Xiao Luo

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Design and fabrication of a CdS QDs/Bi2WO6 monolayer S-scheme heterojunction configuration for highly efficient photocatalytic degradation of trace ethylene in air. Chemical Engineering Journal, 2022, 429, 132241.	12.7	56
2	Spin-enabled photochemistry using nanocrystal-molecule hybrids. CheM, 2022, , .	11.7	8
3	Triplet energy transfer between inorganic nanocrystals and organic molecules. Journal of Photochemistry and Photobiology, 2022, 11, 100128.	2.5	5
4	Gold nanoparticles-decorated N,N'-dioctyl-3,4,9,10-perylene tetracarboxylic diimide active layer towards remarkably enhanced visible-light photoresponse of an n-type organic phototransistor. Thin Solid Films, 2021, 718, 138478.	1.8	1
5	2D/2D atomic double-layer WS2/Nb2O5 shell/core nanosheets with ultrafast interfacial charge transfer for boosting photocatalytic H2 evolution. Chinese Chemical Letters, 2021, 32, 3128-3132.	9.0	23
6	Shallow distance-dependent triplet energy migration mediated by endothermic charge-transfer. Nature Communications, 2021, 12, 1532.	12.8	33
7	Mechanisms of triplet energy transfer across the inorganic nanocrystal/organic molecule interface. Nature Communications, 2020, 11, 28.	12.8	127
8	Tuning Intermediate-Band Cu₃VS₄ Nanocrystals from Plasmonic-like to Excitonic via Shell-Coating. Chemistry of Materials, 2020, 32, 224-233.	6.7	13
9	Synthesis and Spectroscopy of Monodispersed, Quantum-Confined FAPbBr₃ Perovskite Nanocrystals. Chemistry of Materials, 2020, 32, 549-556.	6.7	39
10	A Tandem 0D/2D/2D NbS₂ Quantum Dot/Nb₂O₅ Nanosheet/gâ€C₃N₄ Flake System with Spatial Chargeâ€"Transfer Cascades for Boosting Photocatalytic Hydrogen Evolution. Small, 2020, 16, e2003302.	10.0	40
11	Engineering Sensitized Photon Upconversion Efficiency via Nanocrystal Wavefunction and Molecular Geometry. Angewandte Chemie, 2020, 132, 17879-17884.	2.0	0
12	Triplet Energy Transfer from Perovskite Nanocrystals Mediated by Electron Transfer. Journal of the American Chemical Society, 2020, 142, 11270-11278.	13.7	82
13	Sizeâ€•and Halideâ€Đependent Auger Recombination in Lead Halide Perovskite Nanocrystals. Angewandte Chemie - International Edition, 2020, 59, 14292-14295.	13.8	63
14	Sizeâ€•and Halideâ€Đependent Auger Recombination in Lead Halide Perovskite Nanocrystals. Angewandte Chemie, 2020, 132, 14398-14401.	2.0	8
15	Sensitized Molecular Triplet and Triplet Excimer Emission in Two-Dimensional Hybrid Perovskites. Journal of Physical Chemistry Letters, 2020, 11, 2247-2255.	4.6	33
16	Engineering Sensitized Photon Upconversion Efficiency via Nanocrystal Wavefunction and Molecular Geometry. Angewandte Chemie - International Edition, 2020, 59, 17726-17731.	13.8	20
17	Size- and Composition-Dependent Exciton Spin Relaxation in Lead Halide Perovskite Quantum Dots. ACS Energy Letters, 2020, 5, 1701-1708.	17.4	47
18	Strong Spin-Selective Optical Stark Effect in Lead Halide Perovskite Quantum Dots. Journal of Physical Chemistry Letters, 2020, 11, 3594-3600.	4.6	21

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19	Triplet Sensitization by â€œSelf-Trappedâ€•Excitons of Nontoxic CuInS₂ Nanocrystals for Efficient Photon Upconversion. Journal of the American Chemical Society, 2019, 141, 13033-13037.	13.7	79
20	Visible-to-Ultraviolet Upconversion Efficiency above 10% Sensitized by Quantum-Confined Perovskite Nanocrystals. Journal of Physical Chemistry Letters, 2019, 10, 5036-5040.	4.6	94
