quantumâ€Dot Lightâ€Emitting Diodes for Outdoor Displays with High Stability at High Brightness. Advanced Optical Materials, 2020, 8, 1901145.	3.6	94
8	Bandgap tunable Zn_{1â^'x}Mg_xO thin films as electron transport layers for high performance quantum dot light-emitting diodes. Journal of Materials Chemistry C, 2017, 5, 4724-4730.	2.7	88
9	High-Brightness Blue InP Quantum Dot-Based Electroluminescent Devices: The Role of Shell Thickness. Journal of Physical Chemistry Letters, 2020, 11, 960-967.	2.1	87
10	Measuring the actual voltage of a triboelectric nanogenerator using the non-grounded method. Nano Energy, 2020, 77, 105108.	8.2	80
11	Tuning oxygen vacancies and improving UV sensing of ZnO nanowire by micro-plasma powered by a triboelectric nanogenerator. Nano Energy, 2020, 67, 104210.	8.2	75
12	Bulk-like ZnSe Quantum Dots Enabling Efficient Ultranarrow Blue Light-Emitting Diodes. Nano Letters, 2021, 21, 7252-7260.	4.5	69
13	Hybrid energy harvester with bi-functional nano-wrinkled anti-reflective PDMS film for enhancing energies conversion from sunlight and raindrops. Nano Energy, 2019, 66, 104188.	8.2	64
14	The high-speed ultraviolet photodetector of ZnO nanowire Schottky barrier based on the triboelectric-nanogenerator-powered surface-ionic-gate. Nano Energy, 2019, 60, 680-688.	8.2	62
15	Solution-processed quantum dot light-emitting diodes based on NiO nanocrystals hole injection layer. Organic Electronics, 2017, 44, 189-197.	1.4	48
16	The novel transistor and photodetector of monolayer MoS2 based on surface-ionic-gate modulation powered by a triboelectric nanogenerator. Nano Energy, 2019, 62, 38-45.	8.2	46
17	The self-powered artificial synapse mechanotactile sensing system by integrating triboelectric plasma and gas-ionic-gated graphene transistor. Nano Energy, 2022, 91, 106660.	8.2	41
18	Enhanced light out-coupling efficiency of quantum dot light emitting diodes by nanoimprint lithography. Nanoscale, 2018, 10, 11651-11656.	2.8	40

#	Article	IF	Citations
19	Research progress and challenges of blue light-emitting diodes based on IIâ€“VI semiconductor quantum dots. Journal of Materials Chemistry C, 2020, 8, 10160-10173.	2.7	37
20	The unsaturated photocurrent controlled by two-dimensional barrier geometry of a single ZnO nanowire Schottky photodiode. Applied Physics Letters, 2008, 93, .	1.5	36
21	Meter-scale fabrication of water-driven triboelectric nanogenerator based on in-situ grown layered double hydroxides through a bottom-up approach. Nano Energy, 2020, 71, 104646.	8.2	32
22	Cd(OH)2@ZnO nanowires thin-film transistor and UV photodetector with a floating ionic gate tuned by a triboelectric nanogenerator. Nano Energy, 2020, 73, 104808.	8.2	31
23	High Performance InPâ€based Quantum Dot Lightâ€Emitting Diodes via the Suppression of Fieldâ€Enhanced Electron Delocalization. Advanced Functional Materials, 2022, 32, .	7.8	23
24	Simple Synthesis of CuInS2/ZnS Core/Shell Quantum Dots for White Light-Emitting Diodes. Frontiers in Chemistry, 2020, 8, 669.	1.8	22
25	Patterned honeycomb-like ZnO cavities for Cu(In,Ga)Se 2 thin film solar cells with omnidirectionally enhanced light harvesting. Solar Energy Materials and Solar Cells, 2017, 170, 211-218.	3.0	20
26	Triboelectric plasma decomposition of CO2 at room temperature driven by mechanical energy. Nano Energy, 2021, 88, 106287.	8.2	19
27	Alleviating Electron Over-Injection for Efficient Cadmium-Free Quantum Dot Light-Emitting Diodes toward Deep-Blue Emission. ACS Photonics, 2022, 9, 1400-1408.	3.2	18
