Bo Han

List of Publications by Year
in descending order

90 papers	3,155 citations	147801 31 h-index	175258 52 g-index
91 all docs	91 docs citations	91 times ranked	4515 citing authors

#	Article	IF	Citations
1	Doping phosphorus into Co3O4: A new promising pathway to boost the catalytic activity for peroxymonosulfate activation. Applied Surface Science, 2022, 574, 151632.	6.1	15
2	Constructing novel hyper-crosslinked conjugated polymers through molecular expansion for enhanced gas adsorption performance. Journal of Hazardous Materials, 2022, 426, 127850.	12.4	16
3	Fabricating yolkâ€“shell structured CoTiO3@Co3O4 nanoreactor via a simple self-template method toward high-performance peroxymonosulfate activation and organic pollutant degradation. Applied Surface Science, 2021, 536, 147787.	6.1	49
4	Waterâ€Soluble Crossâ€Linking Functional Binder for Lowâ€Cost and Highâ€Performance Lithiumâ€“Sulfur Batteries. Advanced Functional Materials, 2021, 31, 2104858.	14.9	50
5	Understanding the electronic metal-support interactions of the supported Ni cluster for the catalytic hydrogenation of ethylene. Molecular Catalysis, 2021, 511, 111731.	2.0	4
6	Direct epitaxial growth of nickel phosphide nanosheets on nickel foam as self-support electrode for efficient non-enzymatic glucose sensing. Nanotechnology, 2021, 32, 435501.	2.6	8
7	Composition-engineered LaCoO3-based monolithic catalysts for easily operational and robust peroxymonosulfate activation. Chemical Engineering Journal, 2021, 424, 130574.	12.7	26
8	Postsynthetic incorporation of catalytically inert Al into Co3O4 for peroxymonosulfate activation and insight into the boosted catalytic performance. Chemical Engineering Journal, 2021, 426, 131292.	12.7	22
9	Molecular mechanisms of interaction between enzymes and Maillard reaction products formed from thermal hydrolysis pretreatment of waste activated sludge. Water Research, 2021, 206, 117777.	11.3	26
10	Palladium nanoparticles uniformly and firmly supported on hierarchical flower-like TiO2 nanospheres as a highly active and reusable catalyst for detoxification of Cr(VI)-contaminated water. Applied Nanoscience (Switzerland), 2020, 10, 359-369.	3.1	13
11	Hydrous titania nanosheets constructed hierarchical hollow microspheres as a highly efficient dual-use decontaminant for elimination of heavy metal ions and organic pollutants. Chemical Engineering Journal, 2020, 381, 122638.	12.7	33
12	Unique electron reservoir properties of manganese in Mn(II)-doped CeO2 for reversible electron transfer and enhanced Fenton-like catalytic performance. Applied Surface Science, 2020, 502, 144295.	6.1	20
13	Architecturing CoTiO3 overlayer on nanosheets-assembled hierarchical TiO2 nanospheres as a highly active and robust catalyst for peroxymonosulfate activation and metronidazole degradation. Chemical Engineering Journal, 2020, 392, 123819.	12.7	58
14	Encapsulating tin oxide nanoparticles into holey carbon nanotubes by melt infiltration for superior lithium and sodium ion storage. Journal of Power Sources, 2020, 449, 227564.	7.8	26
15	Effective coating of crosslinked polyethyleneimine on elastic spongy monolith for highly efficient batch and continuous flow adsorption of Pb(II) and acidic red 18. Chemical Engineering Journal, 2020, 391, 123610.	12.7	34
16	Hierarchical flower-like Co₂TiO₄ nanosheets with unique structural and compositional advantages to boost peroxymonosulfate activation for degradation of organic pollutants. Journal of Materials Chemistry A, 2020, 8, 20953-20962.	10.3	50
17	Effect of extracellular polymer substances on the tetracycline removal during coagulation process. Bioresource Technology, 2020, 309, 123316.	9.6	39
18	Synergistic effect between gold nanoparticles and Fe-doped Î³-MnO2 toward enhanced aerobic selective oxidation of ethanol. Catalysis Science and Technology, 2020, 10, 4332-4339.	4.1	9

