Fengxian Xie

List of Publications by Year
in descending order

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Version: 2024-02-01

64 papers	6,408 citations	136950 32 h-index	110387 64 g-index
66 all docs	66 docs citations	66 times ranked	7870 citing authors

#	Article	IF	Citations
1	Dual Plasmonic Nanostructures for High Performance Inverted Organic Solar Cells. Advanced Materials, 2012, 24, 3046-3052.	21.0	654
2	A solvent- and vacuum-free route to large-area perovskite films for efficient solar modules. Nature, 2017, 550, 92-95.	27.8	618
3	Perovskite solar cells with 18.21% efficiency andÂarea over 1â€‰cm2 fabricated by heterojunctionÂengineering. Nature Energy, 2016, 1, .	39.5	555
4	Thermally Stable MAPbI₃ Perovskite Solar Cells with Efficiency of 19.19% and Area over 1 cm² achieved by Additive Engineering. Advanced Materials, 2017, 29, 1701073.	21.0	541
5	Vertical recrystallization for highly efficient and stable formamidinium-based inverted-structure perovskite solar cells. Energy and Environmental Science, 2017, 10, 1942-1949.	30.8	402
6	Diffusion engineering of ions and charge carriers for stable efficient perovskite solar cells. Nature Communications, 2017, 8, 15330.	12.8	356
7	Lowâ€Temperature Solutionâ€Processed Hydrogen Molybdenum and Vanadium Bronzes for an Efficient Holeâ€Transport Layer in Organic Electronics. Advanced Materials, 2013, 25, 2051-2055.	21.0	269
8	Optical and electrical properties of efficiency enhanced polymer solar cells with Au nanoparticles in a PEDOTâ€“PSS layer. Journal of Materials Chemistry, 2011, 21, 16349.	6.7	259
9	A Smooth CH₃NH₃PbI₃ Film via a New Approach for Forming the PbI₂ Nanostructure Together with Strategically High CH₃NH₃I Concentration for High Efficient Planarâ€Heterojunction Solar Cells. Advanced Energy Materials, 2015, 5, 1501354.	19.5	228
10	Efficient Passivation of Hybrid Perovskite Solar Cells Using Organic Dyes with ï£¿COOH Functional Group. Advanced Energy Materials, 2018, 8, 1800715.	19.5	187
11	Soft-cover deposition of scaling-up uniform perovskite thin films for high cost-performance solar cells. Energy and Environmental Science, 2016, 9, 2295-2301.	30.8	173
12	MoOx and V2Ox as hole and electron transport layers through functionalized intercalation in normal and inverted organic optoelectronic devices. Light: Science and Applications, 2015, 4, e273-e273.	16.6	169
13	Enhanced Stability of Perovskite Solar Cells through Corrosionâ€Free Pyridine Derivatives in Holeâ€Transporting Materials. Advanced Materials, 2016, 28, 10738-10743.	21.0	147
14	Plasmonic Electrically Functionalized TiO₂ for Highâ€Performance Organic Solar Cells. Advanced Functional Materials, 2013, 23, 4255-4261.	14.9	138
15	Control of Electrical Potential Distribution for High-Performance Perovskite Solar Cells. Joule, 2018, 2, 296-306.	24.0	138
16	Stable Inverted Planar Perovskite Solar Cells with Lowâ€Temperatureâ€Processed Holeâ€Transport Bilayer. Advanced Energy Materials, 2017, 7, 1700763.	19.5	115
17	Improving the Performance of Inverted Formamidinium Tin Iodide Perovskite Solar Cells by Reducing the Energy-Level Mismatch. ACS Energy Letters, 2018, 3, 1116-1121.	17.4	105
18	Annealing-free perovskite films by instant crystallization for efficient solar cells. Journal of Materials Chemistry A, 2016, 4, 8548-8553.	10.3	103

