Xiaobing Zhu

List of Publications by Year
in descending order

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63 papers	2,825 citations	136950 32 h-index	175258 52 g-index
65 all docs	65 docs citations	65 times ranked	3296 citing authors

#	Article	IF	Citations
1	Semi-transparent nanofilms of plasmonic Au/TiO2 for visible-light photocatalysis. Materials Chemistry and Physics, 2022, 280, 125773.	4.0	7
2	Mesoporous TiO₂ electrocatalysts synthesized by gliding arc plasma for oxygen evolution reaction. Journal Physics D: Applied Physics, 2021, 54, 484003.	2.8	2
3	Lower loading of Pt on hydrophobic TS-1 zeolite: A high-efficiency catalyst for benzene oxidation at low temperature. Catalysis Today, 2020, 355, 512-517.	4.4	15
4	Synergy between Î²-Mo2C Nanorods and Non-thermal Plasma for Selective CO2 Reduction to CO. CheM, 2020, 6, 3312-3328.	11.7	47
5	Warm-plasma catalytic reduction of CO2 with CH4. Catalysis Today, 2019, 330, 54-60.	4.4	19
6	Plasma catalytic steam methane reforming for distributed hydrogen production. Catalysis Today, 2019, 337, 69-75.	4.4	21
7	Plasma chain catalytic reforming of methanol for on-board hydrogen production. Chemical Engineering Journal, 2019, 369, 245-252.	12.7	52
8	Plasmochemical Approach to Templateâ€Free Synthesis of Highly Crystalline Mesoporous TiO₂ within Milliseconds. ChemNanoMat, 2019, 5, 403-406.	2.8	5
9	Novel power-to-syngas concept for plasma catalytic reforming coupled with water electrolysis. Chemical Engineering Journal, 2018, 353, 297-304.	12.7	34
10	Kinetic study on visible-light photocatalytic removal of formaldehyde from air over plasmonic Au/TiO 2. Catalysis Today, 2017, 281, 630-635.	4.4	48
11	Enhanced effect of plasma on catalytic reduction of CO 2 to CO with hydrogen over Au/CeO 2 at low temperature. Journal of Energy Chemistry, 2017, 26, 488-493.	12.9	33
12	In Situ Regeneration of Au Nanocatalysts by Atmospheric-Pressure Air Plasma: Regeneration Characteristics of Square-Wave Pulsed Plasma. Topics in Catalysis, 2017, 60, 914-924.	2.8	17
13	Oxidative pyrolysis reforming of methanol in warm plasma for an on-board hydrogen production. International Journal of Hydrogen Energy, 2017, 42, 13617-13624.	7.1	30
14	Highly Dispersed Copper over Î²-Mo₂C as an Efficient and Stable Catalyst for the Reverse Water Gas Shift (RWGS) Reaction. ACS Catalysis, 2017, 7, 912-918.	11.2	263
15	A novel process of ozone catalytic oxidation for low concentration formaldehyde removal. Chinese Journal of Catalysis, 2017, 38, 1759-1769.	14.0	38
16	Photocatalytic Formaldehyde Oxidation over Plasmonic Au/TiO₂ under Visible Light: Moisture Indispensability and Light Enhancement. ACS Catalysis, 2017, 7, 6514-6524.	11.2	121
17	â€œStorage-oxidationâ€•cycling process for indoor benzene removal at room temperature. Catalysis Today, 2017, 297, 193-200.	4.4	10
18	Nano-sized gold particles dispersed on HZSM-5 and SiO 2 substrates for catalytic oxidation of HCHO. Catalysis Today, 2017, 281, 512-519.	4.4	52

