Xiao Luo

List of Publications by Year
in descending order

60 papers	2,055 citations	304368 22 h-index	243296 44 g-index
60 all docs	60 docs citations	60 times ranked	2352 citing authors

#	Article	IF	Citations
1	Triplet Energy Transfer from CsPbBr₃ Nanocrystals Enabled by Quantum Confinement. Journal of the American Chemical Society, 2019, 141, 4186-4190.	6.6	169
2	Quantum-Cutting Luminescent Solar Concentrators Using Ytterbium-Doped Perovskite Nanocrystals. Nano Letters, 2019, 19, 338-341.	4.5	153
3	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.	7.2	152
4	Mechanisms of triplet energy transfer across the inorganic nanocrystal/organic molecule interface. Nature Communications, 2020, 11, 28.	5.8	127
5	Visible-to-Ultraviolet Upconversion Efficiency above 10% Sensitized by Quantum-Confined Perovskite Nanocrystals. Journal of Physical Chemistry Letters, 2019, 10, 5036-5040.	2.1	94
6	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.	3.1	86
7	Triplet Energy Transfer from Perovskite Nanocrystals Mediated by Electron Transfer. Journal of the American Chemical Society, 2020, 142, 11270-11278.	6.6	82
8	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.	6.6	79
9	On the absence of a phonon bottleneck in strongly confined CsPbBr₃ perovskite nanocrystals. Chemical Science, 2019, 10, 5983-5989.	3.7	71
10	Biexciton Auger recombination in mono-dispersed, quantum-confined CsPbBr3 perovskite nanocrystals obeys universal volume-scaling. Nano Research, 2019, 12, 619-623.	5.8	63
11	Sizeâ€•and Halideâ€Dependent Auger Recombination in Lead Halide Perovskite Nanocrystals. Angewandte Chemie - International Edition, 2020, 59, 14292-14295.	7.2	63
12	Visible-Light-Driven Sensitization of Naphthalene Triplets Using Quantum-Confined CsPbBr₃ Nanocrystals. Journal of Physical Chemistry Letters, 2019, 10, 1457-1463.	2.1	62
13	Toward facile broadband high photoresponse of fullerene based phototransistor from the ultraviolet to the near-infrared region. Carbon, 2016, 96, 685-694.	5.4	56
14	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.	6.6	56
15	Size- and Composition-Dependent Exciton Spin Relaxation in Lead Halide Perovskite Quantum Dots. ACS Energy Letters, 2020, 5, 1701-1708.	8.8	47
16	Ultrasensitive flexible broadband photodetectors achieving pA scale dark current. Npj Flexible Electronics, 2017, 1, .	5.1	41
17	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.	5.2	40
18	Synthesis and Spectroscopy of Monodispersed, Quantum-Confined FAPbBr₃ Perovskite Nanocrystals. Chemistry of Materials, 2020, 32, 549-556.	3.2	39

#	Article	IF	Citations
19	Picosecond multi-hole transfer and microsecond charge-separated states at the perovskite nanocrystal/tetracene interface. Chemical Science, 2019, 10, 2459-2464.	3.7	33
20	Sensitized Molecular Triplet and Triplet Excimer Emission in Two-Dimensional Hybrid Perovskites. Journal of Physical Chemistry Letters, 2020, 11, 2247-2255.	2.1	33
21	Shallow distance-dependent triplet energy migration mediated by endothermic charge-transfer. Nature Communications, 2021, 12, 1532.	5.8	33
22	Ultrasensitivity broadband photodetectors based on perovskite: Research on film crystallization and electrode optimization. Organic Electronics, 2017, 46, 35-43.	1.4	23
23	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.	4.8	23
24	Charge-transport interfacial modification enhanced ultraviolet (UV)/near-UV phototransistor with high sensitivity and fast response speed. Synthetic Metals, 2015, 210, 230-235.	2.1	22
25	Insight into trap state dynamics for exploiting current multiplication in organic photodetectors. Physica Status Solidi - Rapid Research Letters, 2016, 10, 485-492.	1.2	22
26	Unraveling the Interfacial Charge Migration Pathway at the Atomic Level in a Highly Efficient Zâ€Scheme Photocatalyst. Angewandte Chemie, 2019, 131, 11451-11456.	1.6	22
27	Strong Spin-Selective Optical Stark Effect in Lead Halide Perovskite Quantum Dots. Journal of Physical Chemistry Letters, 2020, 11, 3594-3600.	2.1	21
28	Organic near-infrared upconversion devices: Design principles and operation mechanisms. Organic Electronics, 2016, 31, 258-265.	1.4	20
29	Engineering Sensitized Photon Upconversion Efficiency via Nanocrystal Wavefunction and Molecular Geometry. Angewandte Chemie - International Edition, 2020, 59, 17726-17731.	7.2	20
30	Substrate temperature dependent performance of near infrared photoresponsive organic field effect transistors based on lead phthalocyanine. Synthetic Metals, 2015, 205, 190-194.	2.1	19
31	High performance photoresponsive field-effect transistors based on MoS2/pentacene heterojunction. Organic Electronics, 2017, 51, 142-148.	1.4	19
32	Toward High Uniformity of Photoresponse Broadband Hybrid Organicâ€"Inorganic Photodiode Based on PVPâ€Modified Perovskite. Advanced Optical Materials, 2018, 6, 1700509.	3.6	19
33	High-performance organic broadband photomemory transistors exhibiting remarkable UV-NIR response. Physical Chemistry Chemical Physics, 2016, 18, 13108-13117.	1.3	18
34	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.	1.4	17
35	A comprehensive investigation of organic active layer structures toward high performance near-infrared phototransistors. Synthetic Metals, 2018, 240, 44-51.	2.1	17
36	Remarkably enhanced redâ€"NIR broad spectral absorption via gold nanoparticles: applications for organic photosensitive diodes. Nanoscale, 2015, 7, 14422-14433.	2.8	16

