

Bo Han

List of Publications by Year in descending order

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docs citations

91
times ranked

4515
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#	ARTICLE	IF	CITATIONS
1	Carbon Quantum Dot Implanted Graphite Carbon Nitride Nanotubes: Excellent Charge Separation and Enhanced Photocatalytic Hydrogen Evolution. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 5765-5771.	13.8	372
2	Surface Facet of CuFeO ₂ Nanocatalyst: A Key Parameter for H ₂ O ₂ Activation in Fenton-Like Reaction and Organic Pollutant Degradation. <i>Environmental Science & Technology</i> , 2018, 52, 6518-6525.	10.0	150
3	Selective Adsorption of Gd ³⁺ on a Magnetically Retrievable Imprinted Chitosan/Carbon Nanotube Composite with High Capacity. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 21047-21055.	8.0	114
4	Facile and controllable synthesis of N/P co-doped graphene for high-performance supercapacitors. <i>Journal of Power Sources</i> , 2017, 365, 380-388.	7.8	100
5	Enabling Prominent High-Rate and Cycle Performances in One Lithium-Sulfur Battery: Designing Permselective Gateways for Li ⁺ Transportation in Holey-CNT/S Cathodes. <i>Advanced Materials</i> , 2015, 27, 3774-3781.	21.0	92
6	Understanding CO ₂ Capture Mechanisms in Aqueous Monoethanolamine via First Principles Simulations. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 522-526.	4.6	91
7	On the Mechanism of the Improved Operation Voltage of Rhombohedral Nickel Hexacyanoferrate as Cathodes for Sodium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 33619-33625.	8.0	89
8	One-pot synthesis of a novel hierarchical Co(II)-doped TiO ₂ nanostructure: Toward highly active and durable catalyst of peroxymonosulfate activation for degradation of antibiotics and other organic pollutants. <i>Chemical Engineering Journal</i> , 2019, 368, 377-389.	12.7	88
9	Ultrafast and high-capacity adsorption of Gd(III) onto inorganic phosphorous acid modified mesoporous SBA-15. <i>Chemical Engineering Journal</i> , 2017, 313, 197-206.	12.7	81
10	Facile Synthesis of Hierarchically Porous N/P Codoped Carbon with Simultaneously High-Level Heteroatom-Doping and Moderate Porosity for High-Performance Supercapacitor Electrodes. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 5717-5726.	6.7	79
11	Carbon Quantum Dot Implanted Graphite Carbon Nitride Nanotubes: Excellent Charge Separation and Enhanced Photocatalytic Hydrogen Evolution. <i>Angewandte Chemie</i> , 2018, 130, 5867-5873.	2.0	69
12	Au nanoparticles embedded on urchin-like TiO ₂ nanosphere: An efficient catalyst for dyes degradation and 4-nitrophenol reduction. <i>Materials and Design</i> , 2017, 121, 167-175.	7.0	65
13	Solvothermal synthesis of Mn Fe ³⁺ O ₄ nanoparticles with interesting physicochemical characteristics and good catalytic degradation activity. <i>Materials and Design</i> , 2016, 97, 341-348.	7.0	62
14	Architecturing CoTiO ₃ overlayer on nanosheets-assembled hierarchical TiO ₂ nanospheres as a highly active and robust catalyst for peroxymonosulfate activation and metronidazole degradation. <i>Chemical Engineering Journal</i> , 2020, 392, 123819.	12.7	58
15	Density Functional Theory Study of Water Dissociative Chemisorption on the Fe ₃ O ₄ (111) Surface. <i>Journal of Physical Chemistry C</i> , 2010, 114, 21405-21410.	3.1	56
16	Anchoring Lithium Polysulfides via Affinitive Interactions: Electrostatic Attraction, Hydrogen Bonding, or in Parallel?. <i>Journal of Physical Chemistry C</i> , 2015, 119, 20495-20502.	3.1	53
17	On the Mechanisms of SiO ₂ Thin-Film Growth by the Full Atomic Layer Deposition Process Using Bis(<i>i</i> -butylamino)silane on the Hydroxylated SiO ₂ (001) Surface. <i>Journal of Physical Chemistry C</i> , 2012, 116, 947-952.	3.1	50
18	Three-dimensionally porous graphene: A high-performance adsorbent for removal of albumin-bonded bilirubin. <i>Colloids and Surfaces B: Biointerfaces</i> , 2017, 149, 146-153.	5.0	50