21	Discovery of new small molecule inhibitors targeting isocitrate dehydrogenase 1 (IDH1) with blood-brain barrier penetration. European Journal of Medicinal Chemistry, 2019, 183, 111694.	5.5	9
22	Picosecond multi-hole transfer and microsecond charge-separated states at the perovskite nanocrystal/tetracene interface. Chemical Science, 2019, 10, 2459-2464.	7.4	33
23	Unraveling the Interfacial Charge Migration Pathway at the Atomic Level in a Highly Efficient Zâ€Scheme Photocatalyst. Angewandte Chemie, 2019, 131, 11451-11456.	2.0	22
24	Unraveling the Interfacial Charge Migration Pathway at the Atomic Level in a Highly Efficient Zâ€Scheme Photocatalyst. Angewandte Chemie - International Edition, 2019, 58, 11329-11334.	13.8	152
25	On the absence of a phonon bottleneck in strongly confined CsPbBr₃ perovskite nanocrystals. Chemical Science, 2019, 10, 5983-5989.	7.4	71
26	Visible-Light-Driven Sensitization of Naphthalene Triplets Using Quantum-Confined CsPbBr₃ Nanocrystals. Journal of Physical Chemistry Letters, 2019, 10, 1457-1463.	4.6	62
27	Triplet Energy Transfer from CsPbBr₃ Nanocrystals Enabled by Quantum Confinement. Journal of the American Chemical Society, 2019, 141, 4186-4190.	13.7	169
28	Quantum-Cutting Luminescent Solar Concentrators Using Ytterbium-Doped Perovskite Nanocrystals. Nano Letters, 2019, 19, 338-341.	9.1	153
29	Biexciton Auger recombination in mono-dispersed, quantum-confined CsPbBr3 perovskite nanocrystals obeys universal volume-scaling. Nano Research, 2019, 12, 619-623.	10.4	63
30	Achieving Weak Light Response with Plasmonic Nanogold-Decorated Organic Phototransistors. ACS Applied Materials & Interfaces, 2018, 10, 15352-15356.	8.0	14
31	Toward High Uniformity of Photoresponse Broadband Hybrid Organicâ€“Inorganic Photodiode Based on PVPâ€Modified Perovskite. Advanced Optical Materials, 2018, 6, 1700509.	7.3	19
32	Facile Nanogoldâ€“Perovskite Enabling Ultrasensitive Flexible Broadband Photodetector with pW Scale Detection Limit. Advanced Optical Materials, 2018, 6, 1800996.	7.3	14
33	Lighting Up AIEgen Emission in Solution by Grafting onto Colloidal Nanocrystal Surfaces. Journal of Physical Chemistry Letters, 2018, 9, 6334-6338.	4.6	5
34	Effects of source/drain electrode contact length on the photoresponsive properties of organic field-effect transistors. Optical Materials Express, 2018, 8, 901.	3.0	0
35	A comprehensive investigation of organic active layer structures toward high performance near-infrared phototransistors. Synthetic Metals, 2018, 240, 44-51.	3.9	17
36	Broad spectral response photosensitive organic field-effect transistors realized by the hybrid planar-bulk heterojunction composed of three molecules with complementary optical absorption. Organic Electronics, 2017, 43, 27-32.	2.6	17

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37	Ultrasensitivity broadband photodetectors based on perovskite: Research on film crystallization and electrode optimization. Organic Electronics, 2017, 46, 35-43.	2.6	23
38	Ultrasensitive flexible broadband photodetectors achieving pA scale dark current. Npj Flexible Electronics, 2017, 1, .	10.7	41
39	High performance photoresponsive field-effect transistors based on MoS2/pentacene heterojunction. Organic Electronics, 2017, 51, 142-148.	2.6	19
40	Insight into trap state dynamics for exploiting current multiplication in organic photodetectors. Physica Status Solidi - Rapid Research Letters, 2016, 10, 485-492.	2.4	22
41	Notably Improved Red Photoresponse of Organic Diode Employing Gold Nanoparticles Plasmonic Absorption. Journal of Nanoscience and Nanotechnology, 2016, 16, 5707-5713.	0.9	1
