

Cheng-Gang Zhou

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3902891/publications.pdf>

Version: 2024-02-01

104
papers

3,422
citations

126901

33
h-index

175241

52
g-index

107
all docs

107
docs citations

107
times ranked

4803
citing authors

#	ARTICLE	IF	CITATIONS
1	Doping phosphorus into Co ₃ O ₄ : A new promising pathway to boost the catalytic activity for peroxymonosulfate activation. <i>Applied Surface Science</i> , 2022, 574, 151632.	6.1	15
2	Potassium manganese hexacyanoferrate with improved lifespan in Zn(CF ₃ SO ₃) ₂ electrolyte for aqueous zinc-ion batteries. <i>Sustainable Energy and Fuels</i> , 2022, 6, 1353-1361.	4.9	10
3	Tuning the Electrochemical Stability of Zinc Hexacyanoferrate through Manganese Substitution for Aqueous Zinc-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2021, 4, 602-610.	5.1	35
4	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
5	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
6	Understanding the electronic metal-support interactions of the supported Ni cluster for the catalytic hydrogenation of ethylene. <i>Molecular Catalysis</i> , 2021, 511, 111731.	2.0	4
7	Direct epitaxial growth of nickel phosphide nanosheets on nickel foam as self-support electrode for efficient non-enzymatic glucose sensing. <i>Nanotechnology</i> , 2021, 32, 435501.	2.6	8
8	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
9	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
10	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
11	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
12	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
13	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
14	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
15	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
16	Chemical activation of carbon materials for supercapacitors: Elucidating the effect of spatial characteristics of the precursors. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2020, 597, 124762.	4.7	4
17	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
18	Advances on the transition-metal based catalysts for aquathermolysis upgrading of heavy crude oil. <i>Fuel</i> , 2019, 257, 115779.	6.4	74

#	ARTICLE	IF	CITATIONS
19	Fabrication of Organic Probe Decorated Water-Soluble Polymer Chains on Natural Fibers for Selective Detection and Efficient Removal of Hg ²⁺ Ions in Pure Aqueous Media. <i>ACS Applied Polymer Materials</i> , 2019, 1, 2680-2691.	4.4	5
20	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
21	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
22	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
23	In situ preparation of well-dispersed CuO nanocatalysts in heavy oil for catalytic aquathermolysis. <i>Petroleum Science</i> , 2019, 16, 439-446.	4.9	35
24	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
25	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
26	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
27	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
28	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
29	Proton Conduction and Fuel Cell Using the CuFe-Oxide Mineral Composite Based on CuFeO ₂ Structure. <i>ACS Applied Energy Materials</i> , 2018, 1, 580-588.	5.1	28
30	Insight into the high-efficient functionalization of carbon nanotubes by advanced oxidation using peroxymonosulfate. <i>Microporous and Mesoporous Materials</i> , 2018, 260, 24-29.	4.4	7
31	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
32	A mechanism study on the viscosity evolution of heavy oil upon peroxide oxidation and pyrolysis. <i>Fuel</i> , 2018, 214, 123-126.	6.4	29
33	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
34	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
35	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
36	Direct implementation of K ₃ Fe(CN) ₆ as cathode materials of sodium-ion batteries. <i>Materials Today Energy</i> , 2018, 10, 302-306.	4.7	6

#	ARTICLE	IF	CITATIONS
37	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. ACS Applied Nano Materials, 2018, 1, 2727-2738.	5.0	21
38	Mechanisms of hydroxyl radicals production from pyrite oxidation by hydrogen peroxide: Surface versus aqueous reactions. Geochimica Et Cosmochimica Acta, 2018, 238, 394-410.	3.9	66
39	Concerted Ion-Exchange Mechanism for Sodium Diffusion and Its Promotion in Na ₃ V ₂ (PO ₄) ₃ Framework. Journal of Physical Chemistry C, 2018, 122, 16649-16654.	3.1	56
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	Recyclable oleic acid modified magnetic NiFe ₂ O ₄ nanoparticles for catalytic aquathermolysis of Liaohu heavy oil. Fuel, 2017, 200, 193-198.	6.4	38
43	Synthesis of MnSiO ₃ decorated hollow mesoporous silica spheres and its promising application in environmental remediation. Microporous and Mesoporous Materials, 2017, 241, 409-417.	4.4	23
44	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
45	Partial-Redox-Promoted Mn Cycling of Mn(II)-Doped Heterogeneous Catalyst for Efficient H ₂ O ₂ -Mediated Oxidation. ACS Applied Materials & Interfaces, 2017, 9, 371-380.	8.0	31
46	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
47	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
48	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
49	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
50	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
51	Instability of Zinc Hexacyanoferrate Electrode in an Aqueous Environment: Redox-Induced Phase Transition, Compound Dissolution, and Inhibition. ChemElectroChem, 2016, 3, 798-804.	3.4	32
52	Solvothermal synthesis of Mn Fe ₃ O ₄ nanoparticles with interesting physicochemical characteristics and good catalytic degradation activity. Materials and Design, 2016, 97, 341-348.	7.0	62
53	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
54	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

