Xue-Qing Gong

List of Publications by Year
in descending order

226	12,938	19636 61	29127 104
papers	citations	h-index	g-index

231	231	231	14480
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Reactivity of Anatase TiO2Nanoparticles:Â The Role of the Minority (001) Surface. Journal of Physical Chemistry B, 2005, 109, 19560-19562.	1.2	582
2	Ultrathin Metalâ€“Organic Framework Nanosheets with Ultrahigh Loading of Single Pt Atoms for Efficient Visibleâ€Lightâ€Driven Photocatalytic H₂ Evolution. Angewandte Chemie - International Edition, 2019, 58, 10198-10203.	7.2	404
3	Catalytic Role of Metal Oxides in Gold-Based Catalysts: A First Principles Study of CO Oxidation onTiO2Supported Au. Physical Review Letters, 2003, 91, 266102.	2.9	392
4	Steps on anatase TiO2(101). Nature Materials, 2006, 5, 665-670.	13.3	387
5	Boosting Power Conversion Efficiencies of Quantum-Dot-Sensitized Solar Cells Beyond 8% by Recombination Control. Journal of the American Chemical Society, 2015, 137, 5602-5609.	6.6	367
6	Direct hydrodeoxygenation of raw woody biomass into liquid alkanes. Nature Communications, 2016, 7, 11162.	5.8	359
7	Boosting Interfacial Charge-Transfer Kinetics for Efficient Overall CO₂ Photoreduction via Rational Design of Coordination Spheres on Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2020, 142, 12515-12523.	6.6	289
8	Small Au and Pt Clusters at the Anatase TiO₂(101) Surface:â€‰ Behavior at Terraces, Steps, and Surface Oxygen Vacancies. Journal of the American Chemical Society, 2008, 130, 370-381.	6.6	276
9	A Systematic Study of CO Oxidation on Metals and Metal Oxides:Â Density Functional Theory Calculations. Journal of the American Chemical Society, 2004, 126, 8-9.	6.6	267
10	Pd/NbOPO₄ Multifunctional Catalyst for the Direct Production of Liquid Alkanes from Aldol Adducts of Furans. Angewandte Chemie - International Edition, 2014, 53, 9755-9760.	7.2	241
11	Multiple configurations of the two excess<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>4</mml:mn><mml:mi>f</mml:mi></mml:mrow></mml:math>electrons on defective<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>CeO</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:ms Origin and impl. Physical Review B, 2009, 79, .	1.1	233
12	On the Unusual Properties of Anatase TiO₂ Exposed by Highly Reactive Facets. Journal of Physical Chemistry Letters, 2011, 2, 725-734.	2.1	223
13	Density Functional Theory Study of Formic Acid Adsorption on Anatase TiO2(001):Â Geometries, Energetics, and Effects of Coverage, Hydration, and Reconstruction. Journal of Physical Chemistry B, 2006, 110, 2804-2811.	1.2	219
14	Hydrogen Bonding Controls the Dynamics of Catechol Adsorbed on a TiO ₂ (110) Surface. Science, 2010, 328, 882-884.	6.0	212
15	An efficiently tuned d-orbital occupation of IrO₂by doping with Cu for enhancing the oxygen evolution reaction activity. Chemical Science, 2015, 6, 4993-4999.	3.7	208
16	Molecular Engineering of Donorâ€“Acceptor Conjugated Polymer/gâ€C₃N₄ Heterostructures for Significantly Enhanced Hydrogen Evolution Under Visibleâ€Light Irradiation. Advanced Functional Materials, 2018, 28, 1804512.	7.8	196
17	Effect of the crystal plane figure on the catalytic performance of MnO₂for the total oxidation of propane. CrystEngComm, 2015, 17, 3005-3014.	1.3	183
18	An Artificial Molecular Shuttle Operates in Lipid Bilayers for Ion Transport. Journal of the American Chemical Society, 2018, 140, 17992-17998.	6.6	171

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19	Taming the stability of Pd active phases through a compartmentalizing strategy toward nanostructured catalyst supports. Nature Communications, 2019, 10, 1611.	5.8	168
