

# Muhan Cao

## List of Publications by Year in descending order

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54  
papers

3,557  
citations

218677  
26  
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161849  
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54  
all docs

54  
docs citations

54  
times ranked

3771  
citing authors

#	ARTICLE	IF	CITATIONS
1	State of the Art and Prospects for Halide Perovskite Nanocrystals. ACS Nano, 2021, 15, 10775-10981.	14.6	705
2	One-Pot Synthesis of Highly Stable CsPbBr <sub>3</sub> @SiO <sub>2</sub> Core-Shell Nanoparticles. ACS Nano, 2018, 12, 8579-8587.	14.6	447
3	All-inorganic cesium lead halide perovskite nanocrystals: synthesis, surface engineering and applications. Journal of Materials Chemistry C, 2019, 7, 757-789.	5.5	193
4	Hydrochromic CsPbBr <sub>3</sub> Nanocrystals for Anti-Counterfeiting. Angewandte Chemie - International Edition, 2020, 59, 14527-14532.	13.8	190
5	L-Type Ligand-Assisted Acid-Free Synthesis of CsPbBr <sub>3</sub> Nanocrystals with Near-Unity Photoluminescence Quantum Yield and High Stability. Nano Letters, 2019, 19, 4151-4157.	9.1	177
6	Improving the Stability and Size Tunability of Cesium Lead Halide Perovskite Nanocrystals Using Trioctylphosphine Oxide as the Capping Ligand. Langmuir, 2017, 33, 12689-12696.	3.5	165
7	Fabricating CsPbX <sub>3</sub> -Based Type I and Type II Heterostructures by Tuning the Halide Composition of Janus CsPbX <sub>3</sub> /ZrO <sub>2</sub> Nanocrystals. ACS Nano, 2019, 13, 5366-5374.	14.6	147
8	Solvothermal Synthesis of Alloyed PtNi Colloidal Nanocrystal Clusters (CNCs) with Enhanced Catalytic Activity for Methanol Oxidation. Advanced Functional Materials, 2018, 28, 1704774.	14.9	126
9	Interfacial engineering of noble metals for electrocatalytic methanol and ethanol oxidation. Journal of Materials Chemistry A, 2020, 8, 15445-15457.	10.3	103
10	Bi(OH) <sub>3</sub> /PdBi Composite Nanochains as Highly Active and Durable Electrocatalysts for Ethanol Oxidation. Nano Letters, 2019, 19, 4752-4759.	9.1	99
11	Interfacial Synthesis of Monodisperse CsPbBr <sub>3</sub> Nanorods with Tunable Aspect Ratio and Clean Surface for Efficient Light-Emitting Diode Applications. Chemistry of Materials, 2019, 31, 1575-1583.	6.7	78
12	Intermetallic PtBi core/ultrathin Pt shell nanoplates for efficient and stable methanol and ethanol electro-oxidation. Nano Research, 2019, 12, 429-436.	10.4	76
13	The Synergy between Metal Facet and Oxide Support Facet for Enhanced Catalytic Performance: The Case of Pd@TiO <sub>2</sub> . Nano Letters, 2016, 16, 5298-5302.	9.1	69
14	Collective Plasmon Coupling in Gold Nanoparticle Clusters for Highly Efficient Photothermal Therapy. ACS Nano, 2022, 16, 910-920.	14.6	65
15	Fabricating MAPbI <sub>3</sub> /MoS <sub>2</sub> Composites for Improved Photocatalytic Performance. Nano Letters, 2021, 21, 597-604.	9.1	60
16	Perovskite Nanocrystals: Synthesis, Stability, and Optoelectronic Applications. Small Structures, 2021, 2, 2000124.	12.0	53
17	Controlled growth of dodecapod-branched CsPbBr <sub>3</sub> nanocrystals and their application in white light emitting diodes. Nano Energy, 2018, 53, 559-566.	16.0	45
18	Porous Pt nanoframes decorated with Bi(OH) <sub>3</sub> as highly efficient and stable electrocatalyst for ethanol oxidation reaction. Nano Research, 2020, 13, 265-272.	10.4	45