#	ARTICLE	IF	CITATIONS
55	A waxberry-like SiO ₂ @MnSiO ₃ core-shell nanocomposite synthesized via a simple solvothermal self-template method and its potential in catalytic degradation and heavy metal ion removal. RSC Advances, 2016, 6, 23360-23369.	3.6	20
56	Lithium-Sulfur Batteries: Enabling Prominent High-Rate and Cycle Performances in One Lithium-Sulfur Battery: Designing Permselective Gateways for Li ⁺ Transportation in Holey-CNT/S Cathodes (Adv. Mater. 25/2015). Advanced Materials, 2015, 27, 3840-3840.	21.0	2
57	Enabling Prominent High-Rate and Cycle Performances in One Lithium-Sulfur Battery: Designing Permselective Gateways for Li ⁺ Transportation in Holey-CNT/S Cathodes. Advanced Materials, 2015, 27, 3774-3781.	21.0	92
58	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
59	Growth mechanism of curved Mg-Al-CO ₃ layered double hydroxide nanostructures in a one-pot assembly procedure under ambient pressure. RSC Advances, 2015, 5, 19955-19960.	3.6	4
60	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
61	Selective Adsorption of Gd ³⁺ on a Magnetically Retrievable Imprinted Chitosan/Carbon Nanotube Composite with High Capacity. ACS Applied Materials & Interfaces, 2015, 7, 21047-21055.	8.0	114
62	Facile synthesis and in situ magnetization of carbon-decorated lignocellulose fiber for highly efficient removal of methylene blue. Journal of Chemical Technology and Biotechnology, 2015, 90, 1124-1134.	3.2	27
63	Removal of Cationic Dye (Methylene Blue) from Aqueous Solution by Humic Acid-Modified Expanded Perlite: Experiment and Theory. Separation Science and Technology, 2014, 49, 2400-2411.	2.5	37
64	Preparation, characterization, and adsorption evaluation of chitosan-functionalized mesoporous composites. Microporous and Mesoporous Materials, 2014, 193, 15-26.	4.4	70
65	Highly Efficient Removal of Acid Red 18 from Aqueous Solution by Magnetically Retrievable Chitosan/Carbon Nanotube: Batch Study, Isotherms, Kinetics, and Thermodynamics. Journal of Chemical & Engineering Data, 2014, 59, 39-51.	1.9	111
66	Rapid reversible electromigration of intercalated K ions within individual MoO ₃ nanobundle. Journal of Applied Physics, 2013, 113, 024311.	2.5	6
67	K-Enriched WO ₃ Nanobundles: High Electrical Conductivity and Photocurrent with Controlled Polarity. ACS Applied Materials & Interfaces, 2013, 5, 4731-4738.	8.0	20
68	Expeditious diastereoselective construction of a thiochroman skeleton via a cinchona alkaloid-derived catalyst. Organic and Biomolecular Chemistry, 2012, 10, 36-39.	2.8	26
69	Substrate Reconstruction Mediated Unidirectionally Aligned Molecular Dipole Dot Arrays. Journal of Physical Chemistry C, 2012, 116, 11565-11569.	3.1	20
70	K-Enriched MoO ₃ Nanobundles: A Layered Structure with High Electric Conductivity. Journal of Physical Chemistry C, 2012, 116, 3962-3967.	3.1	30
71	Understanding CO ₂ Capture Mechanisms in Aqueous Monoethanolamine via First Principles Simulations. Journal of Physical Chemistry Letters, 2011, 2, 522-526.	4.6	91
72	A first principles study of gas adsorption on charged CuBTC. Computational and Theoretical Chemistry, 2011, 976, 153-160.	2.5	58

