Bin Cai

List of Publications by Year
in descending order

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	Hierarchically Z-scheme photocatalyst of Ag@AgCl decorated on BiVO4 (0 4 0) with enhancing photoelectrochemical and photocatalytic performance. Applied Catalysis B: Environmental, 2015, 170-171, 206-214.	20.2	325
2	Functionâ€Led Design of Aerogels: Selfâ€Assembly of Alloyed PdNi Hollow Nanospheres for Efficient Electrocatalysis. Angewandte Chemie - International Edition, 2015, 54, 13101-13105.	13.8	180
3	Coreâ€“Shell Structuring of Pure Metallic Aerogels towards Highly Efficient Platinum Utilization for the Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2018, 57, 2963-2966.	13.8	154
4	Promoting Electrocatalysis upon Aerogels. Advanced Materials, 2019, 31, e1804881.	21.0	146
5	Tunable metal hydroxideâ€“organic frameworks for catalysing oxygen evolution. Nature Materials, 2022, 21, 673-680.	27.5	123
6	Enhancing oxygen reduction electrocatalysis by tuning interfacial hydrogen bonds. Nature Catalysis, 2021, 4, 753-762.	34.4	122
7	Selective selenization of mixed-linker Ni-MOFs: NiSe2@NC core-shell nano-octahedrons with tunable interfacial electronic structure for hydrogen evolution reaction. Applied Catalysis B: Environmental, 2020, 272, 118976.	20.2	111
8	Emerging Hierarchical Aerogels: Selfâ€Assembly of Metal and Semiconductor Nanocrystals. Advanced Materials, 2018, 30, e1707518.	21.0	104
9	Multimetallic Hierarchical Aerogels: Shape Engineering of the Building Blocks for Efficient Electrocatalysis. Advanced Materials, 2017, 29, 1605254.	21.0	98
10	Efficiently photocatalytic reduction of carcinogenic contaminant Cr (VI) upon robust AgCl:Ag hollow nanocrystals. Applied Catalysis B: Environmental, 2015, 164, 344-351.	20.2	89
11	A distinctive red Ag/AgCl photocatalyst with efficient photocatalytic oxidative and reductive activities. Journal of Materials Chemistry A, 2014, 2, 5280-5286.	10.3	78
12	Nanostructuring Noble Metals as Unsupported Electrocatalysts for Polymer Electrolyte Fuel Cells. Advanced Energy Materials, 2017, 7, 1700548.	19.5	76
13	3D Assembly of Allâ€Inorganic Colloidal Nanocrystals into Gels and Aerogels. Angewandte Chemie - International Edition, 2016, 55, 6334-6338.	13.8	75
14	2020 roadmap on pore materials for energy and environmental applications. Chinese Chemical Letters, 2019, 30, 2110-2122.	9.0	75
15	Effective Solid Contact for Ion-Selective Electrodes: Tetrakis(4-chlorophenyl)borate (TB^{â€“}) Anions Doped Nanocluster Films. Analytical Chemistry, 2012, 84, 3480-3483.	6.5	62
16	Hierarchical Nanomaterials Assembled from Peptoids and Other Sequence-Defined Synthetic Polymers. Chemical Reviews, 2021, 121, 14031-14087.	47.7	61
17	Hybrid N-Butylamine-Based Ligands for Switching the Colloidal Solubility and Regimentation of Inorganic-Capped Nanocrystals. ACS Nano, 2017, 11, 1559-1571.	14.6	49
18	High performance Pd nanocrystals supported on SnO₂-decorated graphene for aromatic nitro compound reduction. Journal of Materials Chemistry A, 2014, 2, 3461-3467.	10.3	45