20	Anatase TiO₂ Crystals with Exposed Highâ€Index Facets. Angewandte Chemie - International Edition, 2011, 50, 3764-3768.	7.2	159
21	Oxygen vacancies induced visible-light photocatalytic activities of CaCu3Ti4O12 with controllable morphologies for antibiotic degradation. Applied Catalysis B: Environmental, 2018, 221, 422-432.	10.8	125
22	CO dissociation and O removal on Co(0001): a density functional theory study. Surface Science, 2004, 562, 247-256.	0.8	124
23	¹³ C NMR Guides Rational Design of Nanocatalysts via Chemisorption Evaluation in Liquid Phase. Science, 2011, 332, 224-228.	6.0	123
24	Current status and perspectives of rare earth catalytic materials and catalysis. Chinese Journal of Catalysis, 2014, 35, 1238-1250.	6.9	120
25	The catalytic role of water in CO oxidation. Journal of Chemical Physics, 2003, 119, 6324-6334.	1.2	119
26	A Model to Understand the Oxygen Vacancy Formation in Zr-Doped CeO₂: Electrostatic Interaction and Structural Relaxation. Journal of Physical Chemistry C, 2009, 113, 10229-10232.	1.5	113
27	Prominent Electronic and Geometric Modifications of Palladium Nanoparticles by Polymer Stabilizers for Hydrogen Production under Ambient Conditions. Angewandte Chemie - International Edition, 2012, 51, 11275-11278.	7.2	110
28	Enhanced Photocatalysis by Au Nanoparticle Loading on TiO₂ Single-Crystal (001) and (110) Facets. Journal of Physical Chemistry Letters, 2013, 4, 3910-3917.	2.1	105
29	Different Reactivities of TiO₂ Polymorphs:â€‰ Comparative DFT Calculations of Water and Formic Acid Adsorption at Anatase and Brookite TiO₂ Surfaces. Journal of Physical Chemistry C, 2008, 112, 6594-6596.	1.5	102
30	Evidence To Challenge the Universality of the Horiutiâ€“Polanyi Mechanism for Hydrogenation in Heterogeneous Catalysis: Origin and Trend of the Preference of a Non-Horiutiâ€“Polanyi Mechanism. Journal of the American Chemical Society, 2013, 135, 15244-15250.	6.6	101
31	The 2Ã—1 reconstruction of the rutile TiO2(011) surface: A combined density functional theory, X-ray diffraction, and scanning tunneling microscopy study. Surface Science, 2009, 603, 138-144.	0.8	99
32	Photocatalytic reduction of CO 2 with water vapor on surface La-modified TiO 2 nanoparticles with enhanced CH 4 selectivity. Applied Catalysis B: Environmental, 2015, 168-169, 125-131.	10.8	99
33	Study of Catalytic Sites on Ruthenium For Hydrogenation of N-ethylcarbazole: Implications of Hydrogen Storage via Reversible Catalytic Hydrogenation. Journal of Physical Chemistry C, 2010, 114, 9720-9730.	1.5	97
34	Mechanistic Study of Selective Catalytic Reduction of NO with NH₃ on W-Doped CeO₂ Catalysts: Unraveling the Catalytic Cycle and the Role of Oxygen Vacancy. Journal of Physical Chemistry C, 2016, 120, 2271-2283.	1.5	97
35	First-principles study of the structures and energetics of stoichiometric brookite<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">Ti</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>surfaces. Physical Review B, 2007, 76, .	1.1	96
36	CHx hydrogenation on Co(0001): A density functional theory study. Journal of Chemical Physics, 2005, 122, 024711.	1.2	94

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37	Hollandite Structure K_{xâ‰ˆ0.25}IrO₂ Catalyst with Highly Efficient Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2016, 8, 820-826.	4.0	94
38	OER activity manipulated by IrO6 coordination geometry: an insight from pyrochlore iridates. Scientific Reports, 2016, 6, 38429.	1.6	92