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19	Hierarchical flower-like Co ₂ TiO ₄ nanosheets with unique structural and compositional advantages to boost peroxymonosulfate activation for degradation of organic pollutants. <i>Journal of Materials Chemistry A</i> , 2020, 8, 20953-20962.	10.3	50
20	Water-soluble Cross-Linking Functional Binder for Low-Cost and High-Performance Lithium-Sulfur Batteries. <i>Advanced Functional Materials</i> , 2021, 31, 2104858.	14.9	50
21	Fabricating yolk-shell structured CoTiO ₃ @Co ₃ O ₄ nanoreactor via a simple self-template method toward high-performance peroxymonosulfate activation and organic pollutant degradation. <i>Applied Surface Science</i> , 2021, 536, 147787.	6.1	49
22	Mechanistic Study on Water Gas Shift Reaction on the Fe ₃ O ₄ (111) Reconstructed Surface. <i>Journal of Physical Chemistry C</i> , 2015, 119, 28934-28945.	3.1	44
23	A hyperbranched conjugated Schiff base polymer network: a potential negative electrode for flexible thin film batteries. <i>Chemical Communications</i> , 2016, 52, 3000-3002.	4.1	40
24	A study on the catalytic hydrogenation of N-ethylcarbazole on the mesoporous Pd/MoO ₃ catalyst. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 25942-25950.	7.1	39
25	Controllable fabrication of 2D and 3D porous graphene architectures using identical thermally exfoliated graphene oxides as precursors and their application as supercapacitor electrodes. <i>Microporous and Mesoporous Materials</i> , 2017, 237, 228-236.	4.4	39
26	Effect of extracellular polymer substances on the tetracycline removal during coagulation process. <i>Bioresource Technology</i> , 2020, 309, 123316.	9.6	39
27	Marine redox stratification during the early Cambrian (ca. 529-509 Ma) and its control on the development of organic-rich shales in Yangtze Platform. <i>Geochemistry, Geophysics, Geosystems</i> , 2017, 18, 2354-2369.	2.5	34
28	Effective coating of crosslinked polyethyleneimine on elastic spongy monolith for highly efficient batch and continuous flow adsorption of Pb(II) and acidic red 18. <i>Chemical Engineering Journal</i> , 2020, 391, 123610.	12.7	34
29	Cu Nanoparticles Supported on Oxygen-Rich Boron Nitride for the Reduction of 4-Nitrophenol. <i>ACS Applied Nano Materials</i> , 2018, 1, 6692-6700.	5.0	33
30	N/P Codoped Porous Carbon-Coated Graphene Nanohybrid as a High-Performance Electrode for Supercapacitors. <i>ACS Applied Nano Materials</i> , 2018, 1, 6742-6751.	5.0	33
31	Hydrous titania nanosheets constructed hierarchical hollow microspheres as a highly efficient dual-use decontaminant for elimination of heavy metal ions and organic pollutants. <i>Chemical Engineering Journal</i> , 2020, 381, 122638.	12.7	33
32	Instability of Zinc Hexacyanoferrate Electrode in an Aqueous Environment: Redox-Induced Phase Transition, Compound Dissolution, and Inhibition. <i>ChemElectroChem</i> , 2016, 3, 798-804.	3.4	32
33	Partial-Redox-Promoted Mn Cycling of Mn(II)-Doped Heterogeneous Catalyst for Efficient H ₂ O ₂ -Mediated Oxidation. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 371-380.	8.0	31
34	On the CO ₂ Capture in Water-Free Monoethanolamine Solution: An ab Initio Molecular Dynamics Study. <i>Journal of Physical Chemistry B</i> , 2013, 117, 5971-5977.	2.6	30
35	A first principles study of water dissociation on small copper clusters. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 9845.	2.8	28
36	Density functional theory study on the full ALD process of silicon nitride thin film deposition via BDEAS or BTBAS and NH ₃ . <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 18501.	2.8	28

