Xiaowei Chen

List of Publications by Year
in descending order

89 papers	5,531 citations	87843 38 h-index	79644 73 g-index
94 all docs	94 docs citations	94 times ranked	7716 citing authors

#	Article	IF	Citations
1	Highly Efficient Photocatalytic H₂ Evolution from Water using Visible Light and Structureâ€Controlled Graphitic Carbon Nitride. Angewandte Chemie - International Edition, 2014, 53, 9240-9245.	7.2	1,000
2	Facet engineered Ag3PO4 for efficient water photooxidation. Energy and Environmental Science, 2013, 6, 3380.	15.6	231
3	Substrate-, Wavelength-, and Time-Dependent Plasmon-Assisted Surface Catalysis Reaction of 4-Nitrobenzenethiol Dimerizing to p,pâ€²-Dimercaptoazobenzene on Au, Ag, and Cu Films. Langmuir, 2011, 27, 10677-10682.	1.6	223
4	A Nobleâ€Metalâ€Free Catalyst Derived from Niâ€Al Hydrotalcite for Hydrogen Generation from N₂H₄â‹…H₂O Decomposition. Angewandte Chemie - International Edition, 2012, 51, 6191-6194.	7.2	222
5	Nanostructured Cu/TiO₂ Photocatalysts for H₂ Production from Ethanol and Glycerol Aqueous Solutions.. ChemCatChem, 2011, 3, 574-577.	1.8	158
6	Catalytic conversion of cellulose to hexitols with mesoporous carbon supported Ni-based bimetallic catalysts. Green Chemistry, 2012, 14, 614.	4.6	151
7	The pH-Controlled Plasmon-Assisted Surface Photocatalysis Reaction of 4-Aminothiophenol top,pâ€²-Dimercaptoazobenzene on Au, Ag, and Cu Colloids. Journal of Physical Chemistry C, 2011, 115, 9629-9636.	1.5	149
8	Surface modification of Ni/Al2O3 with Pt: Highly efficient catalysts for H2 generation via selective decomposition of hydrous hydrazine. Journal of Catalysis, 2013, 298, 1-9.	3.1	137
9	Bifunctional Hybrid SiO₂ Nanoparticles Showing Synergy between Core Spin Crossover and Shell Luminescence Properties. Angewandte Chemie - International Edition, 2011, 50, 3290-3293.	7.2	127
10	Synergistic Role of TRPV1 and TRPA1 in Pancreatic Pain and Inflammation. Gastroenterology, 2011, 140, 1283-1291.e2.	0.6	126
11	Gold supported on carbon nanotubes for the selective oxidation of glycerol. Journal of Catalysis, 2012, 285, 83-91.	3.1	107
12	A novel approach for CO-free H production via catalytic decomposition of hydrazine. International Journal of Hydrogen Energy, 2005, 30, 1081-1089.	3.8	103
13	Influence of activated carbon surface chemistry on the activity of Au/AC catalysts in glycerol oxidation. Journal of Catalysis, 2011, 281, 119-127.	3.1	101
14	The reaction route and active site of catalytic decomposition of hydrazine over molybdenum nitride catalyst. Journal of Catalysis, 2004, 224, 473-478.	3.1	100
15	Promoting role of potassium in the reverse water gas shift reaction on Pt/mullite catalyst. Catalysis Today, 2017, 281, 319-326.	2.2	98
16	Stabilized gold on cerium-modified cryptomelane: Highly active in low-temperature CO oxidation. Journal of Catalysis, 2014, 309, 58-65.	3.1	83
17	Hierarchically Structured Carbon: Synthesis of Carbon Nanofibers Nested inside or Immobilized onto Modified Activated Carbon. Angewandte Chemie - International Edition, 2005, 44, 5488-5492.	7.2	82
18	Enhanced Hydroxyl Radical Scavenging Activity by Doping Lanthanum in Ceria Nanocubes. Journal of Physical Chemistry C, 2016, 120, 1891-1901.	1.5	77