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19	Selective reduction of carbon dioxide to carbon monoxide over Au/CeO2 catalyst and identification of reaction intermediate. Chinese Journal of Catalysis, 2016, 37, 2053-2058.	14.0	17
20	Exceptional activity for photocatalytic mineralization of formaldehyde over amorphous titania nanofilms. Chemical Engineering Journal, 2016, 306, 1001-1009.	12.7	18
21	Gold stabilized on various oxide supports catalyzing formaldehyde oxidation at room temperature. Chinese Journal of Catalysis, 2016, 37, 1729-1737.	14.0	31
22	Warm plasma catalytic reforming of biogas in a heat-insulated reactor: Dramatic energy efficiency and catalyst auto-reduction. Chemical Engineering Journal, 2016, 288, 671-679.	12.7	57
23	Visible-light photocatalytic oxidation of CO over plasmonic Au/TiO 2 : Unusual features of oxygen plasma activation. Applied Catalysis B: Environmental, 2016, 188, 48-55.	20.2	75
24	Gliding Arc Plasma Synthesis of Visibleâ€Light Active Câ€Doped Titania Photocatalysts. Plasma Processes and Polymers, 2015, 12, 422-430.	3.0	16
25	Ozone catalytic oxidation for ammonia removal from simulated air at room temperature. Catalysis Science and Technology, 2015, 5, 2227-2237.	4.1	5
26	Inherent rate constants and humidity impact factors of anatase TiO 2 film in photocatalytic removal of formaldehyde from air. Chemical Engineering Journal, 2015, 279, 897-903.	12.7	59
27	Atmospheric-pressure O2 plasma treatment of Au/TiO2 catalysts for CO oxidation. Catalysis Today, 2015, 256, 142-147.	4.4	49
28	An energy-efficient catalytic process for the tandem removal of formaldehyde and benzene by metal/HZSM-5 catalysts. Catalysis Science and Technology, 2015, 5, 4968-4972.	4.1	13
29	In-situ regeneration of Au nanocatalysts by atmospheric-pressure air plasma: Significant contribution of water vapor. Applied Catalysis B: Environmental, 2015, 179, 69-77.	20.2	44
30	Post-plasma catalytic oxidative CO2 reforming of methane over Ni-based catalysts. Catalysis Today, 2015, 256, 96-101.	4.4	19
31	Kinetics study on carbon dioxide reforming of methane in kilohertz spark-discharge plasma. Chemical Engineering Journal, 2015, 264, 445-452.	12.7	45
32	Understanding on the origins of hydroxyapatite stabilized gold nanoparticles as high-efficiency catalysts for formaldehyde and benzene oxidation. Catalysis Communications, 2015, 59, 195-200.	3.3	43
33	CO Oxidation Activity at Room Temperature over Au/CeO₂ Catalysts: Disclosure of Induction Period and Humidity Effect. ACS Catalysis, 2014, 4, 3481-3489.	11.2	125
34	Facile and Fast Deposition of Amorphous Ti<scp>O</scp>₂ Film under Atmospheric Pressure and at Room Temperature, and its High Photocatalytic Activity under <scp>UV</scp>â€<scp>C</scp> Light. Chemical Vapor Deposition, 2014, 20, 8-13.	1.3	22
35	Effect of CO2/CH4 ratio on biogas reforming with added O2 through an unique spark-shade plasma. International Journal of Hydrogen Energy, 2014, 39, 13902-13908.	7.1	20
36	FeOx-supported gold catalysts for catalytic removal of formaldehyde at room temperature. Applied Catalysis B: Environmental, 2014, 154-155, 73-81.	20.2	137