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37	Carboxyl-functionalized lotus seedpod: A highly efficient and reusable agricultural waste-based adsorbent for removal of toxic Pb ²⁺ ions from aqueous solution. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2019, 568, 391-401.	4.7	28
38	High-performance lithium/sulfur batteries by decorating CMK-3/S cathodes with DNA. <i>Journal of Materials Chemistry A</i> , 2015, 3, 7241-7247.	10.3	27
39	Ultrafine SnO ₂ aggregates in interior of porous carbon nanotubes as high-performance anode materials of lithium-ion batteries. <i>Materials Today Energy</i> , 2019, 12, 303-310.	4.7	26
40	Encapsulating tin oxide nanoparticles into holey carbon nanotubes by melt infiltration for superior lithium and sodium ion storage. <i>Journal of Power Sources</i> , 2020, 449, 227564.	7.8	26
41	Composition-engineered LaCoO ₃ -based monolithic catalysts for easily operational and robust peroxymonosulfate activation. <i>Chemical Engineering Journal</i> , 2021, 424, 130574.	12.7	26
42	Molecular mechanisms of interaction between enzymes and Maillard reaction products formed from thermal hydrolysis pretreatment of waste activated sludge. <i>Water Research</i> , 2021, 206, 117777.	11.3	26
43	First-Principles Study of Hydrogenation of Ethylene on a H ₂ MoO ₃ (010) Surface. <i>Journal of Physical Chemistry C</i> , 2012, 116, 24630-24638.	3.1	25
44	Remarkable performance of magnetized chitosan-decorated lignocellulose fiber towards biosorptive removal of acidic azo colorant from aqueous environment. <i>Reactive and Functional Polymers</i> , 2016, 100, 97-106.	4.1	25
45	Toward High Activity and Durability: An Oxygen-Rich Boron Nitride-Supported Au Nanoparticles for 4-Nitrophenol Hydrogenation. <i>Journal of Physical Chemistry C</i> , 2019, 123, 10389-10397.	3.1	25
46	Facile one-pot synthesis of magnetic nitrogen-doped porous carbon for high-performance bilirubin removal from BSA-rich solution. <i>RSC Advances</i> , 2017, 7, 2081-2091.	3.6	24
47	Synthesis of MnSiO ₃ decorated hollow mesoporous silica spheres and its promising application in environmental remediation. <i>Microporous and Mesoporous Materials</i> , 2017, 241, 409-417.	4.4	23
48	Postsynthetic incorporation of catalytically inert Al into Co ₃ O ₄ for peroxymonosulfate activation and insight into the boosted catalytic performance. <i>Chemical Engineering Journal</i> , 2021, 426, 131292.	12.7	22
49	Influence of Charge on the Reactivity of Supported Heterogeneous Transition Metal Catalysts. <i>ACS Catalysis</i> , 2015, 5, 4592-4597.	11.2	21
50	Simple and Controllable Synthesis of High-Quality MnTiO ₃ Nanodiscs and Their Application as A Highly Efficient Catalyst for H ₂ O ₂ -Mediated Oxidative Degradation. <i>ACS Applied Nano Materials</i> , 2018, 1, 2727-2738.	5.0	21
51	Unique electron reservoir properties of manganese in Mn(II)-doped CeO ₂ for reversible electron transfer and enhanced Fenton-like catalytic performance. <i>Applied Surface Science</i> , 2020, 502, 144295.	6.1	20
52	On the Mechanisms of Carbon Formation Reaction on Ni(111) Surface. <i>Journal of Physical Chemistry C</i> , 2012, 116, 16522-16531.	3.1	19
53	Utilizing cobalt-doped materials as heterogeneous catalysts to activate peroxymonosulfate for organic pollutant degradation: a critical review. <i>Environmental Science: Water Research and Technology</i> , 0, , .	2.4	19
54	Crosslinked poly(ionic liquid) anchored with organic probe as a new promising platform for organic solvent-free recognition, quantification, and selective removal of heavy metal ion. <i>Chemical Engineering Journal</i> , 2018, 346, 458-465.	12.7	17