39	Selective hydrogenation of 5-(hydroxymethyl)furfural to 5-methylfurfural over single atomic metals anchored on Nb2O5. Nature Communications, 2021, 12, 584.	5.8	92
40	Layered nanostructured ferroelectric perovskite Bi₅FeTi₃O₁₅ for visible light photodegradation of antibiotics. Journal of Materials Chemistry A, 2017, 5, 21275-21290.	5.2	88
41	Catalytic total oxidation of 1,2-dichloroethane over VO x /CeO 2 catalysts: Further insights via isotopic tracer techniques. Applied Catalysis B: Environmental, 2016, 182, 598-610.	10.8	87
42	Niâ€“Co Codoping Breaks the Limitation of Single-Metal-Doped IrO₂with Higher Oxygen Evolution Reaction Performance and Less Iridium. ACS Energy Letters, 2017, 2, 2786-2793.	8.8	83
43	Interfacial Effects of CeO₂-Supported Pd Nanorod in Catalytic CO Oxidation: A Theoretical Study. Journal of Physical Chemistry C, 2015, 119, 12923-12934.	1.5	82
44	A promising low pressure methanol synthesis route from CO₂ hydrogenation over Pd@Zn coreâ€“shell catalysts. Green Chemistry, 2017, 19, 270-280.	4.6	82
45	The Critical Role of Water in the Ring Opening of Furfural Alcohol to 1,2-Pentanediol. ACS Catalysis, 2017, 7, 333-337.	5.5	81
46	Oxygen vacancy formation in CeO2 and Ce1â^'xZrxO2 solid solutions: electron localization, electrostatic potential and structural relaxation. Physical Chemistry Chemical Physics, 2012, 14, 16521.	1.3	80
47	A DFT+U study of the lattice oxygen reactivity toward direct CO oxidation on the CeO2(111) and (110) surfaces. Physical Chemistry Chemical Physics, 2012, 14, 16573.	1.3	78
48	Study on the catalytic reaction mechanism of low temperature oxidation of CO over Pdâ€“Cuâ€“Clx/Al2O3 catalyst. Catalysis Today, 2011, 175, 558-567.	2.2	74
49	A highly effective catalyst of Co-CeO 2 for the oxidation of diesel soot: The excellent NO oxidation activity and NO x storage capacity. Applied Catalysis A: General, 2017, 535, 1-8.	2.2	74
50	Realizing highly chemoselective detection of H2S inÂvitro and inÂvivo with fluorescent probes inside core-shell silica nanoparticles. Biomaterials, 2018, 159, 82-90.	5.7	74
51	Role of steps in the reactivity of the anatase TiO2(101) surface. Journal of Catalysis, 2007, 249, 134-139.	3.1	73
52	Shape Effect of Pd-Promoted Ga₂O₃ Nanocatalysts for Methanol Synthesis by CO₂ Hydrogenation. Journal of Physical Chemistry C, 2014, 118, 24452-24466.	1.5	73
53	Role of oxygen vacancies in the surface evolution of H at CeO₂(111): a charge modification effect. Physical Chemistry Chemical Physics, 2015, 17, 3544-3549.	1.3	73
54	Identification of different oxygen species in oxide nanostructures with ¹⁷ O solid-state NMR spectroscopy. Science Advances, 2015, 1, e1400133.	4.7	72

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55	Role and reduction of NOx in the catalytic combustion of soot over ironâ€“ceria mixed oxide catalyst. Chemical Engineering Journal, 2013, 218, 164-172.	6.6	69
56	Effect of lattice strain on the electro-catalytic activity of IrO₂ for water splitting. Chemical Communications, 2018, 54, 996-999.	2.2	68
57	Ultrathin Metalâ€“Organic Framework Nanosheets with Ultrahigh Loading of Single Pt Atoms for Efficient Visibleâ€Lightâ€Driven Photocatalytic H₂ Evolution. Angewandte Chemie, 2019, 131, 10304-10309.	1.6	68
58	Clustering of Oxygen Vacancies at<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>CeO</mml:mi></mml:mrow><mml:mn>2</mml:mn></mml:msub><m stretchy="false">(</mml:mo><mml:mn>111</mml:mn><mml:mo) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 617 Td (stretchy="false">)</mm Letters, 2016, 116, 086102.	2.9	67
59	A unique Co@CoO catalyst for hydrogenolysis of biomass-derived 5-hydroxymethylfurfural to 2,5-dimethylfuran. Nature Communications, 2022, 13, .	5.8	66