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37	A comparative study of the catalytic oxidation of HCHO and CO over Mn0.75Co2.25O4 catalyst: The effect of moisture. Applied Catalysis B: Environmental, 2014, 160-161, 542-551.	20.2	85
38	Gliding Arc Plasma Synthesis of Crystalline TiO2 Nanopowders with High Photocatalytic Activity. Plasma Chemistry and Plasma Processing, 2013, 33, 827-838.	2.4	16
39	Complete oxidation of formaldehyde at ambient temperature over Î³-Al2O3 supported Au catalyst. Catalysis Communications, 2013, 42, 93-97.	3.3	102
40	Renewable and high-concentration syngas production from oxidative reforming of simulated biogas with low energy cost in a plasma shade. Chemical Engineering Journal, 2013, 234, 240-246.	12.7	29
41	Effect of O2/CH4 ratio on the optimal specific-energy-input (SEI) for oxidative reforming of biogas in a plasma-shade reactor. Journal of Energy Chemistry, 2013, 22, 681-684.	12.9	15
42	A triazole-based polymer electrolyte membrane for fuel cells operated in a wide temperature range (25â€“150ÂÂ°C) with little humidification. Journal of Power Sources, 2013, 241, 219-224.	7.8	35
43	Investigation into Electrochemical Oxygen Reduction on Platinum in Tetraethylammonium Hydroxide and Effect of Addition of Imidazole and 1,2,4-Triazole. Journal of the Electrochemical Society, 2012, 159, F628-F634.	2.9	4
44	Bridge to Fuel Cell Molecular Catalysis: 3D Non-Platinum Group Metal Catalyst in MEAs. ECS Transactions, 2012, 45, 143-152.	0.5	6
45	Molecular catalysis of the oxygen reduction reaction by iron porphyrin catalysts tethered into Nafion layers: An electrochemical study in solution and a membrane-electrode-assembly study in fuel cells. Journal of Power Sources, 2012, 216, 67-75.	7.8	38
46	Blend Membranes of Highly Phosphonated Polysulfone and Polybenzimidazoles for High Temperature Proton Exchange Membrane Fuel Cells. ECS Transactions, 2011, 41, 2147-2159.	0.5	2
47	Ionic-Crosslinked Interpenetrating Polymer Network (IPN) Membranes for Anhydrous High Temperature Polymer Electrolyte Fuel Cells Based on PFSA Ionomer and Functionalized Polysiloxane. ECS Transactions, 2011, 41, 2135-2145.	0.5	1
48	Fabrication and investigation of SiO2 supported sulfated zirconia/NafionÂ® self-humidifying membrane for proton exchange membrane fuel cell applications. Journal of Power Sources, 2008, 184, 197-203.	7.8	66
49	An inorganic/organic self-humidifying composite membranes for proton exchange membrane fuel cell application. Electrochimica Acta, 2008, 53, 4096-4103.	5.2	61
50	Challenging reinforced composite polymer electrolyte membranes based on disulfonated poly(arylene) Tj ETQq0 0 0 rgBT /Overlock 10 T 2007, 17, 386-397.	6.7	56
51	Promotion of PEM Self-Humidifying Effect by Nanometer-Sized Sulfated Zirconia-Supported Pt Catalyst Hybrid with Sulfonated Poly(Ether Ether Ketone). Journal of Physical Chemistry B, 2007, 111, 6391-6399.	2.6	46
52	Fabrication and characterization of a PTFE-reinforced integral composite membrane for self-humidifying PEMFC. Journal of Power Sources, 2007, 165, 786-792.	7.8	39
53	Investigation of self-humidifying membranes based on sulfonated poly(ether ether ketone) hybrid with sulfated zirconia supported Pt catalyst for fuel cell applications. Journal of Power Sources, 2007, 168, 323-329.	7.8	43
54	Self-Humidifying Cs2.5H0.5PW12O40 / Nafion / PTFE Composite Membrane for Proton Exchange Membrane Fuel Cells. Electrochemical and Solid-State Letters, 2006, 9, A92-A95.	2.2	36

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55	An Ultrathin Self-Humidifying Membrane for PEM Fuel Cell Application:Â Fabrication, Characterization, and Experimental Analysis. Journal of Physical Chemistry B, 2006, 110, 14240-14248.	2.6	79
56	Synthesis and Structureâ"Activity Relationship Exploration of Carbon-Supported PtRuNi Nanocomposite as a CO-Tolerant Electrocatalyst for Proton Exchange Membrane Fuel Cells. Journal of Physical Chemistry B, 2006, 110, 7828-7834.	2.6	88
57	Research and Development of Key Materials of PEMFC. , 2006, , 105.		0
58	A bi-functional micro-porous layer with composite carbon black for PEM fuel cells. Journal of Power Sources, 2006, 162, 474-479.	7.8	166
59	Preparation and characterization of carbon-supported PtRuIr catalyst with excellent CO-tolerant performance for proton-exchange membrane fuel cells. Journal of Catalysis, 2006, 238, 468-476.	6.2	140
60	Preparation and Characterization of Stable Ionomers and Ionomer Membranes for Fuel Cells. Fuel Cells, 2006, 6, 413-424.	2.4	22
61	A Low-Cost PTFE-Reinforced Integral Multilayered Self-Humidifying Membrane for PEM Fuel Cells. Electrochemical and Solid-State Letters, 2006, 9, A332.	2.2	7
62	A Novel PTFE-Reinforced Multilayer Self-Humidifying Composite Membrane for PEM Fuel Cells. Electrochemical and Solid-State Letters, 2006, 9, A49-A52.	2.2	33
63	On-Board Hydrogen Production: Warm Plasma Chain Catalysis. SSRN Electronic Journal, 0, , .	0.4	0