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19	In Situ FT-IR Spectroscopic Studies of CO Adsorption on Fresh Mo2C/Al2O3Catalyst. Journal of Physical Chemistry B, 2003, 107, 7088-7094.	1.2	71
20	Improved Oxidase Mimetic Activity by Praseodymium Incorporation into Ceria Nanocubes. ACS Applied Materials & Interfaces, 2017, 9, 18595-18608.	4.0	71
21	Catalytic decomposition of hydrazine on iron nitride catalysts. Catalysis Communications, 2006, 7, 187-191.	1.6	70
22	A novel catalyst for hydrazine decomposition: molybdenum carbide supported on Î³-Al2O3. Chemical Communications, 2002, , 288-289.	2.2	69
23	Enhancement of the selectivity to dihydroxyacetone in glycerol oxidation using gold nanoparticles supported on carbon nanotubes. Catalysis Communications, 2011, 16, 64-69.	1.6	68
24	Synergistic effect of bimetallic Au-Pd supported on ceria-zirconia mixed oxide catalysts for selective oxidation of glycerol. Applied Catalysis B: Environmental, 2016, 197, 222-235.	10.8	62
25	Direct synthesis of carbon nanofibers on modified biomass-derived activated carbon. Carbon, 2009, 47, 340-343.	5.4	61
26	Title is missing!. Catalysis Letters, 2002, 79, 21-25.	1.4	55
27	Critical Influence of Nanofaceting on the Preparation and Performance of Supported Gold Catalysts. ACS Catalysis, 2015, 5, 3504-3513.	5.5	53
28	Selective Oxidation of Glycerol Catalyzed by Rh/Activated Carbon: Importance of Support Surface Chemistry. Catalysis Letters, 2011, 141, 420-431.	1.4	48
29	Tide driven microbial dynamics through virus-host interactions in the estuarine ecosystem. Water Research, 2019, 160, 118-129.	5.3	47
30	Natural Lavas as Catalysts for Efficient Production of Carbon Nanotubes and Nanofibers. Angewandte Chemie - International Edition, 2007, 46, 1823-1824.	7.2	46
31	Influence of the microstructure of carbon nanotubes on the oxidative dehydrogenation of ethylbenzene to styrene. Catalysis Today, 2010, 150, 49-54.	2.2	46
32	Pd, Pt, and Ptâ€“Cu Catalysts Supported on Carbon Nanotube (CNT) for the Selective Oxidation of Glycerol in Alkaline and Base-Free Conditions. Industrial & Engineering Chemistry Research, 2016, 55, 8548-8556.	1.8	46
33	Reversible deactivation of a Au/Ce0.62Zr0.38O2 catalyst in CO oxidation: A systematic study of CO2-triggered carbonate inhibition. Journal of Catalysis, 2014, 316, 210-218.	3.1	45
34	Ru-modified Au catalysts supported on ceriaâ€“zirconia for the selective oxidation of glycerol. Catalysis Today, 2015, 253, 178-189.	2.2	45
35	Size, nanostructure, and composition dependence of bimetallic Auâ€“Pd supported on ceriaâ€“zirconia mixed oxide catalysts for selective oxidation of benzyl alcohol. Journal of Catalysis, 2019, 375, 44-55.	3.1	43
36	Selective Oxidation of Glycerol Catalyzed by Gold Supported on Multiwalled Carbon Nanotubes with Different Surface Chemistries. Industrial & Engineering Chemistry Research, 2012, 51, 15884-15894.	1.8	42

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37	Reducible Support Effects in the Gas Phase Hydrogenation of p-Chloronitrobenzene over Gold. Journal of Physical Chemistry C, 2013, 117, 994-1005.	1.5	40
38	Carbon nanotube-induced preparation of vanadium oxide nanorods: Application as a catalyst for the partial oxidation of n-butane. Materials Research Bulletin, 2007, 42, 354-361.	2.7	39
39	Selective hydrogenation of benzoic acid over Au supported on CeO2 and Ce0.62Zr0.38O2: Formation of benzyl alcohol. Journal of Catalysis, 2014, 317, 114-125.	3.1	39
40	The morphology, porosity and productivity control of carbon nanofibers or nanotubes on modified activated carbon. Carbon, 2007, 45, 895-898.	5.4	38
41	The P2Y2 Receptor Sensitizes Mouse Bladder Sensory Neurons and Facilitates Purinergic Currents. Journal of Neuroscience, 2010, 30, 2365-2372.	1.7	36
42	Influence of pretreatment atmospheres on the performance of bimetallic Au-Pd supported on ceria-zirconia mixed oxide catalysts for benzyl alcohol oxidation. Applied Catalysis A: General, 2016, 525, 145-157.	2.2	35
43	Mountâ€Etnaâ€Lavaâ€Supported Nanocarbons for Oxidative Dehydrogenation Reactions. Advanced Materials, 2008, 20, 3597-3600.	11.1	33
44	Selective Oxidation of Glycerol over Platinum-Based Catalysts Supported on Carbon Nanotubes. Industrial & Engineering Chemistry Research, 2013, 52, 17390-17398.	1.8	33
45	Fast Green FCF Attenuates Lipopolysaccharide-Induced Depressive-Like Behavior and Downregulates TLR4/Myd88/NF-ÎºB Signal Pathway in the Mouse Hippocampus. Frontiers in Pharmacology, 2019, 10, 501.	1.6	32
46	Revisiting marine lytic and lysogenic virus-host interactions: Kill-the-Winner and Piggyback-the-Winner. Science Bulletin, 2021, 66, 871-874.	4.3	32
47	Gold Catalysts Supported on Ceriumâ€“Gallium Mixed Oxide for the Carbon Monoxide Oxidation and Water Gas Shift Reaction. Topics in Catalysis, 2011, 54, 201-209.	1.3	31
48	Synthesis of palladium-rhodium bimetallic nanoparticles for formic acid dehydrogenation. Journal of Energy Chemistry, 2021, 52, 301-309.	7.1	31
49	Catalytic Decomposition of Hydrazine over Î±-Mo2C/Î³-Al2O3 Catalysts. Industrial & Engineering Chemistry Research, 2004, 43, 6040-6047.	1.8	30
50	CO Oxidation over Bimetallic Auâ€“Pd Supported on Ceriaâ€“Zirconia Catalysts: Effects of Oxidation Temperature and Au:Pd Molar Ratio. Catalysis Letters, 2016, 146, 144-156.	1.4	29
51	Activation processes of highly ordered carbon nanofibers in the oxidative dehydrogenation of ethylbenzene. Catalysis Today, 2012, 186, 93-98.	2.2	28
52	Synthesis of ceria-praseodimia nanotubes with high catalytic activity for CO oxidation. Catalysis Today, 2012, 180, 167-173.	2.2	26
53	Viral Lysis Alters the Optical Properties and Biological Availability of Dissolved Organic Matter Derived from Prochlorococcus Picocyanobacteria. Applied and Environmental Microbiology, 2021, 87, .	1.4	26
54	Facile Synthesis of Ultrathin AuCu Dimetallic Nanowire Networks. European Journal of Inorganic Chemistry, 2012, 2012, 2700-2706.	1.0	25