42	High-performance organic broadband photomemory transistors exhibiting remarkable UV-NIR response. Physical Chemistry Chemical Physics, 2016, 18, 13108-13117.	2.8	18
43	Airstable near-infrared sensitive organic field-effect transistors utilizing erbium phthalocyanine as photosensitive layer. Synthetic Metals, 2016, 218, 27-33.	3.9	10
44	Toward high performance broad spectral hybrid organicâ€“inorganic photodetectors based on multiple component organic bulk heterojunctions. Journal of Materials Chemistry C, 2016, 4, 815-822.	5.5	15
45	Solvation effect promoted formation of pâ€“n junction between WO3 and FeOOH: A high performance photoanode for water oxidation. Journal of Catalysis, 2016, 333, 200-206.	6.2	86
46	Toward Ultrahigh Red Light Responsive Organic FETs Utilizing Neodymium Phthalocyanine as Light Sensitive Material. IEEE Transactions on Electron Devices, 2016, 63, 452-458.	3.0	6
47	Organic near-infrared upconversion devices: Design principles and operation mechanisms. Organic Electronics, 2016, 31, 258-265.	2.6	20
48	Toward facile broadband high photoresponse of fullerene based phototransistor from the ultraviolet to the near-infrared region. Carbon, 2016, 96, 685-694.	10.3	56
49	A striking performance improvement of fullerene n-channel field-effect transistors via synergistic interfacial modifications. Journal Physics D: Applied Physics, 2015, 48, 405105.	2.8	2
50	Ultrahigh near infrared photoresponsive organic field-effect transistors with lead phthalocyanine/C₆₀ heterojunction on poly(vinyl alcohol) gate dielectric. Nanotechnology, 2015, 26, 185501.	2.6	8
51	Position-dependent performance of copper phthalocyanine based field-effect transistors by gold nanoparticles modification. Nanotechnology, 2015, 26, 035201.	2.6	8
52	Enhanced performance of PbPc photosensitive organic field effect transistors by inserting different-thickness pentacene inducing layers. Organic Electronics, 2015, 26, 186-190.	2.6	13
53	Red light sensitive heterojunction organic field-effect transistors based on neodymium phthalocyanine as photosensitive layer. Thin Solid Films, 2015, 589, 692-696.	1.8	8
54	Near Infrared Sensitive Organic Photodiode Utilizing Exciplex Absorption in NdPc₂/C₆₀ Heterojunction. IEEE Photonics Technology Letters, 2015, 27, 2043-2046.	2.5	9

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55	Enhanced performance of isotype planar heterojunction photoresponsive organic field-effect transistors by using Ag source-drain electrodes. Europhysics Letters, 2015, 110, 17006.	2.0	6
56	Remarkably enhanced redâ€“NIR broad spectral absorption via gold nanoparticles: applications for organic photosensitive diodes. Nanoscale, 2015, 7, 14422-14433.	5.6	16
57	Operational dynamics and architecture dependence of double-gate OFETs with balanced top and bottom channel characteristics. Journal of Materials Chemistry C, 2015, 3, 7336-7344.	5.5	8
58	Substrate temperature dependent performance of near infrared photoresponsive organic field effect transistors based on lead phthalocyanine. Synthetic Metals, 2015, 205, 190-194.	3.9	19
59	Charge-transport interfacial modification enhanced ultraviolet (UV)/near-UV phototransistor with high sensitivity and fast response speed. Synthetic Metals, 2015, 210, 230-235.	3.9	22
60	Correlating optimal electrode buffer layer thickness with the surface roughness of the active layer in organic phototransistors. Synthetic Metals, 2014, 193, 35-40.	3.9	7