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19	Advanced visible-light-driven photocatalyst upon the incorporation of sulfonated graphene. Nanoscale, 2013, 5, 1910.	5.6	35
20	Programming Amphiphilic Peptoid Oligomers for Hierarchical Assembly and Inorganic Crystallization. Accounts of Chemical Research, 2021, 54, 81-91.	15.6	34
21	Nanoparticle-Mediated Assembly of Peptoid Nanosheets Functionalized with Solid-Binding Proteins: Designing Heterostructures for Hierarchy. Nano Letters, 2021, 21, 1636-1642.	9.1	31
22	Ce-/S-codoped TiO₂/Sulfonated graphene for photocatalytic degradation of organic dyes. Journal of Materials Chemistry A, 2014, 2, 13565-13570.	10.3	30
23	Quantumâ€Dotâ€inâ€Polymer Composites via Advanced Surface Engineering. Small Methods, 2017, 1, 1700189.	8.6	29
24	Ternary alloyed AgClxBr1â^'x nanocrystals: facile modulation of electronic structures toward advanced photocatalytic performance. Nanoscale, 2013, 5, 10989.	5.6	27
25	Ligand-Exchange-Mediated Fabrication of Gold Aerogels Containing Different Au(I) Content with Peroxidase-like Behavior. Chemistry of Materials, 2019, 31, 10094-10099.	6.7	26
26	Synthesis of unsupported two-dimensional molybdenum carbide nanosheets for hydrogen evolution. Materials Letters, 2020, 261, 126987.	2.6	22
27	Precise Engineering of Nanocrystal Shells via Colloidal Atomic Layer Deposition. Chemistry of Materials, 2017, 29, 8111-8118.	6.7	21
28	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. Journal of Analytical Atomic Spectrometry, 2020, 35, 953-960.	3.0	19
29	Microtubular Fuel Cell with Ultrahigh Power Output per Footprint. Advanced Materials, 2017, 29, 1607046.	21.0	18
30	Peptoid-directed assembly of CdSe nanoparticles. Nanoscale, 2021, 13, 1273-1282.	5.6	18
31	Solid-State Gelation for Nanostructured Perovskite Oxide Aerogels. Chemistry of Materials, 2019, 31, 9422-9429.	6.7	17
32	Self-Supported Three-Dimensional Quantum Dot Aerogels as a Promising Photocatalyst for CO₂ Reduction. Chemistry of Materials, 2022, 34, 2687-2695.	6.7	12
33	Peptoid-based hierarchically-structured biomimetic nanomaterials: Synthesis, characterization and applications. Science China Materials, 2020, 63, 1099-1112.	6.3	10
34	3Dâ€Anordnung anorganischer kolloidaler Nanokristalle zu Gelen und Aerogelen. Angewandte Chemie, 2016, 128, 6442-6446.	2.0	9
35	Kernâ€Schaleâ€Strukturierung rein metallischer Aerogele fÃ¼r eine hocheffiziente Nutzung von Platin fÃ¼r die Sauerstoffreduktion. Angewandte Chemie, 2018, 130, 3014-3018.	2.0	7
36	Molecular Driving Force for Facet Selectivity of Sequence-Defined Amphiphilic Peptoids at Auâ€“Water Interfaces. Journal of Physical Chemistry B, 2022, 126, 5117-5126.	2.6	6

#	Article	IF	Citations
37	Peptoidâ€Directed Formation of Fiveâ€Fold Twinned Au Nanostars through Particle Attachment and Facet Stabilization. Angewandte Chemie - International Edition, 2022, 61, .	13.8	5
38	Peptoidâ€Directed Formation of Fiveâ€Fold Twinned Au Nanostars through Particle Attachment and Facet Stabilization. Angewandte Chemie, 2022, 134, .	2.0	2
39	Engineering of aerogelâ€based electrocatalysts for oxygen evolution reaction. Electrochemical Science Advances, 2022, 2, e2100113.	2.8	1
40	Frontispiece: Peptoidâ€Directed Formation of Fiveâ€Fold Twinned Au Nanostars through Particle Attachment and Facet Stabilization. Angewandte Chemie - International Edition, 2022, 61, .	13.8	1
41	Frontispiz: Peptoidâ€Directed Formation of Fiveâ€Fold Twinned Au Nanostars through Particle Attachment and Facet Stabilization. Angewandte Chemie, 2022, 134, .	2.0	0