Donglei Zhou

List of Publications by Year
in descending order

67 papers	3,799 citations	159358 30 h-index	128067 60 g-index
67 all docs	67 docs citations	67 times ranked	3886 citing authors

#	Article	IF	Citations
1	Doping Lanthanide into Perovskite Nanocrystals: Highly Improved and Expanded Optical Properties. Nano Letters, 2017, 17, 8005-8011.	4.5	672
2	Cerium and Ytterbium Codoped Halide Perovskite Quantum Dots: A Novel and Efficient Downconverter for Improving the Performance of Silicon Solar Cells. Advanced Materials, 2017, 29, 1704149.	11.1	389
3	Local Field Modulation Induced Threeâ€Order Upconversion Enhancement: Combining Surface Plasmon Effect and Photonic Crystal Effect. Advanced Materials, 2016, 28, 2518-2525.	11.1	240
4	Observation of Considerable Upconversion Enhancement Induced by Cu_{2â€“x}S Plasmon Nanoparticles. ACS Nano, 2016, 10, 5169-5179.	7.3	149
5	Large Upconversion Enhancement in the â€œIslandsâ€•Auâ€“Ag Alloy/NaYF₄: Yb³⁺, Tm³⁺/Er³⁺ Composite Films, and Fingerprint Identification. Advanced Functional Materials, 2015, 25, 5462-5471.	7.8	135
6	Samarium-Doped Metal Halide Perovskite Nanocrystals for Single-Component Electroluminescent White Light-Emitting Diodes. ACS Energy Letters, 2020, 5, 2131-2139.	8.8	124
7	Europium-Doped Lead-Free Cs₃Bi₂Br₉ Perovskite Quantum Dots and Ultrasensitive Cu²⁺ Detection. ACS Sustainable Chemistry and Engineering, 2019, 7, 8397-8404.	3.2	114
8	Plasmonic Photonic Crystals Induced Twoâ€Order Fluorescence Enhancement of Blue Perovskite Nanocrystals and Its Application for Highâ€Performance Flexible Ultraviolet Photodetectors. Advanced Functional Materials, 2018, 28, 1804429.	7.8	106
9	Ti3C2 MXene quantum dots/TiO2 inverse opal heterojunction electrode platform for superior photoelectrochemical biosensing. Sensors and Actuators B: Chemical, 2019, 289, 131-137.	4.0	101
10	Impact of Host Composition, Codoping, or Tridoping on Quantum-Cutting Emission of Ytterbium in Halide Perovskite Quantum Dots and Solar Cell Applications. Nano Letters, 2019, 19, 6904-6913.	4.5	100
11	Dual Interfacial Modification Engineering with 2D MXene Quantum Dots and Copper Sulphide Nanocrystals Enabled Highâ€Performance Perovskite Solar Cells. Advanced Functional Materials, 2020, 30, 2003295.	7.8	100
12	Synergistic Upconversion Enhancement Induced by Multiple Physical Effects and an Angle-Dependent Anticounterfeit Application. Chemistry of Materials, 2017, 29, 6799-6809.	3.2	81
13	Impurity Ions Codoped Cesium Lead Halide Perovskite Nanocrystals with Bright White Light Emission toward Ultravioletâ€“White Light-Emitting Diode. ACS Applied Materials & Interfaces, 2018, 10, 39040-39048.	4.0	78
14	Extremely efficient quantum-cutting Cr3+, Ce3+, Yb3+ tridoped perovskite quantum dots for highly enhancing the ultraviolet response of Silicon photodetectors with external quantum efficiency exceeding 70%. Nano Energy, 2020, 78, 105278.	8.2	73
15	Plasmon-Enhanced Upconversion Luminescence on Vertically Aligned Gold Nanorod Monolayer Supercrystals. ACS Applied Materials & Interfaces, 2016, 8, 11667-11674.	4.0	71
16	Semiconductor plasmon enhanced monolayer upconversion nanoparticles for high performance narrowband near-infrared photodetection. Nano Energy, 2019, 61, 211-220.	8.2	71
17	Enhanced Photoluminescence and Photoresponsiveness of Eu³⁺ Ionsâ€Doped CsPbCl₃ Perovskite Quantum Dots under High Pressure. Advanced Functional Materials, 2021, 31, 2100930.	7.8	71
18	Semiconductor plasmon-sensitized broadband upconversion and its enhancement effect on the power conversion efficiency of perovskite solar cells. Journal of Materials Chemistry A, 2017, 5, 16559-16567.	5.2	70

