

# Xiao Luo

## List of Publications by Year in descending order

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Version: 2024-02-01

60  
papers

2,055  
citations

304743

22  
h-index

243625

44  
g-index

60  
all docs

60  
docs citations

60  
times ranked

2352  
citing authors

| #  | ARTICLE                                                                                                                                                                                                                                                       | IF   | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 1  | Triplet Energy Transfer from CsPbBr <sub>3</sub> Nanocrystals Enabled by Quantum Confinement. <i>Journal of the American Chemical Society</i> , 2019, 141, 4186-4190.                                                                                         | 13.7 | 169       |
| 2  | Quantum-Cutting Luminescent Solar Concentrators Using Ytterbium-Doped Perovskite Nanocrystals. <i>Nano Letters</i> , 2019, 19, 338-341.                                                                                                                       | 9.1  | 153       |
| 3  | Unraveling the Interfacial Charge Migration Pathway at the Atomic Level in a Highly Efficient Z-scheme Photocatalyst. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 11329-11334.                                                               | 13.8 | 152       |
| 4  | Mechanisms of triplet energy transfer across the inorganic nanocrystal/organic molecule interface. <i>Nature Communications</i> , 2020, 11, 28.                                                                                                               | 12.8 | 127       |
| 5  | Visible-to-Ultraviolet Upconversion Efficiency above 10% Sensitized by Quantum-Confined Perovskite Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 5036-5040.                                                                          | 4.6  | 94        |
| 6  | Solvation effect promoted formation of p-n junction between WO <sub>3</sub> and FeOOH: A high performance photoanode for water oxidation. <i>Journal of Catalysis</i> , 2016, 333, 200-206.                                                                   | 6.2  | 86        |
| 7  | Triplet Energy Transfer from Perovskite Nanocrystals Mediated by Electron Transfer. <i>Journal of the American Chemical Society</i> , 2020, 142, 11270-11278.                                                                                                 | 13.7 | 82        |
| 8  | Triplet Sensitization by Self-Trapped Excitons of Nontoxic CuInS <sub>2</sub> Nanocrystals for Efficient Photon Upconversion. <i>Journal of the American Chemical Society</i> , 2019, 141, 13033-13037.                                                       | 13.7 | 79        |
| 9  | On the absence of a phonon bottleneck in strongly confined CsPbBr <sub>3</sub> perovskite nanocrystals. <i>Chemical Science</i> , 2019, 10, 5983-5989.                                                                                                        | 7.4  | 71        |
| 10 | Biexciton Auger recombination in mono-dispersed, quantum-confined CsPbBr <sub>3</sub> perovskite nanocrystals obeys universal volume-scaling. <i>Nano Research</i> , 2019, 12, 619-623.                                                                       | 10.4 | 63        |
| 11 | Size- and Halide-Dependent Auger Recombination in Lead Halide Perovskite Nanocrystals. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 14292-14295.                                                                                              | 13.8 | 63        |
| 12 | Visible-Light-Driven Sensitization of Naphthalene Triplets Using Quantum-Confined CsPbBr <sub>3</sub> Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 1457-1463.                                                                       | 4.6  | 62        |
| 13 | Toward facile broadband high photoresponse of fullerene based phototransistor from the ultraviolet to the near-infrared region. <i>Carbon</i> , 2016, 96, 685-694.                                                                                            | 10.3 | 56        |
| 14 | Design and fabrication of a CdS QDs/Bi <sub>2</sub> WO <sub>6</sub> monolayer S-scheme heterojunction configuration for highly efficient photocatalytic degradation of trace ethylene in air. <i>Chemical Engineering Journal</i> , 2022, 429, 132241.        | 12.7 | 56        |
| 15 | Size- and Composition-Dependent Exciton Spin Relaxation in Lead Halide Perovskite Quantum Dots. <i>ACS Energy Letters</i> , 2020, 5, 1701-1708.                                                                                                               | 17.4 | 47        |
| 16 | Ultrasensitive flexible broadband photodetectors achieving pA scale dark current. <i>Npj Flexible Electronics</i> , 2017, 1, .                                                                                                                                | 10.7 | 41        |
| 17 | A Tandem OD/2D/2D NbS <sub>2</sub> Quantum Dot/Nb <sub>2</sub> O <sub>5</sub> Nanosheet/g-C <sub>3</sub> N <sub>4</sub> Flake System with Spatial Charge Transfer Cascades for Boosting Photocatalytic Hydrogen Evolution. <i>Small</i> , 2020, 16, e2003302. | 10.0 | 40        |
| 18 | Synthesis and Spectroscopy of Monodispersed, Quantum-Confined FAPbBr <sub>3</sub> Perovskite Nanocrystals. <i>Chemistry of Materials</i> , 2020, 32, 549-556.                                                                                                 | 6.7  | 39        |

