Xiaoxing Wang

List of Publications by Year
in descending order

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54 papers	3,421 citations	136885 32 h-index	175177 52 g-index
56 all docs	56 docs citations	56 times ranked	3343 citing authors

#	ARTICLE	IF	CITATIONS
1	Regenerable solid molecular basket sorbents for selective SO2 capture from CO2-rich gas streams. Catalysis Today, 2021, 371, 231-239.	2.2	6
2	Deep removal of SO2 from cathode air over polyethylenimine-modified SBA-15 sorbents for fuel cells. Catalysis Today, 2021, 371, 240-246.	2.2	7
3	One-step plasma-enabled catalytic carbon dioxide hydrogenation to higher hydrocarbons: significance of catalyst-bed configuration. Green Chemistry, 2021, 23, 1642-1647.	4.6	23
4	Unraveling the Dynamic Evolution of Pd Species on Pd-Loaded ZnO Nanorods for Different Hydrogen Sensing Behaviors. ACS Sustainable Chemistry and Engineering, 2021, 9, 6370-6379.	3.2	20
5	Dynamic Evolution of Fe and Carbon Species over Different ZrO₂ Supports during CO Prereduction and Their Effects on CO₂ Hydrogenation to Light Olefins. ACS Sustainable Chemistry and Engineering, 2021, 9, 7891-7903.	3.2	35
6	Plasma-enhanced catalytic reduction of SO2: Decoupling plasma-induced surface reaction from plasma-phase reaction. Applied Catalysis B: Environmental, 2021, 286, 119852.	10.8	12
7	CO2 Hydrogenation to Olefin-Rich Hydrocarbons Over Fe-Cu Bimetallic Catalysts: An Investigation of Fe-Cu Interaction and Surface Species. Frontiers in Chemical Engineering, 2021, 3, .	1.3	5
8	Plasma-assisted catalytic reduction of SO2 to elemental sulfur: Influence of nonthermal plasma and temperature on iron sulfide catalyst. Journal of Catalysis, 2020, 391, 260-272.	3.1	21
9	Hydrogen sulfide removal from biogas on ZIF-derived nitrogen-doped carbons. Catalysis Today, 2020, 371, 221-221.	2.2	4
10	Influence of Loading a Tertiary Amine on Activated Carbons and Effect of CO₂ on Adsorptive H₂S Removal from Biogas. ACS Sustainable Chemistry and Engineering, 2020, 8, 9998-10008.	3.2	13
11	New Approach to Enhance CO2 Capture of â€œMolecular Basketâ€•Sorbent by Using 3-Aminopropyltriethoxysilane to Reshape Fumed Silica Support. Industrial & Engineering Chemistry Research, 2020, 59, 7267-7273.	1.8	15
12	One-Step Low-Temperature Reduction of Sulfur Dioxide to Elemental Sulfur by Plasma-Enhanced Catalysis. ACS Catalysis, 2020, 10, 5272-5277.	5.5	22
13	Regulation of synergy between metal and acid sites over the Ni-SAPO-11 catalyst for n-hexane hydroisomerization. Fuel, 2020, 274, 117855.	3.4	33
14	Carbon Capture From Flue Gas and the Atmosphere: A Perspective. Frontiers in Energy Research, 2020, 8, .	1.2	165
15	Capture of CO2 from Concentrated Sources and the Atmosphere. , 2019, , 35-72.		4
16	Discovering Inherent Characteristics of Polyethylenimine-Functionalized Porous Materials for CO₂ Capture. ACS Applied Materials & Interfaces, 2019, 11, 36515-36524.	4.0	31
17	Origin of Pd-Cu bimetallic effect for synergetic promotion of methanol formation from CO2 hydrogenation. Journal of Catalysis, 2019, 369, 21-32.	3.1	80
18	CO2 hydrogenation to methanol on Pd-Cu bimetallic catalysts: H2/CO2 ratio dependence and surface species. Catalysis Today, 2018, 316, 62-70.	2.2	52