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19	Dye Sensitization and Local Surface Plasmon Resonance-Enhanced Upconversion Luminescence for Efficient Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 24737-24746.	4.0	65
20	A novel approach for designing efficient broadband photodetectors expanding from deep ultraviolet to near infrared. Light: Science and Applications, 2022, 11, 91.	7.7	61
21	Semiconductor Plasmon Induced Up-Conversion Enhancement in mCu_{2â€“x}S@SiO₂@Y₂O₃:Yb³⁺/Er³⁺ Coreâ€“Shell Nanocomposites. ACS Applied Materials & Interfaces, 2017, 9, 35226-35233.	8.3	59
22	Synergistic Effects of Multifunctional Lanthanides Doped CsPbBrCl₂ Quantum Dots for Efficient and Stable MAPbI₃ Perovskite Solar Cells. Advanced Functional Materials, 2022, 32, .	7.8	53
23	Learning From Plants: Lycopene Additive Passivation toward Efficient and â€œFreshâ€•Perovskite Solar Cells with Oxygen and Ultraviolet Resistance. Advanced Energy Materials, 2022, 12, .	10.2	50
24	Paper-based upconversion fluorescence resonance energy transfer biosensor for sensitive detection of multiple cancer biomarkers. Scientific Reports, 2016, 6, 23406.	1.6	45
25	320-fold luminescence enhancement of [Ru(dpp)3]Cl2 dispersed on PMMA opal photonic crystals and highly improved oxygen sensing performance. Light: Science and Applications, 2014, 3, e209-e209.	7.7	42
26	Upconversion ladder enabled super-sensitive narrowband near-infrared photodetectors based on rare earth doped florine perovskite nanocrystals. Nano Energy, 2020, 76, 105103.	8.2	40
27	Highly sensitive and selective detection of mercury ions based on up-conversion FRET from NaYF₄:Yb³⁺/Er³⁺ nanophosphors to CdTe quantum dots. RSC Advances, 2015, 5, 99099-99106.	1.7	36
28	Fabrication of Au-Ag nanocage@NaYF4@NaYF4:Yb,Er Core-Shell Hybrid and its Tunable Upconversion Enhancement. Scientific Reports, 2017, 7, 41079.	1.6	33
29	Remarkable Enhancement of Upconversion Luminescence on Cap-Ag/PMMA Ordered Platform and Trademark Anticounterfeiting. ACS Applied Materials & Interfaces, 2017, 9, 37128-37135.	4.0	33
30	Bright red YCl3-promoted CsPbI3 perovskite nanorods towards efficient light-emitting diode. Nano Energy, 2021, 81, 105615.	8.2	33
31	Size-dependent downconversion near-infrared emission of NaYF4:Yb3+,Er3+ nanoparticles. Journal of Materials Chemistry C, 2017, 5, 2451-2458.	2.7	31
32	Plasmonic Cu_{1.8}S nanocrystals as saturable absorbers for passively Q-switched erbium-doped fiber lasers. Journal of Materials Chemistry C, 2017, 5, 4034-4039.	2.7	31
33	Broadband Ultraviolet Photodetectors Based on Cerium Doped Lead-Free Cs₃MnBr₅ Metal Halide Nanocrystals. ACS Sustainable Chemistry and Engineering, 2021, 9, 4980-4987.	3.2	29
34	Rare earth doping in perovskite luminescent nanocrystals and photoelectric devices. Nano Select, 2022, 3, 531-554.	1.9	29
35	Remarkable enhancement of upconversion luminescence on 2-D anodic aluminum oxide photonic crystals. Nanoscale, 2016, 8, 10004-10009.	2.8	28
36	Self-powered UV photodetectors based on CsPbCl3 nanowires enabled by the synergistic effect of acetate and lanthanide ion passivation. Chemical Engineering Journal, 2021, 426, 131310.	6.6	28