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19	Construction of Single-Atom Platinum Catalysts Enabled by CsPbBr <sub>3</sub> Nanocrystals. ACS Nano, 2021, 15, 13129-13139.	14.6	44
20	Revealing the Correlation between Catalytic Selectivity and the Local Coordination Environment of Pt Single Atom. Nano Letters, 2020, 20, 6865-6872.	9.1	42
21	Low-Dimensional Networked Cesium Lead Halide Perovskites: Properties, Fabrication, and Applications. Small Methods, 2020, 4, 2000303.	8.6	38
22	Imaging the kinetics of anisotropic dissolution of bimetallic core-shell nanocubes using graphene liquid cells. Nature Communications, 2020, 11, 3041.	12.8	36
23	Highly Stable CsPbBr <sub>3</sub> Colloidal Nanocrystal Clusters as Photocatalysts in Polar Solvents. ACS Applied Materials & Interfaces, 2021, 13, 4017-4025.	8.0	31
24	Facile one-step synthesis of PdPb nanochains for high-performance electrocatalytic ethanol oxidation. Rare Metals, 2020, 39, 792-799.	7.1	30
25	Highly Stable CsPbX <sub>3</sub> /PbSO <sub>4</sub> Core/Shell Nanocrystals Synthesized by a Simple Post-treatment Strategy. Advanced Optical Materials, 2021, 9, 2001763.	7.3	30
26	Recent advances and perspectives on light emitting diodes fabricated from halide metal perovskite nanocrystals. Journal of Materials Chemistry C, 2019, 7, 14412-14440.	5.5	29
27	Synergistic combination of Pd nanosheets and porous Bi(OH) <sub>3</sub> boosts activity and durability for ethanol oxidation reaction. Nano Research, 2022, 15, 3920-3926.	10.4	28
28	Sintering-Resistant Pt on Ga <sub>2</sub> O <sub>3</sub> Rods for Propane Dehydrogenation: The Morphology Matters. Industrial & Engineering Chemistry Research, 2018, 57, 13087-13093.	3.7	27
29	Consecutive Interfacial Transformation of Cesium Lead Halide Nanocubes to Ultrathin Nanowires with Improved Stability. ACS Applied Materials & Interfaces, 2019, 11, 3351-3359.	8.0	27
30	Recent advances and perspective on the synthesis and photocatalytic application of metal halide perovskite nanocrystals. Nano Research, 2021, 14, 3773-3794.	10.4	27
31	Cooperative interactions among CTA <sup>+</sup> , Br <sup>-</sup> and Ag <sup>+</sup> during seeded growth of gold nanorods. Nano Research, 2017, 10, 2146-2155.	10.4	25
32	Interfacial Manganese Doping in CsPbBr <sub>3</sub> Nanoplatelets by Employing a Molecular Shuttle. Angewandte Chemie - International Edition, 2022, 61, .	13.8	25
33	Photoreversible luminescence switching of CsPbI <sub>3</sub> nanocrystals sensitized by photochromic AgI nanocrystals. Nanoscale, 2019, 11, 3193-3199.	5.6	24
34	Solvothermal synthesis of cesium lead halide nanocrystals with controllable dimensions: a stoichiometry defined growth mechanism. Journal of Materials Chemistry C, 2019, 7, 14493-14498.	5.5	23
35	Revealing the Active Sites of Pd Nanocrystals for Propyne Semihydrogenation: From Theory to Experiment. ACS Catalysis, 2019, 9, 8471-8480.	11.2	22
36	Strong metal-support interaction between palladium and gallium oxide within monodisperse nanoparticles: self-supported catalysts for propyne semi-hydrogenation. Journal of Catalysis, 2021, 395, 36-45.	6.2	21