60	CO Oxidation at Rutile TiO₂(110): Role of Oxygen Vacancies and Titanium Interstitials. ACS Catalysis, 2015, 5, 2042-2050.	5.5	65
61	Size-dependent catalytic performance of ruthenium nanoparticles in the hydrogenolysis of a Î²-O-4 lignin model compound. Catalysis Science and Technology, 2018, 8, 735-745.	2.1	65
62	Methanol Conversion into Dimethyl Ether on the Anatase TiO₂(001) Surface. Angewandte Chemie - International Edition, 2016, 55, 623-628.	7.2	64
63	Metal-Free Ceria Catalysis for Selective Hydrogenation of Crotonaldehyde. ACS Catalysis, 2020, 10, 14560-14566.	5.5	64
64	Polymer-templated synthesis of hollow Pdâ€“CeO₂nanocomposite spheres and their catalytic activity and thermal stability. Journal of Materials Chemistry A, 2015, 3, 23230-23239.	5.2	63
65	Effects of Metal Oxyhydroxide Coatings on Photoanode in Quantum Dot Sensitized Solar Cells. Chemistry of Materials, 2016, 28, 2323-2330.	3.2	63
66	Formation of New Structures and Their Synergistic Effects in Boron and Nitrogen Codoped TiO2 for Enhancement of Photocatalytic Performance. Journal of Physical Chemistry C, 2011, 115, 7858-7865.	1.5	62
67	Function-oriented design of robust metal cocatalyst for photocatalytic hydrogen evolution on metal/titania composites. Nature Communications, 2021, 12, 158.	5.8	61
68	Mechanism of CO₂ Photocatalytic Reduction to Methane and Methanol on Defected Anatase TiO₂ (101): A Density Functional Theory Study. Journal of Physical Chemistry C, 2019, 123, 3505-3511.	1.5	57
69	Fluorinated conjugated poly(benzotriazole)/g-C3N4 heterojunctions for significantly enhancing photocatalytic H2 evolution. Applied Catalysis B: Environmental, 2020, 267, 118577.	10.8	56
70	Methanol Synthesis at a Wide Range of H₂/CO₂ Ratios over a Rhâ€In Bimetallic Catalyst. Angewandte Chemie - International Edition, 2020, 59, 16039-16046.	7.2	54
71	A density functional theory study of hydrogen dissociation and diffusion at the perimeter sites of Au/TiO2. Physical Chemistry Chemical Physics, 2012, 14, 3741.	1.3	52
72	Dispersed Nickel Boosts Catalysis by Copper in CO₂ Hydrogenation. ACS Catalysis, 2020, 10, 9261-9270.	5.5	52

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73	Site Sensitivity of Interfacial Charge Transfer and Photocatalytic Efficiency in Photocatalysis: Methanol Oxidation on Anatase TiO₂ Nanocrystals. Angewandte Chemie - International Edition, 2021, 60, 6160-6169.	7.2	52
74	A density functional theory study of small Au nanoparticles at CeO2 surfaces. Catalysis Today, 2011, 165, 19-24.	2.2	51
75	A DFT+U study of CO oxidation at CeO2(110) and (111) surfaces with oxygen vacancies. Surface Science, 2013, 618, 140-147.	0.8	51
76	Strategies To Improve the Activity While Maintaining the Selectivity of Oxidative Coupling of Methane at La₂O₃: A Density Functional Theory Study. ACS Catalysis, 2020, 10, 586-594.	5.5	50
77	Operando NMR spectroscopic analysis of proton transfer in heterogeneous photocatalytic reactions. Nature Communications, 2016, 7, 11918.	5.8	49
78	Acrolein hydrogenation on Pt(211) and Au(211) surfaces: a density functional theory study. Physical Chemistry Chemical Physics, 2011, 13, 21146.	1.3	48
79	Distinguishing faceted oxide nanocrystals with 17O solid-state NMR spectroscopy. Nature Communications, 2017, 8, 581.	5.8	48
80	Octahedral-shaped perovskite CaCu3Ti4O12 with dual defects and coexposed {(001), (111)} facets for visible-light photocatalysis. Applied Catalysis B: Environmental, 2019, 254, 86-97.	10.8	48
81	General Insight into CO Oxidation: A Density Functional Theory Study of the Reaction Mechanism on Platinum Oxides. Physical Review Letters, 2004, 93, 106104.	2.9	47
