Pengfei Tian

List of Publications by Year
in descending order

53 papers	2,683 citations	159585 30 h-index	182427 51 g-index
53 all docs	53 docs citations	53 times ranked	3034 citing authors

#	Article	IF	Citations
1	Oxidative degradation of nitrobenzene by a Fenton-like reaction with Fe-Cu bimetallic catalysts. Applied Catalysis B: Environmental, 2019, 244, 1-10.	20.2	214
2	Induced activation of the commercial Cu/ZnO/Al2O3 catalyst for the steam reforming of methanol. Nature Catalysis, 2022, 5, 99-108.	34.4	155
3	Dynamic active sites over binary oxide catalysts: In situ/operando spectroscopic study of low-temperature CO oxidation over MnOx-CeO2 catalysts. Applied Catalysis B: Environmental, 2016, 191, 179-191.	20.2	126
4	The origin of active sites for direct synthesis of H 2 O 2 on Pd/TiO 2 catalysts: Interfaces of Pd and PdO domains. Journal of Catalysis, 2015, 321, 70-80.	6.2	121
5	Insight into active sites of Pdâ€“Au/TiO2 catalysts in hydrogen peroxide synthesis directly from H2 and O2. Journal of Catalysis, 2014, 311, 129-136.	6.2	120
6	Au/carbon as Fenton-like catalysts for the oxidative degradation of bisphenol A. Applied Catalysis B: Environmental, 2013, 134-135, 145-152.	20.2	111
7	Revealing the active species of Cu-based catalysts for heterogeneous Fenton reaction. Applied Catalysis B: Environmental, 2019, 258, 117985.	20.2	107
8	Tuning the Dynamic Interfacial Structure of Copperâ€“Ceria Catalysts by Indium Oxide during CO Oxidation. ACS Catalysis, 2018, 8, 5261-5275.	11.2	100
9	Vacancy engineering of the nickel-based catalysts for enhanced CO2 methanation. Applied Catalysis B: Environmental, 2021, 282, 119561.	20.2	100
10	The origin of palladium particle size effects in the direct synthesis of H2O2: Is smaller better?. Journal of Catalysis, 2017, 349, 30-40.	6.2	98
11	Strong Metalâ€“Support Interactions between Copper and Iron Oxide during the Highâ€Temperature Waterâ€Gas Shift Reaction. Angewandte Chemie - International Edition, 2019, 58, 9083-9087.	13.8	82
12	The generation of hydroxyl radicals by hydrogen peroxide decomposition on <scp>F</scp>eOCl/SBAâ€15 catalysts for phenol degradation. AIChE Journal, 2015, 61, 166-176.	3.6	75
13	Density functional theory study of direct synthesis of H2O2 from H2 and O2 on Pd(111), Pd(100), and Pd(110) surfaces. Chinese Journal of Catalysis, 2013, 34, 1002-1012.	14.0	63
14	Direct and Selective Synthesis of Hydrogen Peroxide over Palladiumâ€“Tellurium Catalysts at Ambient Pressure. ChemSusChem, 2017, 10, 3342-3346.	6.8	57
15	Structureâ€Tunable Copperâ€“Indium Catalysts for Highly Selective CO₂ Electroreduction to CO or HCOOH. ChemSusChem, 2019, 12, 3955-3959.	6.8	55
16	Probing the role of surface hydroxyls for Bi, Sn and In catalysts during CO2 Reduction. Applied Catalysis B: Environmental, 2021, 298, 120581.	20.2	54
17	Catalytic decomposition of H2O2 over a Au/carbon catalyst: A dual intermediate model for the generation of hydroxyl radicals. Journal of Catalysis, 2016, 336, 126-132.	6.2	52
18	Tracking structural evolution: <i>operando</i> regenerative CeOx/Bi interface structure for high-performance CO2 electroreduction. National Science Review, 2021, 8, nwaa187.	9.5	50