#	Article	IF	Citations
19	Significant enhancement of photo-Fenton degradation of ofloxacin over Fe-Dis@Sep due to highly dispersed FeC6 with electron deficiency. Science of the Total Environment, 2020, 723, 138144.	8.0	16
20	A single molecular sensor for selective and differential colorimetric/ratiometric detection of Cu2+ and Pd2+ in 100% aqueous solution. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 237, 118365.	3.9	14
21	Fabrication of Organic Probe Decorated Water-Soluble Polymer Chains on Natural Fibers for Selective Detection and Efficient Removal of Hg²⁺ Ions in Pure Aqueous Media. ACS Applied Polymer Materials, 2019, 1, 2680-2691.	4.4	5
22	A single polymer chemosensor for differential determination of Hg2+ and Cu2+ in pure aqueous media without mutual interference. Materials Today Communications, 2019, 19, 148-156.	1.9	11
23	Ultrafine SnO2 aggregates in interior of porous carbon nanotubes as high-performance anode materials of lithium-ion batteries. Materials Today Energy, 2019, 12, 303-310.	4.7	26
24	A first-principles investigation of the influence of polyanionic boron doping on the stability and electrochemical behavior of Na3V2(PO4)3. Journal of Molecular Modeling, 2019, 25, 96.	1.8	14
25	Toward High Activity and Durability: An Oxygen-Rich Boron Nitride-Supported Au Nanoparticles for 4-Nitrophenol Hydrogenation. Journal of Physical Chemistry C, 2019, 123, 10389-10397.	3.1	25
26	Carboxyl-functionalized lotus seedpod: A highly efficient and reusable agricultural waste-based adsorbent for removal of toxic Pb2+ ions from aqueous solution. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 568, 391-401.	4.7	28
27	One-pot synthesis of a novel hierarchical Co(II)-doped TiO2 nanostructure: Toward highly active and durable catalyst of peroxymonosulfate activation for degradation of antibiotics and other organic pollutants. Chemical Engineering Journal, 2019, 368, 377-389.	12.7	88
28	Facile Synthesis of Hierarchically Porous N/P Codoped Carbon with Simultaneously High-Level Heteroatom-Doping and Moderate Porosity for High-Performance Supercapacitor Electrodes. ACS Sustainable Chemistry and Engineering, 2019, 7, 5717-5726.	6.7	79
29	Carbon Quantum Dot Implanted Graphite Carbon Nitride Nanotubes: Excellent Charge Separation and Enhanced Photocatalytic Hydrogen Evolution. Angewandte Chemie, 2018, 130, 5867-5873.	2.0	69
30	Carbon Quantum Dot Implanted Graphite Carbon Nitride Nanotubes: Excellent Charge Separation and Enhanced Photocatalytic Hydrogen Evolution. Angewandte Chemie - International Edition, 2018, 57, 5765-5771.	13.8	372
31	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. Chemical Engineering Journal, 2018, 346, 458-465.	12.7	17
32	Surface Facet of CuFeO₂ Nanocatalyst: A Key Parameter for H₂O₂ Activation in Fenton-Like Reaction and Organic Pollutant Degradation. Environmental Science & Technology, 2018, 52, 6518-6525.	10.0	150
33	Insight into the high-efficient functionalization of carbon nanotubes by advanced oxidation using peroxomonosulfate. Microporous and Mesoporous Materials, 2018, 260, 24-29.	4.4	7
34	Ionic liquid-grafted probe for selective detection and individual identification of different metal ions in 100% aqueous solutions. Sensors and Actuators B: Chemical, 2018, 259, 411-419.	7.8	17
35	Cu Nanoparticles Supported on Oxygen-Rich Boron Nitride for the Reduction of 4-Nitrophenol. ACS Applied Nano Materials, 2018, 1, 6692-6700.	5.0	33
36	Transition-Metal Ion-Doped Flower-Like Titania Nanospheres as Nonlight-Driven Catalysts for Organic Dye Degradation with Enhanced Performances. ACS Omega, 2018, 3, 17724-17731.	3.5	16