| #  | ARTICLE                                                                                                                                                                                                                                                 | IF   | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 19 | Picosecond multi-hole transfer and microsecond charge-separated states at the perovskite nanocrystal/tetracene interface. <i>Chemical Science</i> , 2019, 10, 2459-2464.                                                                                | 7.4  | 33        |
| 20 | Sensitized Molecular Triplet and Triplet Excimer Emission in Two-Dimensional Hybrid Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 2247-2255.                                                                                    | 4.6  | 33        |
| 21 | Shallow distance-dependent triplet energy migration mediated by endothermic charge-transfer. <i>Nature Communications</i> , 2021, 12, 1532.                                                                                                             | 12.8 | 33        |
| 22 | Ultrasensitivity broadband photodetectors based on perovskite: Research on film crystallization and electrode optimization. <i>Organic Electronics</i> , 2017, 46, 35-43.                                                                               | 2.6  | 23        |
| 23 | 2D/2D atomic double-layer WS <sub>2</sub> /Nb <sub>2</sub> O <sub>5</sub> shell/core nanosheets with ultrafast interfacial charge transfer for boosting photocatalytic H <sub>2</sub> evolution. <i>Chinese Chemical Letters</i> , 2021, 32, 3128-3132. | 9.0  | 23        |
| 24 | Charge-transport interfacial modification enhanced ultraviolet (UV)/near-UV phototransistor with high sensitivity and fast response speed. <i>Synthetic Metals</i> , 2015, 210, 230-235.                                                                | 3.9  | 22        |
| 25 | Insight into trap state dynamics for exploiting current multiplication in organic photodetectors. <i>Physica Status Solidi - Rapid Research Letters</i> , 2016, 10, 485-492.                                                                            | 2.4  | 22        |
| 26 | Unraveling the Interfacial Charge Migration Pathway at the Atomic Level in a Highly Efficient ZnS-Scheme Photocatalyst. <i>Angewandte Chemie</i> , 2019, 131, 11451-11456.                                                                              | 2.0  | 22        |
| 27 | Strong Spin-Selective Optical Stark Effect in Lead Halide Perovskite Quantum Dots. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 3594-3600.                                                                                                  | 4.6  | 21        |
| 28 | Organic near-infrared upconversion devices: Design principles and operation mechanisms. <i>Organic Electronics</i> , 2016, 31, 258-265.                                                                                                                 | 2.6  | 20        |
| 29 | Engineering Sensitized Photon Upconversion Efficiency via Nanocrystal Wavefunction and Molecular Geometry. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 17726-17731.                                                                    | 13.8 | 20        |
| 30 | Substrate temperature dependent performance of near infrared photoresponsive organic field effect transistors based on lead phthalocyanine. <i>Synthetic Metals</i> , 2015, 205, 190-194.                                                               | 3.9  | 19        |
| 31 | High performance photoresponsive field-effect transistors based on MoS <sub>2</sub> /pentacene heterojunction. <i>Organic Electronics</i> , 2017, 51, 142-148.                                                                                          | 2.6  | 19        |
| 32 | Toward High Uniformity of Photoresponse Broadband Hybrid Organic-Inorganic Photodiode Based on PVP-Modified Perovskite. <i>Advanced Optical Materials</i> , 2018, 6, 1700509.                                                                           | 7.3  | 19        |
| 33 | High-performance organic broadband photomemory transistors exhibiting remarkable UV-NIR response. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 13108-13117.                                                                                   | 2.8  | 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. <i>Organic Electronics</i> , 2017, 43, 27-32.              | 2.6  | 17        |
| 35 | A comprehensive investigation of organic active layer structures toward high performance near-infrared phototransistors. <i>Synthetic Metals</i> , 2018, 240, 44-51.                                                                                    | 3.9  | 17        |
| 36 | Remarkably enhanced red-NIR broad spectral absorption via gold nanoparticles: applications for organic photosensitive diodes. <i>Nanoscale</i> , 2015, 7, 14422-14433.                                                                                  | 5.6  | 16        |