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55	The effect of reaction conditions on the apparent deactivation of Ceâ€“Zr mixed oxides for the catalytic wet oxidation of phenol. Catalysis Today, 2012, 180, 25-33.	2.2	25
56	Viral Regulation on Bacterial Community Impacted by Lysis-Lysogeny Switch: A Microcosm Experiment in Eutrophic Coastal Waters. Frontiers in Microbiology, 2019, 10, 1763.	1.5	25
57	A Novel Catalyst for Synthesis of Styrene: Carbon Nanofibers Immobilized on Activated Carbon. Journal of Nanoscience and Nanotechnology, 2007, 7, 3495-3501.	0.9	24
58	Differential purinergic signaling in bladder sensory neurons of naÃ¯ve and bladder-inflamed mice. Pain, 2010, 148, 462-472.	2.0	23
59	CO Oxidation Activity of a Au/Ceria-Zirconia Catalyst Prepared by Depositionâ€“Precipitation with Urea. Topics in Catalysis, 2011, 54, 931-940.	1.3	23
60	Effect of Multifunctional Nanocatalysts on n-C₇ Asphaltene Adsorption and Subsequent Oxidation under High-Pressure Conditions. Energy & Fuels, 2020, 34, 6261-6278.	2.5	23
61	Structure transformations and reducibility of nanocrystalline Ce1âˆ’xYbxO2âˆ’(x/2) mixed oxides. Catalysis Today, 2012, 187, 56-64.	2.2	22
62	Influence of {111} nanofaceting on the dynamics of CO adsorption and oxidation over Au supported on CeO2 nanocubes: An operando DRIFT insight. Catalysis Today, 2019, 336, 90-98.	2.2	22
63	Preferential oxidation of CO in the presence of excess of hydrogen on Ru/Al2O3 catalyst: Promoting effect of ceriaâ€“terbia mixed oxide. Journal of Catalysis, 2013, 299, 272-283.	3.1	21
64	Selective oxidation of glycerol on morphology controlled ceria nanomaterials. Catalysis Science and Technology, 2019, 9, 2328-2334.	2.1	21
65	A Novel Phage Infecting Alteromonas Represents a Distinct Group of Siphophages Infecting Diverse Aquatic Copiotrophs. MSphere, 2021, 6, e0045421.	1.3	20
66	Plasmon-driven dimerization via S-S chemical bond in an aqueous environment. Scientific Reports, 2014, 4, 7221.	1.6	19
67	Fast Green FCF Alleviates Pain Hypersensitivity and Down-Regulates the Levels of Spinal P2X4 Expression and Pro-inflammatory Cytokines in a Rodent Inflammatory Pain Model. Frontiers in Pharmacology, 2018, 9, 534.	1.6	19
68	Ceria-Praseodymia Mixed Oxides: Relationships Between Redox Properties and Catalytic Activities Towards NO Oxidation to NO2 and CO-PROX Reactions. Topics in Catalysis, 2016, 59, 1065-1070.	1.3	18
69	Immobilization of CNFs on the surface and inside of the modified activated carbon. Physica Status Solidi (B): Basic Research, 2006, 243, 3533-3536.	0.7	17
70	Selective Oxidation of Veratryl Alcohol over Au-Pd/Ce0.62Zr0.38O2 Catalysts Synthesized by Sol-Immobilization: Effect of Au:Pd Molar Ratio. Nanomaterials, 2018, 8, 669.	1.9	17
71	A Macroscopically Relevant 3Dâ€Metrology Approach for Nanocatalysis Research. Particle and Particle Systems Characterization, 2018, 35, 1700343.	1.2	16
72	Pulsed radiofrequency to the dorsal root ganglion or the sciatic nerve reduces neuropathic pain behavior, decreases peripheral pro-inflammatory cytokines and spinal Î²-catenin in chronic constriction injury rats. Regional Anesthesia and Pain Medicine, 2019, 44, 742-746.	1.1	16

