He Huang

List of Publications by Year
in descending order

52	5,981	156536	206121
papers	citations	32 h-index	51 g-index

55	55	55	8928
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Lead Halide Perovskite Nanocrystals in the Research Spotlight: Stability and Defect Tolerance. ACS Energy Letters, 2017, 2, 2071-2083.	8.8	888
2	Enhancing the Brightness of Cesium Lead Halide Perovskite Nanocrystal Based Green Light-Emitting Devices through the Interface Engineering with Perfluorinated Ionomer. Nano Letters, 2016, 16, 1415-1420.	4.5	685
3	Control of Emission Color of High Quantum Yield CH₃NH₃PbBr₃ Perovskite Quantum Dots by Precipitation Temperature. Advanced Science, 2015, 2, 1500194.	5.6	536
4	Water resistant CsPbX₃ nanocrystals coated with polyhedral oligomeric silsesquioxane and their use as solid state luminophores in all-perovskite white light-emitting devices. Chemical Science, 2016, 7, 5699-5703.	3.7	499
5	Cutting sp2 clusters in graphene sheets into colloidal graphene quantum dots with strong green fluorescence. Journal of Materials Chemistry, 2012, 22, 3314.	6.7	423
6	Colloidal lead halide perovskite nanocrystals: synthesis, optical properties and applications. NPG Asia Materials, 2016, 8, e328-e328.	3.8	385
7	Neutral and Charged Exciton Fine Structure in Single Lead Halide Perovskite Nanocrystals Revealed by Magneto-optical Spectroscopy. Nano Letters, 2017, 17, 2895-2901.	4.5	216
8	Growth mechanism of strongly emitting CH3NH3PbBr3 perovskite nanocrystals with a tunable bandgap. Nature Communications, 2017, 8, 996.	5.8	210
9	Twinning in metastable high-entropy alloys. Nature Communications, 2018, 9, 2381.	5.8	155
10	Room-Temperature Solution-Processed NiO_x:PbI₂ Nanocomposite Structures for Realizing High-Performance Perovskite Photodetectors. ACS Nano, 2016, 10, 6808-6815.	7.3	122
11	Advances in metal halide perovskite nanocrystals: Synthetic strategies, growth mechanisms, and optoelectronic applications. Materials Today, 2020, 32, 204-221.	8.3	114
12	Revealing the Formation Mechanism of CsPbBr₃ Perovskite Nanocrystals Produced via a Slowedâ€Down Microwaveâ€Assisted Synthesis. Angewandte Chemie - International Edition, 2018, 57, 5833-5837.	7.2	109
13	Polyhedral Oligomeric Silsesquioxane Enhances the Brightness of Perovskite Nanocrystal-Based Green Light-Emitting Devices. Journal of Physical Chemistry Letters, 2016, 7, 4398-4404.	2.1	105
14	Topâ€Down Fabrication of Stable Methylammonium Lead Halide Perovskite Nanocrystals by Employing a Mixture of Ligands as Coordinating Solvents. Angewandte Chemie - International Edition, 2017, 56, 9571-9576.	7.2	98
15	Spontaneous Crystallization of Perovskite Nanocrystals in Nonpolar Organic Solvents: A Versatile Approach for their Shapeâ€Controlled Synthesis. Angewandte Chemie - International Edition, 2019, 58, 16558-16562.	7.2	96
16	Using Polar Alcohols for the Direct Synthesis of Cesium Lead Halide Perovskite Nanorods with Anisotropic Emission. ACS Nano, 2019, 13, 8237-8245.	7.3	84
17	Carbonization conditions influence the emission characteristics and the stability against photobleaching of nitrogen doped carbon dots. Nanoscale, 2017, 9, 11730-11738.	2.8	83
18	Dextran Sulfate Lithium as Versatile Binder to Stabilize Highâ€Voltage LiCoO₂ to 4.6 V. Advanced Energy Materials, 2021, 11, 2101864.	10.2	80