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37	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.	2.7	15
38	Achieving Weak Light Response with Plasmonic Nanogold-Decorated Organic Phototransistors. ACS Applied Materials & Interfaces, 2018, 10, 15352-15356.	4.0	14
39	Facile Nanogoldâ€“Perovskite Enabling Ultrasensitive Flexible Broadband Photodetector with pW Scale Detection Limit. Advanced Optical Materials, 2018, 6, 1800996.	3.6	14
40	Enhanced performance of PbPc photosensitive organic field effect transistors by inserting different-thickness pentacene inducing layers. Organic Electronics, 2015, 26, 186-190.	1.4	13
41	Tuning Intermediate-Band Cu₃VS₄ Nanocrystals from Plasmonic-like to Excitonic via Shell-Coating. Chemistry of Materials, 2020, 32, 224-233.	3.2	13
42	Airstable near-infrared sensitive organic field-effect transistors utilizing erbium phthalocyanine as photosensitive layer. Synthetic Metals, 2016, 218, 27-33.	2.1	10
43	Near Infrared Sensitive Organic Photodiode Utilizing Exciplex Absorption in NdPc₂/C₆₀ Heterojunction. IEEE Photonics Technology Letters, 2015, 27, 2043-2046.	1.3	9
44	Discovery of new small molecule inhibitors targeting isocitrate dehydrogenase 1 (IDH1) with blood-brain barrier penetration. European Journal of Medicinal Chemistry, 2019, 183, 111694.	2.6	9
45	Ultrahigh near infrared photoresponsive organic field-effect transistors with lead phthalocyanine/C₆₀ heterojunction on poly(vinyl alcohol) gate dielectric. Nanotechnology, 2015, 26, 185501.	1.3	8
46	Position-dependent performance of copper phthalocyanine based field-effect transistors by gold nanoparticles modification. Nanotechnology, 2015, 26, 035201.	1.3	8
47	Red light sensitive heterojunction organic field-effect transistors based on neodymium phthalocyanine as photosensitive layer. Thin Solid Films, 2015, 589, 692-696.	0.8	8
48	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.	2.7	8
49	Sizeâ€•and Halideâ€Dependent Auger Recombination in Lead Halide Perovskite Nanocrystals. Angewandte Chemie, 2020, 132, 14398-14401.	1.6	8
50	Spin-enabled photochemistry using nanocrystal-molecule hybrids. CheM, 2022, , .	5.8	8
51	Correlating optimal electrode buffer layer thickness with the surface roughness of the active layer in organic phototransistors. Synthetic Metals, 2014, 193, 35-40.	2.1	7
52	Enhanced performance of isotype planar heterojunction photoresponsive organic field-effect transistors by using Ag source-drain electrodes. Europhysics Letters, 2015, 110, 17006.	0.7	6
53	Toward Ultrahigh Red Light Responsive Organic FETs Utilizing Neodymium Phthalocyanine as Light Sensitive Material. IEEE Transactions on Electron Devices, 2016, 63, 452-458.	1.6	6
54	Lighting Up AIEgen Emission in Solution by Grafting onto Colloidal Nanocrystal Surfaces. Journal of Physical Chemistry Letters, 2018, 9, 6334-6338.	2.1	5

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55	Triplet energy transfer between inorganic nanocrystals and organic molecules. Journal of Photochemistry and Photobiology, 2022, 11, 100128.	1.1	5
56	A striking performance improvement of fullerene n-channel field-effect transistors via synergistic interfacial modifications. Journal Physics D: Applied Physics, 2015, 48, 405105.	1.3	2
57	Notably Improved Red Photoresponse of Organic Diode Employing Gold Nanoparticles Plasmonic Absorption. Journal of Nanoscience and Nanotechnology, 2016, 16, 5707-5713.	0.9	1
58	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.	0.8	1
59	Effects of source/drain electrode contact length on the photoresponsive properties of organic field-effect transistors. Optical Materials Express, 2018, 8, 901.	1.6	0
60	Engineering Sensitized Photon Upconversion Efficiency via Nanocrystal Wavefunction and Molecular Geometry. Angewandte Chemie, 2020, 132, 17879-17884.	1.6	0