#	Article	IF	Citations
37	N/P Codoped Porous Carbon-Coated Graphene Nanohybrid as a High-Performance Electrode for Supercapacitors. ACS Applied Nano Materials, 2018, 1, 6742-6751.	5.0	33
38	Direct implementation of K3Fe(CN)6 as cathode materials of sodium-ion batteries. Materials Today Energy, 2018, 10, 302-306.	4.7	6
39	Simple and Controllable Synthesis of High-Quality MnTiO3 Nanodiscs and Their Application as A Highly Efficient Catalyst for H2O2-Mediated Oxidative Degradation. ACS Applied Nano Materials, 2018, 1, 2727-2738.	5.0	21
40	Poly(ionic liquid) as an efficient carrier of hydrophobic small-molecule probes for ion detections in pure aqueous environments. Sensors and Actuators B: Chemical, 2017, 245, 104-111.	7.8	7
41	Au nanoparticles embedded on urchin-like TiO 2 nanosphere: An efficient catalyst for dyes degradation and 4-nitrophenol reduction. Materials and Design, 2017, 121, 167-175.	7.0	65
42	Density Functional Theory Study on the Role of Polyacetylene as a Promoter in Selective Hydrogenation of Styrene on a Pd Catalyst. Journal of Physical Chemistry C, 2017, 121, 4246-4252.	3.1	7
43	Density functional theory study of the mechanism for the formation of glycidyl esters from triglyceride. Journal of Molecular Modeling, 2017, 23, 83.	1.8	2
44	Design of efficient mono-aminosilane precursors for atomic layer deposition of SiO₂ thin films. RSC Advances, 2017, 7, 22672-22678.	3.6	16
45	Marine redox stratification during the early <scp>C</scp>ambrian (ca. 529â€509 Ma) and its control on the development of organicâ€rich shales in <scp>Y</scp>angtze <scp>P</scp>latform. Geochemistry, Geophysics, Geosystems, 2017, 18, 2354-2369.	2.5	34
46	Synthesis of MnSiO3 decorated hollow mesoporous silica spheres and its promising application in environmental remediation. Microporous and Mesoporous Materials, 2017, 241, 409-417.	4.4	23
47	Ultrafast and high-capacity adsorption of Gd(III) onto inorganic phosphorous acid modified mesoporous SBA-15. Chemical Engineering Journal, 2017, 313, 197-206.	12.7	81
48	Partial-Redox-Promoted Mn Cycling of Mn(II)-Doped Heterogeneous Catalyst for Efficient H₂O₂-Mediated Oxidation. ACS Applied Materials & Interfaces, 2017, 9, 371-380.	8.0	31
49	Computational Criteria for Evaluating Polysulfide Cohesion, Solvation, and Stabilization: Approach for Screening Effective Anchoring Substrates. Journal of Physical Chemistry C, 2017, 121, 308-314.	3.1	10
50	A study on the catalytic hydrogenation of N-ethylcarbazole on the mesoporous Pd/MoO3 catalyst. International Journal of Hydrogen Energy, 2017, 42, 25942-25950.	7.1	39
51	Facile and scalable synthesis of hierarchically porous graphene architecture for hydrogen storage and high-rate supercapacitors. Journal of Materials Science: Materials in Electronics, 2017, 28, 17675-17681.	2.2	10
52	Facile and controllable synthesis of N/P co-doped graphene for high-performance supercapacitors. Journal of Power Sources, 2017, 365, 380-388.	7.8	100
53	Three-dimensionally porous graphene: A high-performance adsorbent for removal of albumin-bonded bilirubin. Colloids and Surfaces B: Biointerfaces, 2017, 149, 146-153.	5.0	50
54	Controllable fabrication of 2D and 3D porous graphene architectures using identical thermally exfoliated graphene oxides as precursors and their application as supercapacitor electrodes. Microporous and Mesoporous Materials, 2017, 237, 228-236.	4.4	39