82	Facet-dependent photocatalytic performance of TiO 2 : A DFT study. Applied Catalysis B: Environmental, 2016, 198, 1-8.	10.8	45
83	High Performance and Stability of the Ptâ€W/ZSMâ€5 Catalyst for the Total Oxidation of Propane: The Role of Tungsten. ChemCatChem, 2013, 5, 2495-2503.	1.8	44
84	Unique Electronic and Structural Effects in Vanadia/Ceria-Catalyzed Reactions. Journal of the American Chemical Society, 2015, 137, 13228-13231.	6.6	44
85	Interaction of Hydrogen with Ceria: Hydroxylation, Reduction, and Hydride Formation on the Surface and in the Bulk. Chemistry - A European Journal, 2021, 27, 5268-5276.	1.7	44
86	High-performance PdNi alloy structured in situ on monolithic metal foam for coalbed methane deoxygenation via catalytic combustion. Chemical Communications, 2015, 51, 12613-12616.	2.2	43
87	Cooperative catalysis for the direct hydrodeoxygenation of vegetable oils into diesel-range alkanes over Pd/NbOPO₄. Chemical Communications, 2016, 52, 5160-5163.	2.2	43
88	Diffusion and Reaction of Hydrogen on Rutile TiO₂(011)-2Ã—1: The Role of Surface Structure. Journal of Physical Chemistry C, 2012, 116, 20438-20446.	1.5	42
89	N-Annulated perylene-based organic dyes sensitized graphitic carbon nitride to form an amide bond for efficient photocatalytic hydrogen production under visible-light irradiation. Applied Catalysis B: Environmental, 2018, 237, 32-42.	10.8	42
90	(Photo)Electrocatalytic CO₂ Reduction at the Defective Anatase TiO₂ (101) Surface. ACS Catalysis, 2020, 10, 4048-4058.	5.5	42

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91	A highly effective Ni-modified MnO_x catalyst for total oxidation of propane: the promotional role of nickel oxide. RSC Advances, 2016, 6, 50228-50237.	1.7	41
92	Polar surface structure of oxide nanocrystals revealed with solid-state NMR spectroscopy. Nature Communications, 2019, 10, 5420.	5.8	41
93	Chemical activity of oxygen vacancies on ceria: a combined experimental and theoretical study on CeO₂(111). Physical Chemistry Chemical Physics, 2014, 16, 24165-24168.	1.3	40
94	Methanol Dynamically Activated Room-Temperature Phosphorescence from a Twisted 4-Bromobiphenyl System. CCS Chemistry, 2020, 2, 158-167.	4.6	40
95	Mechanism of Surface-Enhanced Raman Scattering Based on 3D Grapheneâ€“TiO₂ Nanocomposites and Application to Real-Time Monitoring of Telomerase Activity in Differentiation of Stem Cells. ACS Applied Materials & Interfaces, 2017, 9, 36596-36605.	4.0	39
96	Catalytic Activity Control via Crossover between Two Different Microstructures. Journal of the American Chemical Society, 2017, 139, 13740-13748.	6.6	39
97	Localized Electrons Enhanced Ion Transport for Ultrafast Electrochemical Energy Storage. Advanced Materials, 2020, 32, e1905578.	11.1	39
98	High-Performance PdNi Nanoalloy Catalyst in Situ Structured on Ni Foam for Catalytic Deoxygenation of Coalbed Methane: Experimental and DFT Studies. ACS Catalysis, 2016, 6, 6236-6245.	5.5	38
99	Efficient dye-sensitized solar cells based on concerted companion dyes: Systematic optimization of thiophene units in the organic dye components. Chinese Chemical Letters, 2022, 33, 4313-4316.	4.8	38
100	Surface Reconstruction-Induced Site-Specific Charge Separation and Photocatalytic Reaction on Anatase TiO₂(001) Surface. Journal of Physical Chemistry C, 2017, 121, 9991-9999.	1.5	37
101	Trapping Nitric Oxide by Surface Hydroxyls on Rutile TiO₂(110). Journal of Physical Chemistry C, 2012, 116, 1887-1891.	1.5	36
