

# Bin Cai

## List of Publications by Year in descending order

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Version: 2024-02-01

41  
papers

2,373  
citations

257450

24  
h-index

276875

41  
g-index

43  
all docs

43  
docs citations

43  
times ranked

3336  
citing authors

#	ARTICLE	IF	CITATIONS
1	Engineering of aerogel-based electrocatalysts for oxygen evolution reaction. <i>Electrochemical Science Advances</i> , 2022, 2, e2100113.	2.8	1
2	Tunable metal hydroxide-organic frameworks for catalysing oxygen evolution. <i>Nature Materials</i> , 2022, 21, 673-680.	27.5	123
3	Frontispiece: Peptoid-Directed Formation of Five-Fold Twinned Au Nanostars through Particle Attachment and Facet Stabilization. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	1
4	Peptoid-Directed Formation of Five-Fold Twinned Au Nanostars through Particle Attachment and Facet Stabilization. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	2
5	Peptoid-Directed Formation of Five-Fold Twinned Au Nanostars through Particle Attachment and Facet Stabilization. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	5
6	Self-Supported Three-Dimensional Quantum Dot Aerogels as a Promising Photocatalyst for CO <sub>2</sub> Reduction. <i>Chemistry of Materials</i> , 2022, 34, 2687-2695.	6.7	12
7	Frontispiz: Peptoid-Directed Formation of Five-Fold Twinned Au Nanostars through Particle Attachment and Facet Stabilization. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	0
8	Molecular Driving Force for Facet Selectivity of Sequence-Defined Amphiphilic Peptoids at Au-Water Interfaces. <i>Journal of Physical Chemistry B</i> , 2022, 126, 5117-5126.	2.6	6
9	Programming Amphiphilic Peptoid Oligomers for Hierarchical Assembly and Inorganic Crystallization. <i>Accounts of Chemical Research</i> , 2021, 54, 81-91.	15.6	34
10	Nanoparticle-Mediated Assembly of Peptoid Nanosheets Functionalized with Solid-Binding Proteins: Designing Heterostructures for Hierarchy. <i>Nano Letters</i> , 2021, 21, 1636-1642.	9.1	31
11	Hierarchical Nanomaterials Assembled from Peptoids and Other Sequence-Defined Synthetic Polymers. <i>Chemical Reviews</i> , 2021, 121, 14031-14087.	47.7	61
12	Enhancing oxygen reduction electrocatalysis by tuning interfacial hydrogen bonds. <i>Nature Catalysis</i> , 2021, 4, 753-762.	34.4	122
13	Peptoid-directed assembly of CdSe nanoparticles. <i>Nanoscale</i> , 2021, 13, 1273-1282.	5.6	18
14	Synthesis of unsupported two-dimensional molybdenum carbide nanosheets for hydrogen evolution. <i>Materials Letters</i> , 2020, 261, 126987.	2.6	22
15	An improved separation scheme for Sr through fluoride coprecipitation combined with a cation-exchange resin from geological samples with high Rb/Sr ratios for high-precision determination of Sr isotope ratios. <i>Journal of Analytical Atomic Spectrometry</i> , 2020, 35, 953-960.	3.0	19
16	Peptoid-based hierarchically-structured biomimetic nanomaterials: Synthesis, characterization and applications. <i>Science China Materials</i> , 2020, 63, 1099-1112.	6.3	10
17	Selective selenization of mixed-linker Ni-MOFs: NiSe <sub>2</sub> @NC core-shell nano-octahedrons with tunable interfacial electronic structure for hydrogen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2020, 272, 118976.	20.2	111
18	Solid-State Gelation for Nanostructured Perovskite Oxide Aerogels. <i>Chemistry of Materials</i> , 2019, 31, 9422-9429.	6.7	17