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19	Chemical Cutting of Perovskite Nanowires into Singleâ€Photon Emissive Lowâ€Aspectâ€Ratio CsPbX₃ (X=Cl, Br, I) Nanorods. Angewandte Chemie - International Edition, 2018, 57, 16094-16098.	7.2	79
20	C-axis preferentially oriented and fully activated TiO₂ nanotube arrays for lithium ion batteries and supercapacitors. Journal of Materials Chemistry A, 2014, 2, 11454-11464.	5.2	75
21	Nearly monodisperse graphene quantum dots fabricated by amine-assisted cutting and ultrafiltration. Nanoscale, 2013, 5, 12098.	2.8	73
22	Excitons and Biexciton Dynamics in Single CsPbBr₃ Perovskite Quantum Dots. Journal of Physical Chemistry Letters, 2018, 9, 6934-6940.	2.1	73
23	Templatedâ€Assembly of CsPbBr₃ Perovskite Nanocrystals into 2D Photonic Supercrystals with Amplified Spontaneous Emission. Angewandte Chemie - International Edition, 2020, 59, 17750-17756.	7.2	72
24	Manganeseâ€Dopingâ€Induced Quantum Confinement within Host Perovskite Nanocrystals through Ruddlesdenâ€“Popper Defects. Angewandte Chemie - International Edition, 2020, 59, 6794-6799.	7.2	72
25	Transfer of Direct to Indirect Bound Excitons by Electron Intervalley Scattering in Cs₂AgBiBr₆ Double Perovskite Nanocrystals. ACS Nano, 2020, 14, 5855-5861.	7.3	58
26	Coherent vibrational dynamics reveals lattice anharmonicity in organicâ€“inorganic halide perovskite nanocrystals. Nature Communications, 2021, 12, 2629.	5.8	58
27	Reversible transformation between CsPbBr₃ and Cs₄PbBr₆ nanocrystals. CrystEngComm, 2018, 20, 4900-4904.	1.3	48
28	Ternary Snâ€“Tiâ€“O Based Nanostructures as Anodes for Lithium Ion Batteries. Small, 2015, 11, 1364-1383.	5.2	47
29	Efficient near-infrared light-emitting diodes based on organometallic halide perovskiteâ€“poly(2-ethyl-2-oxazoline) nanocomposite thin films. Nanoscale, 2016, 8, 19846-19852.	2.8	43
30	Application of Two-Dimensional Correlation Infrared Spectroscopy to the Study of Miscible Polymer Blends. Macromolecules, 2003, 36, 8156-8163.	2.2	39
31	Growth of Perovskite CsPbBr₃ Nanocrystals and Their Formed Superstructures Revealed by In Situ Spectroscopy. Chemistry of Materials, 2020, 32, 8877-8884.	3.2	39
32	Two-Dimensional Correlation Infrared Spectroscopic Study ofN-Methylacetamide as a Function of Temperature. Journal of Physical Chemistry A, 2003, 107, 7697-7703.	1.1	32
33	Application of Two-Dimensional Correlation Infrared Spectroscopy to the Study of Immiscible Polymer Blends. Macromolecules, 2003, 36, 8148-8155.	2.2	32
34	Chemical Cutting of Perovskite Nanowires into Singleâ€Photon Emissive Lowâ€Aspectâ€Ratio CsPbX₃ (X=Cl, Br, I) Nanorods. Angewandte Chemie, 2018, 130, 16326-16330.	1.6	32
35	Topâ€Down Fabrication of Stable Methylammonium Lead Halide Perovskite Nanocrystals by Employing a Mixture of Ligands as Coordinating Solvents. Angewandte Chemie, 2017, 129, 9699-9704.	1.6	31
36	Co single atoms and nanoparticles dispersed on N-doped carbon nanotube as high-performance catalysts for Zn-air batteries. Rare Metals, 2022, 41, 2055-2062.	3.6	27

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37	Interfacial Manganeseâ€Doping in CsPbBr₃ Nanoplatelets by Employing a Molecular Shuttle. Angewandte Chemie - International Edition, 2022, 61, .	7.2	25
38	Application of Generalized Two-Dimensional Infrared Correlation Spectroscopy to the Study of a Hydrogen-Bonded Blend. Applied Spectroscopy, 2004, 58, 1074-1081.	1.2	23
39	Exciton Diffusion Lengths and Dissociation Rates in CsPbBr₃ Nanocrystalâ€“Fullerene Composites: Layerâ€byâ€Layer versus Blend Structures. Advanced Optical Materials, 2019, 7, 1801776.	3.6	23
40	A Building Brick Principle to Create Transparent Composite Films with Multicolor Emission and Selfâ€Healing Function. Small, 2018, 14, e1800315.	5.2	21
41	Fast recognition of single quantum dots from high multi-exciton emission and clustering effects. Optics Express, 2018, 26, 4674.	1.7	18
42	Revealing the Formation Mechanism of CsPbBr₃ Perovskite Nanocrystals Produced via a Slowedâ€Down Microwaveâ€Assisted Synthesis. Angewandte Chemie, 2018, 130, 5935-5939.	1.6	12
43	Coupling a Three-Dimensional Nanopillar and Robust Film to Guide Li-Ion Flux for Dendrite-Free Lithium Metal Anodes. ACS Applied Materials & Interfaces, 2021, 13, 45416-45425.	4.0	8
44	Manganâ€Dotierung von Perowskitâ€Nanokristallen: QuanteneinschrÃnkung Aufgrund von Ruddlesdenâ€Popperâ€Defekten. Angewandte Chemie, 2020, 132, 6860-6865.	1.6	7
45	Templateâ€basierte Herstellung von 2Dâ€photonischen Superkristallen mit verstÃrkter spontaner Emission aus CsPbBr 3 â€Perowskitâ€Nanokristallen. Angewandte Chemie, 2020, 132, 17903-17909.	1.6	6
46	Spontane Kristallisation von Perowskitâ€Nanokristallen in unpolaren organischen LÃ¶sungsmitteln: Ein vielseitiges Konzept fÃ¼r deren morphologiekontrollierende Synthese. Angewandte Chemie, 2019, 131, 16710-16715.	1.6	5
47	Facile Synthesis of FAPbI3 Nanorods. Nanomaterials, 2020, 10, 72.	1.9	5
48	Efficient Interfacial Synthesis Strategy for Perovskite CsPbBr₃ Nanorods in the Biphase Solution. Advanced Materials Technologies, 2022, 7, .	3.0	5
49	Synthesis of Perovskite Nanocrystals. Springer Series in Materials Science, 2020, , 1-18.	0.4	2
50	Interfacial Manganeseâ€Doping in CsPbBr₃ Nanoplatelets by Employing a Molecular Shuttle. Angewandte Chemie, 2022, 134, .	1.6	2
51	Titelbild: Templateâ€basierte Herstellung von 2Dâ€photonischen Superkristallen mit verstÃrkter spontaner Emission aus CsPbBr₃â€Perowskitâ€Nanokristallen (Angew. Chem. 40/2020). Angewandte Chemie, 2020, 132, 17457-17457.	1.6	0
52	RÃ¼cktitelbild: Manganâ€Dotierung von Perowskitâ€Nanokristallen: QuanteneinschrÃnkung Aufgrund von Ruddlesdenâ€Popperâ€Defekten (Angew. Chem. 17/2020). Angewandte Chemie, 2020, 132, 7004-7004.	1.6	0