| #  | ARTICLE                                                                                                                                                                                                            | IF   | CITATIONS |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 37 | Toward high performance broad spectral hybrid organic–inorganic photodetectors based on multiple component organic bulk heterojunctions. <i>Journal of Materials Chemistry C</i> , 2016, 4, 815-822.               | 5.5  | 15        |
| 38 | Achieving Weak Light Response with Plasmonic Nanogold-Decorated Organic Phototransistors. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 15352-15356.                                                   | 8.0  | 14        |
| 39 | Facile Nanogold–Perovskite Enabling Ultrasensitive Flexible Broadband Photodetector with pW Scale Detection Limit. <i>Advanced Optical Materials</i> , 2018, 6, 1800996.                                           | 7.3  | 14        |
| 40 | Enhanced performance of PbPc photosensitive organic field effect transistors by inserting different-thickness pentacene inducing layers. <i>Organic Electronics</i> , 2015, 26, 186-190.                           | 2.6  | 13        |
| 41 | Tuning Intermediate-Band Cu <sub>3</sub> VS <sub>4</sub> Nanocrystals from Plasmonic-like to Excitonic via Shell-Coating. <i>Chemistry of Materials</i> , 2020, 32, 224-233.                                       | 6.7  | 13        |
| 42 | Airstable near-infrared sensitive organic field-effect transistors utilizing erbium phthalocyanine as photosensitive layer. <i>Synthetic Metals</i> , 2016, 218, 27-33.                                            | 3.9  | 10        |
| 43 | Near Infrared Sensitive Organic Photodiode Utilizing Exciplex Absorption in NdPc <sub>2</sub> /C <sub>60</sub> Heterojunction. <i>IEEE Photonics Technology Letters</i> , 2015, 27, 2043-2046.                     | 2.5  | 9         |
| 44 | Discovery of new small molecule inhibitors targeting isocitrate dehydrogenase 1 (IDH1) with blood-brain barrier penetration. <i>European Journal of Medicinal Chemistry</i> , 2019, 183, 111694.                   | 5.5  | 9         |
| 45 | Ultrahigh near infrared photoresponsive organic field-effect transistors with lead phthalocyanine/C <sub>60</sub> heterojunction on poly(vinyl alcohol) gate dielectric. <i>Nanotechnology</i> , 2015, 26, 185501. | 2.6  | 8         |
| 46 | Position-dependent performance of copper phthalocyanine based field-effect transistors by gold nanoparticles modification. <i>Nanotechnology</i> , 2015, 26, 035201.                                               | 2.6  | 8         |
| 47 | Red light sensitive heterojunction organic field-effect transistors based on neodymium phthalocyanine as photosensitive layer. <i>Thin Solid Films</i> , 2015, 589, 692-696.                                       | 1.8  | 8         |
| 48 | Operational dynamics and architecture dependence of double-gate OFETs with balanced top and bottom channel characteristics. <i>Journal of Materials Chemistry C</i> , 2015, 3, 7336-7344.                          | 5.5  | 8         |
| 49 | Size- and Halide-Dependent Auger Recombination in Lead Halide Perovskite Nanocrystals. <i>Angewandte Chemie</i> , 2020, 132, 14398-14401.                                                                          | 2.0  | 8         |
| 50 | Spin-enabled photochemistry using nanocrystal-molecule hybrids. <i>CheM</i> , 2022, , .                                                                                                                            | 11.7 | 8         |
| 51 | Correlating optimal electrode buffer layer thickness with the surface roughness of the active layer in organic phototransistors. <i>Synthetic Metals</i> , 2014, 193, 35-40.                                       | 3.9  | 7         |
| 52 | Enhanced performance of isotype planar heterojunction photoresponsive organic field-effect transistors by using Ag source-drain electrodes. <i>Europhysics Letters</i> , 2015, 110, 17006.                         | 2.0  | 6         |
| 53 | Toward Ultrahigh Red Light Responsive Organic FETs Utilizing Neodymium Phthalocyanine as Light Sensitive Material. <i>IEEE Transactions on Electron Devices</i> , 2016, 63, 452-458.                               | 3.0  | 6         |
| 54 | Lighting Up AIEgen Emission in Solution by Grafting onto Colloidal Nanocrystal Surfaces. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 6334-6338.                                                        | 4.6  | 5         |

| #  | ARTICLE                                                                                                                                                                                                                                     | IF  | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 55 | Triplet energy transfer between inorganic nanocrystals and organic molecules. <i>Journal of Photochemistry and Photobiology</i> , 2022, 11, 100128.                                                                                         | 2.5 | 5         |
| 56 | A striking performance improvement of fullerene n-channel field-effect transistors via synergistic interfacial modifications. <i>Journal Physics D: Applied Physics</i> , 2015, 48, 405105.                                                 | 2.8 | 2         |
| 57 | Notably Improved Red Photoresponse of Organic Diode Employing Gold Nanoparticles Plasmonic Absorption. <i>Journal of Nanoscience and Nanotechnology</i> , 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. <i>Thin Solid Films</i> , 2021, 718, 138478. | 1.8 | 1         |
| 59 | Effects of source/drain electrode contact length on the photoresponsive properties of organic field-effect transistors. <i>Optical Materials Express</i> , 2018, 8, 901.                                                                    | 3.0 | 0         |
| 60 | Engineering Sensitized Photon Upconversion Efficiency via Nanocrystal Wavefunction and Molecular Geometry. <i>Angewandte Chemie</i> , 2020, 132, 17879-17884.                                                                               | 2.0 | 0         |