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19	Al-TiO₂ Composite-Modified Single-Layer Graphene as an Efficient Transparent Cathode for Organic Solar Cells. ACS Nano, 2013, 7, 1740-1747.	14.6	90
20	Room-temperature solution-processed molybdenum oxide as a hole transport layer with Ag nanoparticles for highly efficient inverted organic solar cells. Journal of Materials Chemistry A, 2013, 1, 6614.	10.3	89
21	Lowâ€Temperature Softâ€Cover Deposition of Uniform Largeâ€Scale Perovskite Films for Highâ€Performance Solar Cells. Advanced Materials, 2017, 29, 1701440.	21.0	74
22	Highâ€Performance Organic Solar Cells with Broadband Absorption Enhancement and Reliable Reproducibility Enabled by Collective Plasmonic Effects. Advanced Optical Materials, 2015, 3, 1220-1231.	7.3	66
23	Component regulation and crystallization mechanism of CsPbBr3/Cs4PbBr6 perovskite composite quantum dots-embedded borosilicate glass for light emitting application. Applied Surface Science, 2020, 512, 145655.	6.1	65
24	A comparative study of o,p-dimethoxyphenyl-based hole transport materials by altering Ï€-linker units for highly efficient and stable perovskite solar cells. Journal of Materials Chemistry A, 2017, 5, 10480-10485.	10.3	60
25	Highly luminescent water-soluble AgInS2/ZnS quantum dots-hydrogel composites for warm white LEDs. Journal of Alloys and Compounds, 2020, 824, 153896.	5.5	52
26	Over 1.1 eV Workfunction Tuning of Cesium Intercalated Metal Oxides for Functioning as Both Electron and Hole Transport Layers in Organic Optoelectronic Devices. Advanced Functional Materials, 2014, 24, 7348-7356.	14.9	44
27	Recent Advances in Blue Perovskite Quantum Dots for Lightâ€Emitting Diodes. Small, 2022, 18, e2103527.	10.0	43
28	Efficient hole transport layers with widely tunable work function for deep HOMO level organic solar cells. Journal of Materials Chemistry A, 2015, 3, 23955-23963.	10.3	40
29	Surface States Induced Photoluminescence Enhancement of Nitrogen-Doped Carbon Dots Via Post-Treatments. Nanoscale Research Letters, 2019, 14, 172.	5.7	40
30	Facile Synthesis and Optical Properties of CsPbX3/ZIF-8 Composites for Wide-Color-Gamut Display. Nanomaterials, 2019, 9, 832.	4.1	38
31	A New Interconnecting Layer of Metal Oxide/Dipole Layer/Metal Oxide for Efficient Tandem Organic Solar Cells. Advanced Energy Materials, 2015, 5, 1500631.	19.5	37
32	Discovery of Leadâ€Free Perovskites for Highâ€Performance Solar Cells via Machine Learning: Ultrabroadband Absorption, Low Radiative Combination, and Enhanced Thermal Conductivities. Advanced Science, 2022, 9, e2103648.	11.2	35
33	Spectrum projection with a bandgap-gradient perovskite cell for colour perception. Light: Science and Applications, 2020, 9, 162.	16.6	32
34	49.25% efficient cyan emissive sulfur dots via a microwave-assisted route. RSC Advances, 2020, 10, 17266-17269.	3.6	32
35	Thioacetamide-ligand-mediated synthesis of CsPbBr₃â€“CsPbBr₃ homostructured nanocrystals with enhanced stability. Journal of Materials Chemistry C, 2021, 9, 11349-11357.	5.5	31
36	Color-tunable optical properties of cadmium-free transition metal ions doped InP/ZnS quantum dots. Journal of Luminescence, 2019, 212, 264-270.	3.1	29

