Zu-hong Xiong

List of Publications by Year
in descending order

72 papers	1,315 citations	394421 19 h-index	414414 32 g-index
72 all docs	72 docs citations	72 times ranked	1401 citing authors

#	Article	IF	Citations
1	Charge-transfer versus energy-transfer in quasi-2D perovskite light-emitting diodes. Nano Energy, 2018, 50, 615-622.	16.0	103
2	Highly Efficient Perovskite Light-Emitting Diodes Incorporating Full Film Coverage and Bipolar Charge Injection. Journal of Physical Chemistry Letters, 2017, 8, 1810-1818.	4.6	97
3	Nearly 100% Efficiency Enhancement of CH₃NH₃PbBr₃ Perovskite Light-Emitting Diodes by Utilizing Plasmonic Au Nanoparticles. Journal of Physical Chemistry Letters, 2017, 8, 3961-3969.	4.6	75
4	Magnetoâ€Electroluminescence as a Tool to Discern the Origin of Delayed Fluorescence: Reverse Intersystem Crossing or Tripletâ€"Triplet Annihilation?. Advanced Optical Materials, 2014, 2, 142-148.	7.3	70
5	High performance and stable all-inorganic perovskite light emitting diodes by reducing luminescence quenching at PEDOT:PSS/Perovskites interface. Organic Electronics, 2019, 64, 47-53.	2.6	66
6	Intersystem Crossing and Triplet Fusion in Singlet-Fission-Dominated Rubrene-Based OLEDs Under High Bias Current. ACS Applied Materials & Interfaces, 2018, 10, 1948-1956.	8.0	50
7	Molecular Spacing Modulated Conversion of Singlet Fission to Triplet Fusion in Rubrene-Based Organic Light-Emitting Diodes at Ambient Temperature. Journal of Physical Chemistry C, 2016, 120, 8380-8386.	3.1	40
8	Full coverage all-inorganic cesium lead halide perovskite film for high-efficiency light-emitting diodes assisted by 1,3,5-tri(m-pyrid-3-yl-phenyl)benzene. Organic Electronics, 2017, 50, 480-484.	2.6	36
9	Full Confinement of Highâ€Lying Triplet States to Achieve Highâ€Level Reverse Intersystem Crossing in Rubrene: A Strategy for Obtaining the Recordâ€High EQE of 16.1% with Low Efficiency Rollâ€Off. Advanced Functional Materials, 2020, 30, 2005765.	14.9	33
10	Ultralarge Magnetoâ€Electroluminescence in Exciplexâ€Based Devices Driven by Fieldâ€Induced Reverse Intersystem Crossing. Advanced Optical Materials, 2016, 4, 694-699.	7.3	31
11	Achievement of High-Level Reverse Intersystem Crossing in Rubrene-Doped Organic Light-Emitting Diodes. Journal of Physical Chemistry Letters, 2020, 11, 2804-2811.	4.6	31
12	Determining the Origin of Half-bandgap-voltage Electroluminescence in Bifunctional Rubrene/C60 Devices. Scientific Reports, 2016, 6, 25331.	3.3	30
13	Guest concentration, bias current, and temperature-dependent sign inversion of magneto-electroluminescence in thermally activated delayed fluorescence devices. Scientific Reports, 2017, 7, 44396.	3.3	28
14	On the performance of polymer:organometal halide perovskite composite light emitting devices: The effects of polymer additives. Organic Electronics, 2018, 52, 350-355.	2.6	27
15	Electrode quenching control for highly efficient CsPbBr₃ perovskite light-emitting diodes via surface plasmon resonance and enhanced hole injection by Au nanoparticles. Nanotechnology, 2018, 29, 175203.	2.6	26
16	Large magneto-conductance and magneto-electroluminescence in exciplex-based organic light-emitting diodes at room temperature. Applied Physics Letters, 2015, 107, .	3.3	24
17	Magnetoconductance of polymerâ€"fullerene bulk heterojunction solar cells. Organic Electronics, 2009, 10, 1288-1292.	2.6	21
18	Thermally activated singlet exciton fission observed in rubrene doped organic films. Organic Electronics, 2014, 15, 577-581.	2.6	21