102	Elucidation of the high CO₂ reduction selectivity of isolated Rh supported on TiO₂: a DFT study. Catalysis Science and Technology, 2016, 6, 6128-6136.	2.1	36
103	BrÃ¸nsted base site engineering of graphitic carbon nitride for enhanced photocatalytic activity. Journal of Materials Chemistry A, 2017, 5, 19227-19236.	5.2	36
104	AgBr tetradecahedrons with co-exposed {100} and {111} facets: simple fabrication and enhancing spatial charge separation using facet heterojunctions. Journal of Materials Chemistry A, 2016, 4, 18570-18577.	5.2	34
105	Pt-Doped NiFe₂O₄ Spinel as a Highly Efficient Catalyst for H₂ Selective Catalytic Reduction of NO at Room Temperature. ACS Combinatorial Science, 2016, 18, 195-202.	3.8	34
106	N-doped graphitic C3N4 nanosheets decorated with CoP nanoparticles: A highly efficient activator in singlet oxygen dominated visible-light-driven peroxymonosulfate activation for degradation of pharmaceuticals and personal care products. Journal of Hazardous Materials, 2021, 416, 125891.	6.5	34
107	Nucleation and Growth of 1D Water Clusters on Rutile TiO₂(011)-2Ã—1. Journal of Physical Chemistry C, 2009, 113, 10329-10332.	1.5	33
108	Structure and Catalytic Activity of Gold in Low-Temperature CO Oxidation. Journal of Physical Chemistry C, 2009, 113, 6124-6131.	1.5	32

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109	The stability and deactivation of Pdâ€“Cuâ€“Clx/Al2O3 catalyst for low temperature CO oxidation: an effect of moisture. Catalysis Science and Technology, 2011, 1, 1202.	2.1	32
110	Origin of the High Activity of Mesoporous CeO₂ Supported Monomeric VO_x for Low-Temperature Gas-Phase Selective Oxidative Dehydrogenation of Benzyl Alcohol: Role As an Electronic â€œHoleâ€• Journal of Physical Chemistry C, 2014, 118, 24950-24958.	1.5	32
111	A DFT + U study of V, Cr and Mn doped CeO2(111). Applied Surface Science, 2018, 428, 377-384.	3.1	32
112	Preparation, Characterization and Origin of Highly Active and Thermally Stable Pdâ€“Ce_{0.8}Zr_{0.2}O₂ Catalysts via Sol-Evaporation Induced Self-Assembly Method. Environmental Science & Technology, 2014, 48, 12403-12410.	4.6	31
113	A highly-efficient Laâ€“MnO_x catalyst for propane combustion: the promotional role of La and the effect of the preparation method. Catalysis Science and Technology, 2016, 6, 8222-8233.	2.1	31
114	New Directions for Atomic Steps: Step Alignment by Grazing Incident Ion Beams on<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>TiO</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mo stretchy="false">(</mml:mo><mml:mn>110</mml:mn><mml:mo) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 527 Td (stretchy="false">)</mm	2.9	30
115	Synthesis of a hollow structured coreâ€“shell Au@CeO₂â€“ZrO₂ nanocatalyst and its excellent catalytic performance. Journal of Materials Chemistry A, 2017, 5, 5601-5611.	5.2	29
116	Superior Performance of Ag over Pt for Hydrogen Evolution Reaction in Water Electrolysis under High Overpotentials. ACS Applied Energy Materials, 2019, 2, 1221-1228.	2.5	27
117	Adsorbate-Induced Restructuring of Ru(0001)<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>TiO</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mo stretchy="false">(</mml:mo><mml:mn>011</mml:mn><mml:mo stretchy="false">)</mml:mo><mml:mtext mathvariant="normal">â^’</mml:mtext><mml:mo stretchy="false">(</mml:mo><mml:mn>2</mml:mn><mml:mo>Ã—</mml:mo><mml:mn>1</mml:mn><mml:mo) Tj ETQq1 1 0.784314	2.9	26
118	Surface Reconstruction for Forming the [IrO₆]â€“[IrO₆] Framework: Key Structure for Stable and Activated OER Performance in Acidic Media. ACS Applied Materials & Interfaces, 2021, 13, 29654-29663.	4.0	26