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55	Ionic liquid-grafted probe for selective detection and individual identification of different metal ions in 100% aqueous solutions. <i>Sensors and Actuators B: Chemical</i> , 2018, 259, 411-419.	7.8	17
56	Density Function Theory Study of Copper Agglomeration on the WN(001) Surface. <i>Journal of Physical Chemistry C</i> , 2007, 111, 9403-9406.	3.1	16
57	First-Principles Simulations of Conditions of Enhanced Adhesion Between Copper and TaN(111) Surfaces Using a Variety of Metallic Glue Materials. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 148-152.	13.8	16
58	Design of efficient mono-aminosilane precursors for atomic layer deposition of SiO ₂ thin films. <i>RSC Advances</i> , 2017, 7, 22672-22678.	3.6	16
59	Transition-Metal Ion-Doped Flower-Like Titania Nanospheres as Nonlight-Driven Catalysts for Organic Dye Degradation with Enhanced Performances. <i>ACS Omega</i> , 2018, 3, 17724-17731.	3.5	16
60	Significant enhancement of photo-Fenton degradation of ofloxacin over Fe-Dis@Sep due to highly dispersed FeC ₆ with electron deficiency. <i>Science of the Total Environment</i> , 2020, 723, 138144.	8.0	16
61	Constructing novel hyper-crosslinked conjugated polymers through molecular expansion for enhanced gas adsorption performance. <i>Journal of Hazardous Materials</i> , 2022, 426, 127850.	12.4	16
62	Doping phosphorus into Co ₃ O ₄ : A new promising pathway to boost the catalytic activity for peroxydisulfate activation. <i>Applied Surface Science</i> , 2022, 574, 151632.	6.1	15
63	On the relative stability of cobalt- and nickel-based amidinate complexes against ² â€m migration. <i>International Journal of Quantum Chemistry</i> , 2009, 109, 756-763.	2.0	14
64	The roles of active species in photo-decomposition of organic compounds by microwave powered electrodeless discharge lamps. <i>Journal of Environmental Sciences</i> , 2015, 33, 60-68.	6.1	14
65	A first-principles investigation of the influence of polyanionic boron doping on the stability and electrochemical behavior of Na ₃ V ₂ (PO ₄) ₃ . <i>Journal of Molecular Modeling</i> , 2019, 25, 96.	1.8	14
66	A single molecular sensor for selective and differential colorimetric/ratiometric detection of Cu ²⁺ and Pd ²⁺ in 100% aqueous solution. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2020, 237, 118365.	3.9	14
67	Ab Initio Molecular Dynamics Simulation on the Aggregation of a Cu Monolayer on a WN(001) Surface. <i>Journal of Physical Chemistry C</i> , 2008, 112, 9798-9802.	3.1	13
68	First-Principles Study of a Full Cycle of Atomic Layer Deposition of SiO ₂ Thin Films with Di(<i>i</i> -butylamino)silane and Ozone. <i>Journal of Physical Chemistry C</i> , 0, , 130911145338002.	3.1	13
69	Palladium nanoparticles uniformly and firmly supported on hierarchical flower-like TiO ₂ nanospheres as a highly active and reusable catalyst for detoxification of Cr(VI)-contaminated water. <i>Applied Nanoscience (Switzerland)</i> , 2020, 10, 359-369.	3.1	13
70	A single polymer chemosensor for differential determination of Hg ²⁺ and Cu ²⁺ in pure aqueous media without mutual interference. <i>Materials Today Communications</i> , 2019, 19, 148-156.	1.9	11
71	Computational Criteria for Evaluating Polysulfide Cohesion, Solvation, and Stabilization: Approach for Screening Effective Anchoring Substrates. <i>Journal of Physical Chemistry C</i> , 2017, 121, 308-314.	3.1	10
72	Facile and scalable synthesis of hierarchically porous graphene architecture for hydrogen storage and high-rate supercapacitors. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 17675-17681.	2.2	10

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73	Chemisorption of small fullerenes C_n <small><math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mtext>C</mml:mtext><mml:mi>n</mml:mi></mml:msub></mml:mrow></mml:math></small>		