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37	Efficient chromium ion passivated CsPbCl₃:Mn perovskite quantum dots for photon energy conversion in perovskite solar cells. Journal of Materials Chemistry C, 2020, 8, 12323-12329.	2.7	23
38	In situ preparation of two-dimensional ytterbium ions doped all-inorganic perovskite nanosheets for high-performance visual dual-bands photodetectors. Nano Energy, 2022, 93, 106815.	8.2	22
39	Dual Modification Engineering via Lanthanideâ€Based Halide Quantum Dots and Black Phosphorus Enabled Efficient Perovskite Solar Cells with High Openâ€Voltage of 1.235ÂV. Advanced Functional Materials, 2022, 32, .	7.8	22
40	Toward Broad Spectral Response Inverted Perovskite Solar Cells: Insulating Quantumâ€Cutting Perovskite Nanophosphors and Multifunctional Ternary Organic Bulkâ€Heterojunction. Advanced Energy Materials, 2022, 12, .	10.2	21
41	Modulation of upconversion white light emission in PMMA/NaYF_4:Yb^3+, Er^3+, Tm^3+ composite photonic crystals. Optics Letters, 2014, 39, 4619.	1.7	18
42	Label-free photoelectrochemical biosensor for alpha-fetoprotein detection based on Au/CsxWO3 heterogeneous films. Talanta, 2021, 225, 122074.	2.9	17
43	Highly modified spontaneous emission in NaY(MoO₄)₂:Yb³⁺/Er³⁺ inverse opal photonic crystals. RSC Advances, 2015, 5, 104862-104869.	1.7	16
44	Plasmon multiwavelength-sensitized luminescence enhancement of highly transparent Ag/YVO4:Eu3+/PMMA film. Journal of Luminescence, 2018, 200, 158-163.	1.5	14
45	Highly efficient ligand-modified manganese ion doped CsPbCl3 perovskite quantum dots for photon energy conversion in silicon solar cells. Nanoscale, 2020, 12, 18621-18628.	2.8	14
46	Near-infrared-pumped photon upconversion in CsPbI3 and CaF2:Yb3+/Ho3+ nanocomposites for bio-imaging application. Materials Today Physics, 2021, 21, 100495.	2.9	13
47	Ni²⁺ and Pr³⁺ Co-doped CsPbCl₃ perovskite quantum dots with efficient infrared emission at 1300 nm. Nanoscale, 2021, 13, 16598-16607.	2.8	13
48	Ceriumâ€Doped Perovskite Nanocrystals for Extremely Highâ€Performance Deepâ€Ultraviolet Photoelectric Detection. Advanced Optical Materials, 2021, 9, 2100423.	3.6	12
49	ZnWO₄/ZnWO₄â€‰:â€‰Eu³⁺ inverse opal photonic crystal scintillator: efficient phosphors in radiation detection. RSC Advances, 2015, 5, 82748-82755.	1.7	11
50	Self-organized helical superstructure of photonic cellulose loaded with upconversion nanoparticles showing modulated luminescence. RSC Advances, 2016, 6, 76231-76236.	1.7	11
51	Simultaneous bottom-up double-layer synergistic optimization by multifunctional fused-ring acceptor with electron-deficient core for stable planar perovskite solar cells with approaching 24% efficiency. Nano Energy, 2022, 99, 107368.	8.2	10
52	Enhanced upconversion luminescence on the plasmonic architecture of Auâ€“Ag nanocages. RSC Advances, 2016, 6, 86297-86300.	1.7	9
53	Efficient Radiative Enhancement in Perovskite Lightâ€Emitting Devices through Involving a Novel Sandwich Localized Surface Plasmon Structure. Small Methods, 2022, 6, e2200163.	4.6	9
54	Introducing ytterbium acetate to luminescent CsPbCl₃ nanocrystals for enhanced sensitivity of Cu²⁺ detection. Inorganic Chemistry Frontiers, 2021, 9, 44-50.	3.0	8

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55	Mechanistic studies of CsPbBr₃ superstructure formation. Journal of Materials Chemistry C, 2021, 9, 14699-14708.	2.7	7
56	Flexible double narrowband near-infrared photodetector based on PMMA/coreâ€“shell upconversion nanoparticle composites. Journal of Rare Earths, 2022, 40, 211-217.	2.5	7
57	Synergistic Regulation Effect of Nitrate and Calcium Ions for Highly Luminescent and Robust Î±â€CsPbI₃ Perovskite. Small, 2022, 18, e2106147.	5.2	7
58	Narrowband Near-Infrared Photodetectors Based on Perovskite Waveguide Devices. Journal of Physical Chemistry Letters, 2022, 13, 6057-6063.	2.1	7
59	Multi-wavelength pumped upconversion enhancement induced by Cu_{2-x}S plasmonic nanoparticles in NaYF₄@Cu_{2-x}S coreâ€“shell structure. Optics Letters, 2021, 46, 5.	1.7	6
60	Highly Stable and Efficient Mn²⁺ Doping Zero-Dimension Cs₂Zn_xPb_{1â€“x}Cl₄ Alloyed Nanorods toward White Electroluminescent Light-Emitting Diodes. Journal of Physical Chemistry Letters, 2022, 13, 2379-2387.	2.1	5
61	Pressure-Driven Abnormal Emission Blue-Shift of Lead-Free Halide Double Perovskite Cs₂AgInCl₆ Nanocrystals. Inorganic Chemistry, 2022, 61, 6488-6492.	1.9	5
62	Evolution of self-trapped exciton emission tuned by high pressure in 2D all-inorganic cesium lead halide nanosheets. Journal of Materials Chemistry C, 2022, 10, 8711-8718.	2.7	5
63	Injection-seeded high-repetition-rate short-pulse micro-laser based on upconversion nanoparticles. Nanoscale, 2021, 13, 878-885.	2.8	4
64	Dual Interfacial Modification Engineering for Highly Efficient and Stable Perovskite Solar Cells. Solar Rrl, 2021, 5, 2000652.	3.1	4
65	Interfacial Modification Engineering with Cs₃Cu₂I₅ Nanocrystals for Efficient and Stable Perovskite Solar Cells. Solar Rrl, 2022, 6, .	3.1	4
66	Tunable concentration-dependent upconversion and downconversion luminescence in NaYF₄: Yb³⁺, Er³⁺@ NaYF₄: Yb³⁺, Nd³⁺ core-shell nanocrystals for a dual-mode anti-counterfeiting imaging application. Optics Letters, 2022, 47, 2814.	1.7	3
67	Three-order fluorescence enhancement of perovskite nanocrystals using plasmonic Ag@SiO2 nanocomposites. Journal of Materials Chemistry C, 0, , .	2.7	1