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19	Composite Hole Transport Layer Consisting of High-Mobility Polymer and Small Molecule With Deep-Lying HOMO Level for Efficient Quantum Dot Light-Emitting Diodes. IEEE Electron Device Letters, 2020, 41, 80-83.	3.9	19
20	Abnormal Reverse Intersystem Crossing of Polaron-Pair States and Its Conversion to Intersystem Crossing via the Regulation of Intermolecular Electron-Hole Spacing Distance. Physical Review Applied, 2020, 14, .	3.8	19
21	Spontaneous formation of Mn nanocluster arrays on a<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mtext>Si</mml:mtext><mml:mrow><mml:mo>(</mml:mo><mml:mrow><mml:mn>111</mml:mn> observed with STM. Physical Review B, 2008, 78, .	3.2	18
22	Identify triplet-charge interaction in rubrene-based diodes using magneto-conductance: Coexistence of dissociation and scattering channels. Organic Electronics, 2016, 39, 207-213.	2.6	18
23	Room-Temperature Observation for Reverse Intersystem Crossing in Exciplex-Based OLEDs with Balanced Charge Injection. ACS Applied Electronic Materials, 2021, 3, 3034-3043.	4.3	16
24	Direct observation of reverse intersystem crossing from fully confined triplet exciplexes using magneto-electroluminescence. Journal of Materials Chemistry C, 2019, 7, 10841-10850.	5.5	15
25	Direct evidence for the electronâ€“hole pair mechanism by studying the organic magneto-electroluminescence based on charge-transfer states. Organic Electronics, 2012, 13, 1774-1778.	2.6	14
26	Realization of tripletâ€“triplet annihilation in planar heterojunction exciplex-based organic light-emitting diodes. Organic Electronics, 2016, 28, 94-99.	2.6	14
27	Extraordinary magnetic field effects mediated by spin-pair interaction and electron mobility in thermally activated delayed fluorescence-based OLEDs with quantum-well structure. Journal of Materials Chemistry C, 2019, 7, 2421-2429.	5.5	14
28	Efficient quasi-two dimensional perovskite light-emitting diodes using a cage-type additive. Journal of Materials Chemistry C, 2020, 8, 9845-9853.	5.5	14
29	Competition between singlet exciton fission, radiation, and dissociation measured in rubrene-doped amorphous films. Synthetic Metals, 2015, 207, 13-17.	3.9	13
30	Spinâ€“orbital coupling induced high-field decay of magneto-electroluminescence in pristine Alq3-based organic light-emitting diodes. Organic Electronics, 2015, 22, 210-215.	2.6	13
31	Abnormal temperature dependent behaviors of intersystem crossing and triplet-triplet annihilation in organic planar heterojunction devices. Applied Physics Letters, 2016, 109, .	3.3	13
32	Magneto-conductance characteristics of trapped tripletâ€“polaron and tripletâ€“trapped polaron interactions in anthracene-based organic light emitting diodes. Physical Chemistry Chemical Physics, 2016, 18, 30733-30739.	2.8	13
33	Highly efficient and bright red quantum dot light-emitting diodes with balanced charge injection. Organic Electronics, 2020, 81, 105683.	2.6	13
34	High-performance near-infrared organic phototransistors based on diketopyrrolopyrrole conjugated polymers with partial removal of long branched alkyl side chains. Journal of Materials Chemistry C, 2020, 8, 16915-16922.	5.5	12
35	Efficient tuning of the conversion from ISC to high-level RISC <i>via</i> adjusting the triplet energies of charge-transporting layers in rubrene-doped OLEDs. Journal of Materials Chemistry C, 2021, 9, 2775-2783.	5.5	12
36	Highly efficient quasi-two dimensional perovskite light-emitting diodes by phase tuning. Organic Electronics, 2021, 98, 106295.	2.6	12

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37	Strain-driven formation of rubrene crystalline films on Bi(001). Physical Review B, 2011, 83, .	3.2	11
38	Visualizing buried silicon atoms at the Cd-Si(111)- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>7</mml:mn><mml:mo>Ã—</mml:mo><mml:mn>7</mm interface with localized electrons. Physical Review B, 2017, 96, .	3.2	11
39	A method towards 100% internal quantum efficiency for all-inorganic cesium halide perovskite light-emitting diodes. Organic Electronics, 2018, 58, 88-93.	2.6	11
40	Poly(ethylene oxide)-assisted energy funneling for efficient perovskite light emission. Journal of Materials Chemistry C, 2019, 7, 8287-8293.	5.5	11
41	Large Performance Enhancement in All-Solution-Processed, Full-Color, Inverted Quantum-Dot Light-Emitting Diodes Using Graphene Oxide Doped Hole Injection Layer. Journal of Physical Chemistry C, 2020, 124, 11617-11624.	3.1	11
42	Negative magnetoconductance effects in amorphous copper phthalocyanine thin film: trap-assisted bipolaron formation. Journal of Materials Chemistry C, 2015, 3, 12056-12060.	5.5	10
43	47-Fold EQE improvement in CsPbBr3 perovskite light-emitting diodes via double-additives assistance. Organic Electronics, 2019, 70, 264-271.	2.6	10
44	Trap-induced conversion from singlet fission to intersystem crossing <i>via in situ</i> heating of rubrene-based organic light-emitting diodes. Journal of Materials Chemistry C, 2019, 7, 553-557.	5.5	10
45	Enhanced Electroluminescence Efficiency Using Reverse Intersystem Crossing Induced by the Strong Triplet Fusion of Rubrene as a Sensitizer. Journal of Physical Chemistry C, 2020, 124, 9451-9459.	3.1	10
46	Temperature-dependent recombination dynamics and electroluminescence characteristics of colloidal CdSe/ZnS core/shell quantum dots. Applied Physics Letters, 2021, 119, .	3.3	10
47	84% efficiency improvement in all-inorganic perovskite light-emitting diodes assisted by a phosphorescent material. RSC Advances, 2018, 8, 15698-15702.	3.6	9
48	Large current efficiency enhancement in the CsPbBr3 perovskite light-emitting diodes assisted by an ultrathin buffer layer. Journal of Luminescence, 2019, 209, 251-257.	3.1	9
49	Large contribution of triplet excitons to electro-fluorescence in small molecular organic light-emitting diodes. Organic Electronics, 2011, 12, 1512-1517.	2.6	8
50	Dynamic Behaviors of Exciplex States in Rubrene/ <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:msub><mml:mrow><mml:mrow><mml:mi mathvariant="normal">C</mml:mi></mml:mrow></mml:mrow><mml:mn>60</mml:mn></mml:msub></mml:math> -Based OLEDs with Sub-Band-Gap Turn-On Electroluminescence. Physical Review Applied, 2021, 16, .	3.8	8
51	Simultaneous Sign Change of Magneto-Electroluminescence and Magneto-Conductance in Polymer/Colloidal Quantum Dot Nanocomposites. Journal of Physical Chemistry C, 2017, 121, 8128-8135.	3.1	7
52	30-Fold efficiency enhancement achieved in the perovskite light-emitting diodes. RSC Advances, 2017, 7, 50571-50577.	3.6	7
53	Supramolecular Motors on Graphite Surface Stabilized by Charge States and Hydrogen Bonds. ACS Nano, 2017, 11, 10236-10242.	14.6	7
54	The origin of interlayer-induced significant enhancement of EQE in CzDBA-based OLEDs studied by magneto-electroluminescence. Applied Physics Letters, 2021, 118, .	3.3	7