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73	Enhancing activity, selectivity and stability of palladium catalysts in formic acid decomposition: Effect of support functionalization. Catalysis Today, 2021, 382, 61-70.	2.2	16
74	Improved Photoactivities of Largeâ€surfaceâ€area gâ€C₃N₄ for CO₂ Conversion by Controllably Introducing Coâ€and Niâ€Species to Effectively Modulate Photogenerated Charges. ChemCatChem, 2019, 11, 6282-6287.	1.8	15
75	Physicochemical properties of nanostructured Pd/lanthanide-doped ceria spheres with high catalytic activity for CH₄ combustion. Journal of Materials Chemistry A, 2018, 6, 7488-7499.	5.2	14
76	Simultaneous water gas shift and methanation reactions on Ru/Ce0.8Tb0.2O2â^'x based catalysts. Catalysis Today, 2012, 180, 42-50.	2.2	13
77	Enhanced Artificial Enzyme Activities on the Reconstructed Sawtoothlike Nanofacets of Pure and Pr-Doped Ceria Nanocubes. ACS Applied Materials & Interfaces, 2021, 13, 38061-38073.	4.0	13
78	Adjustment and control of SERS activity of metal substrates by pressure. Journal of Raman Spectroscopy, 2010, 41, 398-405.	1.2	10
79	The contribution of neuro-immune crosstalk to pain in the peripheral nervous system and the spinal cord. International Immunopharmacology, 2022, 107, 108700.	1.7	10
80	A facile one-pot hydrothermal synthesis as an efficient method to modulate the potassium content of cryptomelane and its effects on the redox and catalytic properties. Chinese Journal of Catalysis, 2019, 40, 940-952.	6.9	9
81	A global viral oceanography database (gVOD). Earth System Science Data, 2021, 13, 1251-1271.	3.7	9
82	A Novel Broad Host Range Phage Infecting Alteromonas. Viruses, 2021, 13, 987.	1.5	9
83	Nitrifiers drive successions of particulate organic matter and microbial community composition in a starved macrocosm. Environment International, 2021, 157, 106776.	4.8	8
84	Experimental and Process Modelling Investigation of the Hydrogen Generation from Formic Acid Decomposition Using a Pd/Zn Catalyst. Applied Sciences (Switzerland), 2021, 11, 8462.	1.3	7
85	Combined Macroscopic, Nanoscopic, and Atomicâ€Scale Characterization of Goldâ€“Ruthenium Bimetallic Catalysts for Octanol Oxidation. Particle and Particle Systems Characterization, 2016, 33, 419-437.	1.2	6
86	Elevated Contribution of Low Nucleic Acid Prokaryotes and Viral Lysis to the Prokaryotic Community Along the Nutrient Gradient From an Estuary to Open Ocean Transect. Frontiers in Microbiology, 2020, 11, 612053.	1.5	6
87	Exceptional Low-Temperature CO Oxidation over Noble-Metal-Free Iron-Doped Hollandites: An In-Depth Analysis of the Influence of the Defect Structure on Catalytic Performance. ACS Catalysis, 2021, 11, 15026-15039.	5.5	5
88	UNDERSTANDING CERIA-BASED CATALYTIC MATERIALS: AN OVERVIEW OF RECENT PROGRESS. Catalytic Science Series, 2013, , 47-138.	0.6	2
89	Performance of Supported Au-Pd Alloy Nano Particles Catalyst for Base-free Synthesis of Imines by Self-coupling of Amine. Rare Metal Materials and Engineering, 2018, 47, 442-446.	0.8	1