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19	Ligand-Exchange-Mediated Fabrication of Gold Aerogels Containing Different Au(I) Content with Peroxidase-like Behavior. <i>Chemistry of Materials</i> , 2019, 31, 10094-10099.	6.7	26
20	2020 roadmap on pore materials for energy and environmental applications. <i>Chinese Chemical Letters</i> , 2019, 30, 2110-2122.	9.0	75
21	Promoting Electrocatalysis upon Aerogels. <i>Advanced Materials</i> , 2019, 31, e1804881.	21.0	146
22	Kern-Schale-Strukturierung rein metallischer Aerogele für eine hocheffiziente Nutzung von Platin für die Sauerstoffreduktion. <i>Angewandte Chemie</i> , 2018, 130, 3014-3018.	2.0	7
23	Core-Shell Structuring of Pure Metallic Aerogels towards Highly Efficient Platinum Utilization for the Oxygen Reduction Reaction. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 2963-2966.	13.8	154
24	Emerging Hierarchical Aerogels: Self-Assembly of Metal and Semiconductor Nanocrystals. <i>Advanced Materials</i> , 2018, 30, e1707518.	21.0	104
25	Multimetallic Hierarchical Aerogels: Shape Engineering of the Building Blocks for Efficient Electrocatalysis. <i>Advanced Materials</i> , 2017, 29, 1605254.	21.0	98
26	Hybrid N-Butylamine-Based Ligands for Switching the Colloidal Solubility and Regimentation of Inorganic-Capped Nanocrystals. <i>ACS Nano</i> , 2017, 11, 1559-1571.	14.6	49
27	Nanostructuring Noble Metals as Unsupported Electrocatalysts for Polymer Electrolyte Fuel Cells. <i>Advanced Energy Materials</i> , 2017, 7, 1700548.	19.5	76
28	Microtubular Fuel Cell with Ultrahigh Power Output per Footprint. <i>Advanced Materials</i> , 2017, 29, 1607046.	21.0	18
29	Precise Engineering of Nanocrystal Shells via Colloidal Atomic Layer Deposition. <i>Chemistry of Materials</i> , 2017, 29, 8111-8118.	6.7	21
30	Quantum-Dot-in-Polymer Composites via Advanced Surface Engineering. <i>Small Methods</i> , 2017, 1, 1700189.	8.6	29
31	3D Assembly of All-Inorganic Colloidal Nanocrystals into Gels and Aerogels. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 6334-6338.	13.8	75
32	3D-Anordnung anorganischer kolloidaler Nanokristalle zu Gelen und Aerogelen. <i>Angewandte Chemie</i> , 2016, 128, 6442-6446.	2.0	9
33	Function-Led Design of Aerogels: Self-Assembly of Alloyed PdNi Hollow Nanospheres for Efficient Electrocatalysis. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 13101-13105.	13.8	180
34	Hierarchically Z-scheme photocatalyst of Ag@AgCl decorated on BiVO <sub>4</sub> (0 4 0) with enhancing photoelectrochemical and photocatalytic performance. <i>Applied Catalysis B: Environmental</i> , 2015, 170-171, 206-214.	20.2	325
35	Efficiently photocatalytic reduction of carcinogenic contaminant Cr (VI) upon robust AgCl:Ag hollow nanocrystals. <i>Applied Catalysis B: Environmental</i> , 2015, 164, 344-351.	20.2	89
36	A distinctive red Ag/AgCl photocatalyst with efficient photocatalytic oxidative and reductive activities. <i>Journal of Materials Chemistry A</i> , 2014, 2, 5280-5286.	10.3	78

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37	Ce-/S-codoped TiO <sub>2</sub> /Sulfonated graphene for photocatalytic degradation of organic dyes. Journal of Materials Chemistry A, 2014, 2, 13565-13570.	10.3	30
38	High performance Pd nanocrystals supported on SnO <sub>2</sub> -decorated graphene for aromatic nitro compound reduction. Journal of Materials Chemistry A, 2014, 2, 3461-3467.	10.3	45
39	Ternary alloyed AgCl <sub>x</sub> Br <sub>1-x</sub> nanocrystals: facile modulation of electronic structures toward advanced photocatalytic performance. Nanoscale, 2013, 5, 10989.	5.6	27
40	Advanced visible-light-driven photocatalyst upon the incorporation of sulfonated graphene. Nanoscale, 2013, 5, 1910.	5.6	35
41	Effective Solid Contact for Ion-Selective Electrodes: Tetrakis(4-chlorophenyl)borate (TB <sup>-</sup> ) Anions Doped Nanocluster Films. Analytical Chemistry, 2012, 84, 3480-3483.	6.5	62