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37	Dual-emission of silicon nanoparticles encapsulated lanthanide-based metal-organic frameworks for ratiometric fluorescence detection of bacterial spores. Mikrochimica Acta, 2020, 187, 666.	5.0	25
38	Synergistic Effect of Halogen Ions and Shelling Temperature on Anion Exchange Induced Interfacial Restructuring for Highly Efficient Blue Emissive InP/ZnS Quantum Dots. Small, 2022, 18, e2108120.	10.0	23
39	Narrow band-gap cathode Fe3(PO4)2 for sodium-ion battery with enhanced sodium storage. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 591, 124561.	4.7	22
40	Emission tuning of highly efficient quaternary Ag-Cu-Ga-Se/ZnSe quantum dots for white light-emitting diodes. Journal of Colloid and Interface Science, 2021, 602, 307-315.	9.4	22
41	Highly luminescent copper gallium selenium based multicomponent quantum dots: Formation process and tunable white-light emission. Applied Surface Science, 2021, 538, 147907.	6.1	21
42	Enhanced tunable dual emission of Cu:InP/ZnS quantum dots enabled by introducing Ag ions. Applied Surface Science, 2019, 493, 605-612.	6.1	20
43	Gadolinium-doped carbon dots with high-performance in dual-modal molecular imaging. Analytical Methods, 2021, 13, 2442-2449.	2.7	20
44	A Review of Modification Methods of Solid Electrolytes for Allâ€Solidâ€State Sodiumâ€Ion Batteries. Energy Technology, 2021, 9, 2000682.	3.8	19
45	Functions of Self-Assembled Ultrafine TiO₂ Nanocrystals for High Efficient Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2014, 6, 5367-5373.	8.0	18
46	Synthesis and structure design of Iâ€“IIIâ€“VI quantum dots for white light-emitting diodes. Materials Chemistry Frontiers, 2022, 6, 418-429.	5.9	18
47	Broadband enhancement of spontaneous emission in a photonic-plasmonic structure. Optics Letters, 2012, 37, 2037.	3.3	17
48	Smooth CH₃NH₃PbI₃from controlled solidâ€“gas reaction for photovoltaic applications. RSC Advances, 2015, 5, 73760-73766.	3.6	17
49	Optical and Morphological Properties of Single-Phased and Dual-Emissive InP/ZnS Quantum Dots via Transition Metallic and Inorganic Ions. Langmuir, 2020, 36, 10244-10250.	3.5	15
50	Rapid large-scale synthesis of highly emissive solid-state metal halide perovskite quantum dots across the full visible spectrum. Optics and Laser Technology, 2021, 143, 107369.	4.6	13
51	Accurate and fast evaluation of perovskite solar cells with least hysteresis. Applied Physics Express, 2017, 10, 076601.	2.4	12
52	Highly efficient Mn-doped CsPb(Br/Cl)3 mixed-halide perovskite via a simple large-scale synthesis method. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 273, 115426.	3.5	12
53	Exploring novel ligands with strong electron delocalization for high-performance blue CsPbBr₃ perovskite nanoplatelets. Journal of Materials Chemistry C, 2022, 10, 9834-9840.	5.5	12
54	Role of organic cation orientation in formamidine based perovskite materials. Scientific Reports, 2021, 11, 20433.	3.3	11

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55	Stability of electroluminescent perovskite quantum dots lightâ€emitting diode. Nano Select, 2022, 3, 505-530.	3.7	10
56	Simple Structural Descriptor Obtained from Symbolic Classification for Predicting the Oxygen Vacancy Defect Formation of Perovskites. ACS Applied Materials & Interfaces, 2022, 14, 11758-11767.	8.0	9
57	Investigating the Electrochemical Performance of Smart Selfâ€Powered Bionic Skin Fragment Based on Bioelectricity Generation. Advanced Materials Technologies, 2021, 6, 2000848.	5.8	5
58	One-step synthesis of high-quality vanadium disulfide quantum dots for long-term lysosome-targetable imaging. Sensors and Actuators B: Chemical, 2021, 346, 130544.	7.8	4
59	Design and Mechanism of a Selfâ€Powered and Disintegrationâ€“Reorganizationâ€“Regeneration Power Supply with Cold Resistance. Advanced Materials, 2021, 33, e2101239.	21.0	2
60	Organic Light-Emitting Diodes Array With High-Luminance Stability and Low-Lateral Leakage by Hybridized Plasma Treatments. IEEE Transactions on Electron Devices, 2022, 69, 1107-1114.	3.0	2
61	Eliminating hysteresis effects in flexible organic light-emitting diodes. Organic Electronics, 2022, 103, 106467.	2.6	2
62	An effective optics-electrochemistry approach to random packing density of non-equiaxed ellipsoids. Materialia, 2020, 12, 100750.	2.7	1
63	Novel Solid-State Sodium-Ion Battery with Wide Band Gap NaTi₂(PO₄)₃ Nanocrystal Electrolyte. ACS Omega, 2021, 6, 11537-11544.	3.5	1
64	Cation Crosslinking-Induced Stable Copper Nanoclusters Powder as Latent Fingerprints Marker. Nanomaterials, 2021, 11, 3371.	4.1	1