#	Article	IF	Citations
55	Facile one-pot synthesis of magnetic nitrogen-doped porous carbon for high-performance bilirubin removal from BSA-rich solution. RSC Advances, 2017, 7, 2081-2091.	3.6	24
56	Nickel Family Metal Clusters for Catalytic Hydrogenation Processes. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2017, 33, 1310-1323.	4.9	3
57	Instability of Zinc Hexacyanoferrate Electrode in an Aqueous Environment: Redoxâ€Induced Phase Transition, Compound Dissolution, and Inhibition. ChemElectroChem, 2016, 3, 798-804.	3.4	32
58	Solvothermal synthesis of Mn Fe3â^'O4 nanoparticles with interesting physicochemical characteristics and good catalytic degradation activity. Materials and Design, 2016, 97, 341-348.	7.0	62
59	On the Mechanism of the Improved Operation Voltage of Rhombohedral Nickel Hexacyanoferrate as Cathodes for Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2016, 8, 33619-33625.	8.0	89
60	A hyperbranched conjugated Schiff base polymer network: a potential negative electrode for flexible thin film batteries. Chemical Communications, 2016, 52, 3000-3002.	4.1	40
61	Remarkable performance of magnetized chitosan-decorated lignocellulose fiber towards biosorptive removal of acidic azo colorant from aqueous environment. Reactive and Functional Polymers, 2016, 100, 97-106.	4.1	25
62	Lithiumâ€“Sulfur Batteries: Enabling Prominent Highâ€Rate and Cycle Performances in One Lithiumâ€“Sulfur Battery: Designing Permselective Gateways for Li⁺ Transportation in Holeyâ€CNT/S Cathodes (Adv. Mater. 25/2015). Advanced Materials, 2015, 27, 3840-3840.	21.0	2
63	Enabling Prominent Highâ€Rate and Cycle Performances in One Lithiumâ€“Sulfur Battery: Designing Permselective Gateways for Li⁺ Transportation in Holeyâ€CNT/S Cathodes. Advanced Materials, 2015, 27, 3774-3781.	21.0	92
64	Mechanistic Study on Water Gas Shift Reaction on the Fe₃O₄ (111) Reconstructed Surface. Journal of Physical Chemistry C, 2015, 119, 28934-28945.	3.1	44
65	High-performance lithium/sulfur batteries by decorating CMK-3/S cathodes with DNA. Journal of Materials Chemistry A, 2015, 3, 7241-7247.	10.3	27
66	Influence of Charge on the Reactivity of Supported Heterogeneous Transition Metal Catalysts. ACS Catalysis, 2015, 5, 4592-4597.	11.2	21
67	The roles of active species in photo-decomposition of organic compounds by microwave powered electrodeless discharge lamps. Journal of Environmental Sciences, 2015, 33, 60-68.	6.1	14
68	Anchoring Lithium Polysulfides via Affinitive Interactions: Electrostatic Attraction, Hydrogen Bonding, or in Parallel?. Journal of Physical Chemistry C, 2015, 119, 20495-20502.	3.1	53
69	Selective Adsorption of Gd³⁺ on a Magnetically Retrievable Imprinted Chitosan/Carbon Nanotube Composite with High Capacity. ACS Applied Materials & Interfaces, 2015, 7, 21047-21055.	8.0	114
70	Density functional theory study on the full ALD process of silicon nitride thin film deposition via BDEAS or BTBAS and NH₃. Physical Chemistry Chemical Physics, 2014, 16, 18501.	2.8	28
71	Analytic Force Field for Clusters and Nanoparticles of Aluminum and Its Hydride. Physical Review Applied, 2014, 1, .	3.8	0
72	Effect of Al Electronic Configuration on the SiO₂ Thin Film Growth via Catalytic Self-Assembling Deposition. Journal of Physical Chemistry C, 2013, 117, 22705-22713.	3.1	6

#	Article	IF	Citations
73	On the CO₂ Capture in Water-Free Monoethanolamine Solution: An ab Initio Molecular Dynamics Study. Journal of Physical Chemistry B, 2013, 117, 5971-5977.	2.6	30
74	On the Mechanisms of SiO₂ Thin-Film Growth by the Full Atomic Layer Deposition Process Using Bis(t-butylamino)silane on the Hydroxylated SiO₂(001) Surface. Journal of Physical Chemistry C, 2012, 116, 947-952.	3.1	50
75	First-Principles Study of Hydrogenation of Ethylene on a H_xMoO₃(010) Surface. Journal of Physical Chemistry C, 2012, 116, 24630-24638.	3.1	25
76	On the Mechanisms of Carbon Formation Reaction on Ni(111) Surface. Journal of Physical Chemistry C, 2012, 116, 16522-16531.	3.1	19
77	First Principles Study of Steam Carbon Reaction on Î³-Fe(111) Surface. Journal of Physical Chemistry C, 2011, 115, 12068-12076.	3.1	9
78	Understanding CO₂ Capture Mechanisms in Aqueous Monoethanolamine via First Principles Simulations. Journal of Physical Chemistry Letters, 2011, 2, 522-526.	4.6	91
79	Firstâ€Principles Simulations of Conditions of Enhanced Adhesion Between Copper and TaN(111) Surfaces Using a Variety of Metallic Glue Materials. Angewandte Chemie - International Edition, 2010, 49, 148-152.	13.8	16
80	Density Functional Theory Study of Water Dissociative Chemisorption on the Fe₃O₄(111) Surface. Journal of Physical Chemistry C, 2010, 114, 21405-21410.	3.1	56
81	A first principles study of water dissociation on small copper clusters. Physical Chemistry Chemical Physics, 2010, 12, 9845.	2.8	28
82	Chemisorption of small fullerenes<mml: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> xmlns:mml="http://www.w3.org/1998/Math/MathML"		