#	ARTICLE	IF	CITATIONS
73	Hydrogen sequential dissociative chemisorption on Ni _n (n = 2–9,13) clusters: comparison with Pt and Pd. <i>Journal of Molecular Modeling</i> , 2011, 17, 2305-2311.	1.8	14
74	Electronic stress tensor analysis of hydrogenated palladium clusters. <i>Theoretical Chemistry Accounts</i> , 2011, 130, 531-542.	1.4	10
75	Force fields for metallic clusters and nanoparticles. <i>Journal of Computational Chemistry</i> , 2011, 32, 1711-1720.	3.3	10
76	Preparation of LiFePO ₄ /C in a reductive atmosphere generated by windward aerobic decomposition of glucose. <i>Journal of Power Sources</i> , 2011, 196, 5143-5146.	7.8	14
77	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
78	Weak Chemical Complexation of PH ₃ with Ionic Liquids. <i>Journal of Physical Chemistry B</i> , 2010, 114, 904-909.	2.6	7
79	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
80	A first principles study of water dissociation on small copper clusters. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 9845.	2.8	28
81	On reversible bonding of hydrogen molecules on platinum clusters. <i>Journal of Chemical Physics</i> , 2009, 130, 084111.	3.0	26
82	Force field for copper clusters and nanoparticles. <i>Journal of Computational Chemistry</i> , 2009, 30, 2255-2266.	3.3	2
83	Hydrogen adsorption and desorption on the Pt and Pd subnano clusters – a review. <i>Frontiers of Physics in China</i> , 2009, 4, 356-366.	1.0	26
84	On the relative stability of cobalt- and nickel-based amidinate complexes against N-migration. <i>International Journal of Quantum Chemistry</i> , 2009, 109, 756-763.	2.0	14
85	Sequential H ₂ Chemisorption and H Desorption on Icosahedral Pt ₁₃ and Pd ₁₃ Clusters: A Density Functional Theory Study. <i>Journal of Computational and Theoretical Nanoscience</i> , 2009, 6, 1320-1327.	0.4	13
86	On the Dissociative Chemisorption of Tris(dimethylamino)silane on Hydroxylated SiO ₂ (001) Surface. <i>Journal of Physical Chemistry C</i> , 2009, 113, 9731-9736.	3.1	42
87	A mechanistic study of CO removal on a small H-saturated platinum cluster. <i>Science in China Series B: Chemistry</i> , 2008, 51, 1187-1196.	0.8	2
88	On the electronic structures and spectroscopic properties of polyyne and its derivatives. <i>International Journal of Quantum Chemistry</i> , 2008, 108, 1565-1571.	2.0	3
89	Hydrogen dissociative chemisorption and desorption on saturated subnano palladium clusters (Pd _n , n) <i>TJ ETQq1 1 0.784314 ggBT /Over</i>	2.8	55
90	First-Principles Study on Water and Oxygen Adsorption on Surfaces of Indium Oxide and Indium Tin Oxide Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2008, 112, 14015-14020.	3.1	36

#	ARTICLE	IF	CITATIONS
91	Effect of Co doping on catalytic activity of small Pt clusters. <i>Journal of Chemical Physics</i> , 2008, 128, 124704.	3.0	19
92	Influence of CO Poisoning on Hydrogen Chemisorption onto a Pt ₆ Cluster. <i>Journal of Physical Chemistry C</i> , 2008, 112, 13937-13942.	3.1	32
93	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
94	Growth Pathway of Pt Clusters on α -Al ₂ O ₃ (0001) Surface. <i>Journal of Physical Chemistry C</i> , 2007, 111, 13786-13793.	3.1	35
95	On the Sequential Hydrogen Dissociative Chemisorption on Small Platinum Clusters: A Density Functional Theory Study. <i>Journal of Physical Chemistry C</i> , 2007, 111, 12773-12778.	3.1	130
96	Computational Study on the Relative Reactivities of Cobalt and Nickel Amidinates via H ⁺ Migration. <i>Organometallics</i> , 2007, 26, 2803-2805.	2.3	27
97	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
98	Structural evolution of subnano platinum clusters. <i>International Journal of Quantum Chemistry</i> , 2007, 107, 219-224.	2.0	83
99	Influence of sequential lithium insertions on the physical properties of spinel manganese oxide. <i>International Journal of Quantum Chemistry</i> , 2007, 107, 225-231.	2.0	3
100	First principles study of small palladium cluster growth and isomerization. <i>International Journal of Quantum Chemistry</i> , 2007, 107, 1632-1641.	2.0	45
101	Adsorption of fullerenes C _n (n=32,36,40,44,48,60) on the GaAs(001) $\sqrt{3}\times\sqrt{3}$ -(4 \times 4) reconstructed surface. <i>Physical Review B</i> , 2006, 73, .	3.2	5
102	Heterogeneous transition dynamic equations and the self-organized origin of the nesting rhythmic beddings in Panzihua lithosomes. <i>Science in China Series D: Earth Sciences</i> , 2005, 48, 13-20.	0.9	5
103	Chemisorption of C ₂₈ fullerene on $\sqrt{3}\times\sqrt{3}$ -(4 \times 4) reconstructed GaAs(001) surface: A density functional theory study. <i>Physical Review B</i> , 2005, 71, .	3.2	5
104	Utilizing cobalt-doped materials as heterogeneous catalysts to activate peroxy monosulfate for organic pollutant degradation: a critical review. <i>Environmental Science: Water Research and Technology</i> , 0, , .	2.4	19