28	Simultaneous Improvement of Efficiency and Lifetime of Quantum Dot Light-Emitting Diodes with a Bilayer Hole Injection Layer Consisting of PEDOT:PSS and Solution-Processed WO₃. ACS Applied Materials & Interfaces, 2018, 10, 24232-24241.	4.0	17
29	A water collection system with ultra-high harvest rate and ultra-low energy consumption by integrating triboelectric plasma. Nano Energy, 2022, 96, 107081.	8.2	15
30	In Situ Electrochemical Treatment Evoked Superior Grain Growth for Green Electrodeposition-Processed Flexible CZTSe Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 31852-31860.	4.0	14
31	Quantum dot light-emitting diodes with high efficiency at high brightness via shell engineering. Optics Express, 2021, 29, 12169.	1.7	13
32	Size Engineering of Trap Effects in Oxidized and Hydroxylated ZnSe Quantum Dots. Nano Letters, 2022, 22, 3604-3611.	4.5	13
33	Low-cost Cu2ZnSnS4 thin films prepared from single step electrodeposited Cu/Zn/Sn alloy precursor films. Materials Chemistry and Physics, 2015, 163, 24-29.	2.0	12
34	Asymmetric Wettability Interfaces Induced a Large-Area Quantum Dot Microstructure toward High-Resolution Quantum Dot Light-Emitting Diodes. ACS Applied Materials & Interfaces, 2019, 11, 28520-28526.	4.0	12
35	Improved Efficiency of All-Inorganic Quantum-Dot Light-Emitting Diodes via Interface Engineering. Frontiers in Chemistry, 2020, 8, 265.	1.8	12
36	High-efficiency and stable quantum dot light-emitting diodes with staircase V2O5/PEDOT:PSS hole injection layer interface barrier. Organic Electronics, 2020, 78, 105589.	1.4	10

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37	Highly Efficient Near-Infrared Light-Emitting Diodes Based on Chloride Treated CdTe/CdSe Type-II Quantum Dots. Frontiers in Chemistry, 2020, 8, 266.	1.8	10
38	Back Shallow Ge Gradient Enhanced Carrier Separation for CZTSe Solar Cells through a Coselenization Process. ACS Applied Materials & Interfaces, 2021, 13, 56302-56308.	4.0	10
39	Cuâ€Promoted Reversed Elemental Distribution for Electrochemically Intermetallic Diffusion Improved Cu₂ZnSnSe₄ Photovoltaic Device Beyond 9% Efficiency. Solar Rrl, 2019, 3, 1900165.	3.1	9
40	Enhanced performances of quantum dot light-emitting diodes with PFN-adding emitting layer. Organic Electronics, 2019, 66, 110-115.	1.4	9
41	Fabrication of CZTSSe absorbers by optimized selenization of one-step co-electrodeposited CZTS precursors. Journal of Materials Science, 2017, 52, 11014-11024.	1.7	7
42	Quantum Dot Modified One-Dimensional C₆₀ Nanorod in Situ Preparation and Photoinduced Charge Transfer. Journal of Physical Chemistry C, 2017, 121, 23676-23682.	1.5	7
43	AgNWs/AZO composite electrode for transparent inverted ZnCdSeS/ZnS quantum dot light-emitting diodes. Nanotechnology, 2020, 31, 055201.	1.3	7
44	Quantum dot light-emitting diodes with an Al-doped ZnO anode. Nanotechnology, 2020, 31, 255203.	1.3	7
45	High performance blue quantum light-emitting diodes by attaching diffraction wrinkle patterns. Nanoscale, 2021, 13, 8498-8505.	2.8	7
46	Triboelectric Plasma-Catalytic CO Oxidation of MnO2 Nanostructures Driven by Mechanical Energy at Room Temperature. ACS Applied Nano Materials, 2022, 5, 1426-1434.	2.4	7
47	The Regulation of O2 Spin State and Direct Oxidation of CO at Room Temperature Using Triboelectric Plasma by Harvesting Mechanical Energy. Nanomaterials, 2021, 11, 3408.	1.9	7
48	Facile Sb2Se3 and Se co-selenization process improves the performance of Cu2ZnSnSe4 solar cells. Journal of Power Sources, 2021, 491, 229581.	4.0	6
49	Synchronous Outcoupling of Triâ€Colored Light for Ultraâ€Bright White Quantum Dot Lightâ€Emitting Diodes by Using External Wrinkle Pattern. Advanced Optical Materials, 2022, 10, .	3.6	6