119	CH₃^{â€¢}-Generating Capability as a Reactivity Descriptor for Metal Oxides in Oxidative Coupling of Methane. ACS Catalysis, 2021, 11, 14651-14659.	5.5	26
120	Enhancing photocatalytic activity of Sn doped TiO2 dominated with {105} facets. Catalysis Today, 2014, 225, 18-23.	2.2	25
121	Coreâ€“Shell Nanostructured Ru@Irâ€“O Electrocatalysts for Superb Oxygen Evolution in Acid. Small, 2022, 18, e2108031.	5.2	25
122	Catalytic activities of CeO2(110)â€“2 Ã— 1 reconstructed surface. Surface Science, 2015, 632, 164-173.	0.8	24
123	Solvent-free selective oxidation of cyclohexane with molecular oxygen over manganese oxides: Effect of the calcination temperature. Chinese Journal of Catalysis, 2016, 37, 184-192.	6.9	24
124	Selective tracking of ovarian-cancer-specific Î³-glutamyltranspeptidase using a ratiometric two-photon fluorescent probe. Journal of Materials Chemistry B, 2018, 6, 7439-7443.	2.9	24
125	A promising engineering strategy for water electro-oxidation iridate catalysts via coordination distortion. Chemical Communications, 2019, 55, 5801-5804.	2.2	24
126	Interactions of Oxide Surfaces with Water Revealed with Solid-State NMR Spectroscopy. Journal of the American Chemical Society, 2020, 142, 11173-11182.	6.6	24

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127	A comparative DFT study of adsorption and catalytic performance of Au nanoparticles at anatase and brookite TiO2 surfaces. Surface Science, 2011, 605, 1369-1380.	0.8	23
128	Ligand-mediated bifunctional catalysis for enhanced oxygen reduction and methanol oxidation tolerance in fuel cells. Journal of Materials Chemistry A, 2018, 6, 18884-18890.	5.2	22
129	Activity and selectivity of propane oxidative dehydrogenation over VO 3 /CeO 2 (111) catalysts: A density functional theory study. Chinese Journal of Catalysis, 2018, 39, 1520-1526.	6.9	22
130	Construction of polymeric carbon nitride and dibenzothiophene dioxide-based intramolecular donorâ€“acceptor conjugated copolymers for photocatalytic H₂ evolution. Nanoscale Advances, 2021, 3, 1699-1707.	2.2	22
131	A density functional theory study on the water formation at high coverages and the water effect in the Fischerâ€“Tropsch synthesis. Molecular Physics, 2004, 102, 993-1000.	0.8	21
132	Catalytic properties of Pt/Al2O3 catalysts in the aqueous-phase reforming of ethylene glycol: Effect of the alumina support. Kinetics and Catalysis, 2011, 52, 817-822.	0.3	21
133	A DFT+U study of the catalytic degradation of 1,2-dichloroethane over CeO₂. Physical Chemistry Chemical Physics, 2018, 20, 5856-5864.	1.3	21
134	The synthesis of Co-doped SAPO-5 molecular sieve and its performance in the oxidation of cyclohexane with molecular oxygen. Chinese Journal of Catalysis, 2016, 37, 273-280.	6.9	20
135	A DFT+U revisit of reconstructed CeO₂(100) surfaces: structures, thermostabilities and reactivities. Physical Chemistry Chemical Physics, 2019, 21, 19987-19994.	1.3	20
136	Ionic Liquid Stabilized Niobium Oxoclusters Catalyzing Oxidation of Sulfides with Exceptional Activity. Chemistry - A European Journal, 2019, 25, 4206-4217.	1.7	20
137	Role of Low-Coordinated Ce in Hydride Formation and Selective Hydrogenation Reactions on CeO₂ Surfaces. ACS Catalysis, 2022, 12, 624-632.	5.5	20
138	Pd@Zn coreâ€“shell nanoparticles of controllable shell thickness for catalytic methanol production. Catalysis Science and Technology, 2016, 6, 7698-7702.	2.1	19
139	Surfactant-Mediated One-Pot Method To Prepare Pdâ€“CeO₂ Colloidal Assembled Spheres and Their Enhanced Catalytic Performance for CO Oxidation. ACS Omega, 2016, 1, 118-126.	1.6	19
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