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37	Regulating the Interfacial Synergy of Ni/Ga <sub>2</sub> O <sub>3</sub> for CO <sub>2</sub> Hydrogenation toward the Reverse Water-Gas Shift Reaction. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 9448-9455.	3.7	21
38	Ultra-Stable CsPbX <sub>3</sub> @Pyrophosphate Nanoparticles in Water over One Year. <i>Small</i> , 2022, 18, e2107548.	10.0	20
39	Hydrochromic CsPbBr <sub>3</sub> Nanocrystals for Anti-Counterfeiting. <i>Angewandte Chemie</i> , 2020, 132, 14635-14640.	2.0	18
40	Recent advances and perspective on heterogeneous catalysis using metals and oxide nanocrystals. <i>Materials Chemistry Frontiers</i> , 2021, 5, 151-222.	5.9	18
41	The Impact of Precursor Ratio on the Synthetic Production, Surface Chemistry, and Photovoltaic Performance of CsPb <sub>3</sub> Perovskite Quantum Dots. <i>Solar Rrl</i> , 2021, 5, 2100090.	5.8	17
42	Reversible transformation of all-inorganic copper halide perovskite nanocrystals for anti-counterfeiting. <i>Dalton Transactions</i> , 2021, 50, 12826-12830.	3.3	14
43	Encapsulation of lead halide perovskite nanocrystals (NCs) at the single-particle level: strategies and properties. <i>Nanoscale</i> , 2021, 13, 19341-19351.	5.6	13
44	Facet-Selective Deposition of Metal (M=Au, Pt, Pd) Nanoparticles on Co <sub>3</sub> O <sub>4</sub> Crystals: Magnetically Separable Photocatalyst with Improved Catalytic Performance. <i>ChemPlusChem</i> , 2018, 83, 334-338.	2.8	11
45	Fully Alloying AuAg Nanorods in a Photothermal Nano-Oven: Superior Plasmonic Property and Enhanced Chemical Stability. <i>ACS Omega</i> , 2018, 3, 18623-18629.	3.5	10
46	Stabilizing Oxygen Vacancies in ZrO <sub>2</sub> by Ga <sub>2</sub> O <sub>3</sub> Boosts the Direct Dehydrogenation of Light Alkanes. <i>ACS Catalysis</i> , 2021, 11, 10159-10169.	11.2	9
47	One-pot reprecipitation strategy to synthesize CsPbX <sub>3</sub> /Pb <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> composite nanocrystals. <i>Journal of Materials Chemistry C</i> , 2021, 9, 466-471.	5.5	9
48	Regulation of surface carbides on palladium nanocubes with zeolitic imidazolate frameworks for propyne selective hydrogenation. <i>Nano Research</i> , 2021, 14, 1559-1564.	10.4	5
49	Efficient Interfacial Synthesis Strategy for Perovskite CsPbBr <sub>3</sub> Nanorods in the Biphasic Solution. <i>Advanced Materials Technologies</i> , 2022, 7, .	5.8	5
50	Kinetics-Controlled Interfacial Synthesis of Janus and Patchy Heterostructures Based on Perovskite Nanocrystals. <i>Advanced Optical Materials</i> , 2022, 10, .	7.3	4
51	Colloidal Synthesis of Au@Pd Core-Shell Nanorods with Tunable Dimensions and Enhanced Electrocatalytic Activities. <i>Topics in Catalysis</i> , 2018, 61, 949-957.	2.8	3
52	An etching-redeposition isomerization process for the shape control of anatase TiO <sub>2</sub> nanocrystals. <i>Materials Chemistry Frontiers</i> , 2019, 3, 874-880.	5.9	3
53	Improved photophysical properties and durability of CsPbBr <sub>3</sub> NCs endowed by inorganic oxoacid and bromide ions. <i>Nanoscale</i> , 2021, 13, 9634-9640.	5.6	3
54	Interfacial Manganese-Doping in CsPbBr <sub>3</sub> Nanoplatelets by Employing a Molecular Shuttle. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	2