#	Article	IF	Citations
19	Preparation, Characterization, and Kinetic Study of a Coreâ€“Shell Mn₃O₄@SiO₂ Nanostructure Catalyst for CO Oxidation. ACS Catalysis, 2014, 4, 4106-4115.	11.2	49
20	An efficient preparation of N-doped mesoporous carbon derived from milk powder for supercapacitors and fuel cells. Electrochimica Acta, 2016, 196, 527-534.	5.2	49
21	Preparation of S/N co-doped graphene through a self-generated high gas pressure for high rate supercapacitor. Applied Surface Science, 2018, 456, 781-788.	6.1	49
22	First-Principles Study of C₂ Oxygenates Synthesis Directly from Syngas over CoCu Bimetallic Catalysts. Journal of Physical Chemistry C, 2015, 119, 216-227.	3.1	47
23	Theoretical study of size effects on the direct synthesis of hydrogen peroxide over palladium catalysts. Journal of Catalysis, 2019, 369, 95-104.	6.2	46
24	Rh nanoclusters encaged in hollow mesoporous silica nanoreactors with enhanced catalytic performance for phenol selective hydrogenation. Chemical Engineering Journal, 2020, 397, 125484.	12.7	46
25	Nature of Reactive Oxygen Intermediates on Copper-Promoted Ironâ€“Chromium Oxide Catalysts during CO₂ Activation. ACS Catalysis, 2020, 10, 7857-7863.	11.2	44
26	Promotional effects of Sb on Pd-based catalysts for the direct synthesis of hydrogen peroxide at ambient pressure. Chinese Journal of Catalysis, 2018, 39, 673-681.	14.0	41
27	Resolving CO2 activation and hydrogenation pathways over iron carbides from DFT investigation. Journal of CO2 Utilization, 2020, 38, 10-15.	6.8	41
28	Dispersing Pd nanoparticles on N-doped TiO₂: a highly selective catalyst for H₂O₂ synthesis. Catalysis Science and Technology, 2016, 6, 5060-5068.	4.1	36
29	Synergistic Effect of Platinum Single Atoms and Nanoclusters Boosting Electrocatalytic Hydrogen Evolution. CCS Chemistry, 2021, 3, 2539-2547.	7.8	36
30	A facile preparation of pomegranate-like porous carbon by carbonization and activation of phenolic resin prepared via hydrothermal synthesis in KOH solution for high performance supercapacitor electrodes. Advanced Powder Technology, 2019, 30, 2900-2907.	4.1	35
31	Deflagration method synthesizing N, S co-doped oxygen-functionalized carbons as a bifunctional catalyst for oxygen reduction and oxygen evolution reaction. Carbon, 2021, 181, 234-245.	10.3	32
32	Revealing the role of tellurium in palladium-tellurium catalysts for the direct synthesis of hydrogen peroxide. Journal of Catalysis, 2020, 385, 21-29.	6.2	31
33	N-doped 3D porous carbon catalyst derived from biowaste Triarrhena sacchariflora panicle for oxygen reduction reaction. Carbon, 2019, 146, 70-77.	10.3	29
34	Antioxidative and stable PdZn/ZnO/Al2O3 catalyst coatings concerning methanol steam reforming for fuel cell-powered vehicles. Applied Energy, 2020, 268, 115043.	10.1	28
35	Enhanced catalytic performance of atomically dispersed Pd on Pr-doped CeO2 nanorod in CO oxidation. Journal of Hazardous Materials, 2022, 426, 127793.	12.4	26
36	â€œFryingâ€•milk powder by molten salt to prepare nitrogen-doped hierarchical porous carbon for high performance supercapacitor. Journal of Alloys and Compounds, 2019, 806, 650-659.	5.5	24

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37	Redirecting dynamic structural evolution of nickel-contained RuO2 catalyst during electrochemical oxygen evolution reaction. Journal of Energy Chemistry, 2022, 69, 330-337.	12.9	24
38	Strong Metalâ€"Support Interactions between Copper and Iron Oxide during the Highâ€Temperature Waterâ€Gas Shift Reaction. Angewandte Chemie, 2019, 131, 9181-9185.	2.0	22
39	In situ template reaction method to prepare three-dimensional interconnected Fe-N doped hierarchical porous carbon for efficient oxygen reduction reaction catalysts and high performance supercapacitors. Journal of Power Sources, 2020, 448, 227443.	7.8	21
40	Effects of Cerium Doping on Ptâ€"Sn/Al₂O₃ Catalysts for <i>n</i>-Heptane Reforming. Industrial & Engineering Chemistry Research, 2020, 59, 6424-6434.	3.7	20
41	Electroless deposition of Niâ€"Cuâ€"P on a self-supporting graphene with enhanced hydrogen evolution reaction activity. International Journal of Hydrogen Energy, 2020, 45, 13985-13993.	7.1	20
42	Revealing the Effect of Sodium on Iron-Based Catalysts for CO₂ Hydrogenation: Insights from Calculation and Experiment. Journal of Physical Chemistry C, 2021, 125, 7637-7646.	3.1	20
43	Temperature tuned carbon morphologies derived from flexible graphite sheets in KNO3 molten salt. Carbon, 2016, 98, 221-224.	10.3	18
44	Tunable Carbon Dioxide Activation Pathway over Iron Oxide Catalysts: Effects of Potassium. Industrial & Engineering Chemistry Research, 2021, 60, 8705-8713.	3.7	18
45	Ce-introduced effects on modification of acidity and Pt electronic states on Pt-Sn/Î³-Al2O3 catalysts for catalytic reforming. Applied Catalysis A: General, 2021, 617, 118116.	4.3	17
46	Activation and deactivation of the commercialâ€type CuOâ€"Cr₂O₃â€"Fe₂O₃ high temperature shift catalyst. AIChE Journal, 2020, 66, e16846.	3.6	14
47	Superhydrophobic Ptâ€"Pd/Al 2 O 3 catalyst coating for hydrogen mitigation system of nuclear power plant. International Journal of Hydrogen Energy, 2017, 42, 14829-14840.	7.1	12
48	Borophene Nanoribbons via Strain Engineering for the Hydrogen Evolution Reaction: A First-Principles Study. Journal of Physical Chemistry C, 2021, 125, 16955-16962.	3.1	12
49	Curvature-induced electronic tuning of molecular catalysts for CO₂ reduction. Catalysis Science and Technology, 2021, 11, 2491-2496.	4.1	11
50	Functionalized silica nanorattles hosting Au nanocatalyst for direct synthesis of H2O2. Catalysis Today, 2015, 248, 28-34.	4.4	9
51	Degradation of MO and H 2 O 2 on Cu/ Î³â€Al 2 O 3 pellets in a fixed bed reactor: Kinetics and transport characteristics. AIChE Journal, 2020, 66, e17000.	3.6	9
52	Application of DFT modeling in Fischerâ€"Tropsch synthesis over Co-based catalysts. Chemical Modelling, 2015, , 184-218.	0.4	4
53	Electroreduction of Carbon Dioxide by Heterogenized Cofacial Porphyrins. Transactions of Tianjin University, 0, , 1.	6.4	3