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55	Investigations of microscopic mechanisms in exciplex-based devices with isomers of mCBP and CBP as donors via magneto-electroluminescence. Wuli Xuebao/Acta Physica Sinica, 2022, 71, 087201.	0.5	7
56	STM study of a rubrene monolayer on Bi(001): Structural modulations. Physical Review B, 2011, 83, .	3.2	6
57	In situ investigation of energy transfer in hybrid organic/colloidal quantum dot light-emitting diodes via magneto-electroluminescence. Physical Chemistry Chemical Physics, 2016, 18, 22373-22378.	2.8	6
58	Spin-pair state-induced exceptional magnetic field responses from a thermally activated delayed fluorescence-assisted fluorescent material doping system. Physical Chemistry Chemical Physics, 2019, 21, 17673-17686.	2.8	6
59	Boosting the external quantum efficiency in perovskite light-emitting diodes by an exciton retrieving layer. Journal of Materials Chemistry C, 2019, 7, 8705-8711.	5.5	6
60	An unprecedented spike of the electroluminescence turn-on transience from guest-doped OLEDs with strong electron-donating abilities of host carbazole groups. Materials Horizons, 2021, 8, 2785-2796.	12.2	6
61	Observation of Reverse Intersystemâ€Crossing From the Upperâ€Level Triplet to Lowest Singlet Excitons (T₂â†’S₁) in Tetra(<i>t</i>â€butyl)rubreneâ€Based OLEDs for Enhanced Lightâ€Emission. Advanced Functional Materials, 2022, 32, .	14.9	6
62	Anomalous temperature dependent magneto-conductance in organic light-emitting diodes with multiple emissive states. Applied Physics Letters, 2015, 107, .	3.3	5
63	Tuning the polarity of organic magnetic field effects in polymer light-emitting diodes by incorporating a colloidal quantum dots thin layer. Organic Electronics, 2018, 55, 165-169.	2.6	5
64	Conversions from Normal to Abnormal Currentâ€Dependent ISC and from Abnormal to Normal Currentâ€Dependent RISC Processes in Exciplexâ€Based OLEDs. Advanced Materials Interfaces, 2022, 9, .	3.7	5
65	Realization of H-Type Aggregation in Rubrene-Doped OLEDs and Its Induced Enhancement of Delayed Fluorescence. Journal of Physical Chemistry C, 2022, 126, 9456-9465.	3.1	5
66	Efficient halide perovskite light-emitting diodes with emissive layer consisted of multilayer coatings. Journal of Applied Physics, 2019, 126, 165502.	2.5	4
67	Using magneto-electroluminescence as a fingerprint to identify the spin polarization and spinâ€“orbit coupling of magnetic nanoparticle doped polymer light emitting diodes. RSC Advances, 2019, 9, 15845-15851.	3.6	3
68	Trap-Enhanced Intersystem Crossing in Tris(8-hydroxyquinoline) Aluminum-Based Organic Light-Emitting Diodes via In Situ Heating. Journal of Physical Chemistry C, 2020, 124, 3218-3223.	3.1	2
69	High efficiency green perovskite light-emitting diodes based on exciton blocking layer. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 038501.	0.5	2
70	Slow recombination of the de-trapped carriers from doped OLEDs induced by spontaneous orientation polarization. Journal of Luminescence, 2022, 249, 119063.	3.1	2
71	Abnormal current dependence of high-level reverse intersystem crossing induced by Dexter energy transfer from hole-transporting layer. Journal of Materials Chemistry C, 2020, 8, 11061-11069.	5.5	1
72	An unreported peak of the electroluminescence turn-on transience from OLEDs with electron or hole potential well. Journal of Luminescence, 2022, 246, 118850.	3.1	0