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19	Feâ€“Cu Bimetallic Catalysts for Selective CO₂ Hydrogenation to Olefin-Rich C₂⁺ Hydrocarbons. Industrial & Engineering Chemistry Research, 2018, 57, 4535-4542.	1.8	88
20	Al2O3 and CeO2-promoted MgO sorbents for CO2 capture at moderate temperatures. Frontiers of Chemical Science and Engineering, 2018, 12, 83-93.	2.3	30
21	Oligomerization of Biomass-Derived Light Olefins to Liquid Fuel: Effect of Alkali Treatment on the HZSM-5 Catalyst. Industrial & Engineering Chemistry Research, 2017, 56, 12046-12055.	1.8	24
22	CO2 capture over molecular basket sorbents: Effects of SiO2 supports and PEG additive. Journal of Energy Chemistry, 2017, 26, 1030-1038.	7.1	35
23	Comparative Study of Molecular Basket Sorbents Consisting of Polyallylamine and Polyethylenimine Functionalized SBAâ€15 for CO 2 Capture from Flue Gas. ChemPhysChem, 2017, 18, 3163-3173.	1.0	37
24	Selective Removal of H₂S from Biogas Using Solid Amine-Based â€œMolecular Basketâ€• Sorbent. Energy & Fuels, 2017, 31, 9517-9528.	2.5	34
25	Spectroscopic characterization and catalytic activity of Rh supported on CeO2-modified Al2O3 for low-temperature steam reforming of propane. Catalysis Today, 2016, 263, 22-34.	2.2	49
26	Development of a new clay supported polyethylenimine composite for CO2 capture. Applied Energy, 2014, 113, 334-341.	5.1	133
27	New Strategy To Enhance CO₂ Capture over a Nanoporous Polyethylenimine Sorbent. Energy & Fuels, 2014, 28, 7742-7745.	2.5	23
28	New molecular basket sorbents for CO2 capture based on mesoporous sponge-like TUD-1. Catalysis Today, 2014, 238, 95-102.	2.2	28
29	Three-dimensional molecular basket sorbents for CO2 capture: Effects of pore structure of supports and loading level of polyethylenimine. Catalysis Today, 2014, 233, 100-107.	2.2	65
30	Ultra-Deep Adsorptive Desulfurization of Light-Irradiated Diesel Fuel over Supported TiO₂â€“CeO₂ Adsorbents. Industrial & Engineering Chemistry Research, 2013, 52, 15746-15755.	1.8	51
31	Molecular basket sorbents polyethylenimineâ€“SBA-15 for CO2 capture from flue gas: Characterization and sorption properties. Microporous and Mesoporous Materials, 2013, 169, 103-111.	2.2	152
32	A novel approach for ultraâ€deep adsorptive desulfurization of diesel fuel over TiO₂â€“CeO₂/MCMâ€48 under ambient conditions. AIChE Journal, 2013, 59, 1441-1445.	1.8	88
33	Sulfuric Acid Modified Bentonite as the Support of Tetraethylenepentamine for CO₂ Capture. Energy & Fuels, 2013, 27, 1538-1546.	2.5	75
34	Temperature-programmed desorption of CO2 from polyethylenimine-loaded SBA-15 as molecular basket sorbents. Catalysis Today, 2012, 194, 44-52.	2.2	93
35	A solid molecular basket sorbent for CO₂capture from gas streams with low CO₂concentration under ambient conditions. Physical Chemistry Chemical Physics, 2012, 14, 1485-1492.	1.3	107
36	Influence of sulfur on the carbon deposition in steam reforming of liquid hydrocarbons over CeO2â€“Al2O3 supported Ni and Rh catalysts. Applied Catalysis A: General, 2011, 394, 32-40.	2.2	48

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37	A Novel and Green Method for the Synthesis of Ionic Liquids Using the Corresponding Acidic Ionic Liquid Precursors and Dialkyl Carbonate. Chemistry Letters, 2010, 39, 1112-1113.	0.7	6
38	Sulfur poisoning of CeO2â€“Al2O3-supported mono- and bi-metallic Ni and Rh catalysts in steam reforming of liquid hydrocarbons at low and high temperatures. Applied Catalysis A: General, 2010, 390, 210-218.	2.2	62
39	Influence of ceria and nickel addition to alumina-supported Rh catalyst for propane steam reforming at low temperatures. Applied Catalysis A: General, 2009, 357, 213-222.	2.2	87
40	Nanoporous molecular basket sorbent for NO2 and SO2 capture based on a polyethylene glycol-loaded mesoporous molecular sieve. Energy and Environmental Science, 2009, 2, 878.	15.6	47
41	â€œMolecular Basketâ€•Sorbents for Separation of CO₂ and H₂S from Various Gas Streams. Journal of the American Chemical Society, 2009, 131, 5777-5783.	6.6	497
42	Infrared Study of CO₂ Sorption over â€œMolecular Basketâ€•Sorbent Consisting of Polyethylenimine-Modified Mesoporous Molecular Sieve. Journal of Physical Chemistry C, 2009, 113, 7260-7268.	1.5	330
43	Mesoporous-molecular-sieve-supported Polymer Sorbents for Removing H2S from Hydrogen Gas Streams. Topics in Catalysis, 2008, 49, 108-117.	1.3	85
44	A nanoporous polymeric sorbent for deep removal of H2S from gas mixtures for hydrogen purification. Green Chemistry, 2007, 9, 695.	4.6	86
45	Iron-containing heterogeneous catalysts for partial oxidation of methane and epoxidation of propylene. Catalysis Today, 2006, 117, 156-162.	2.2	49
46	Iron-catalyzed propylene epoxidation by nitrous oxide: Toward understanding the nature of active iron sites with modified Fe-MFI and Fe-MCM-41 catalysts. Journal of Catalysis, 2006, 239, 105-116.	3.1	62
47	Coordination structures of vanadium and iron in MCM-41 and the catalytic properties in partial oxidation of methane. Microporous and Mesoporous Materials, 2005, 77, 223-234.	2.2	54
48	Iron-Catalyzed Propylene Epoxidation by Nitrous Oxide:â€‰ Studies on the Effects of Alkali Metal Salts. Journal of Physical Chemistry B, 2005, 109, 23500-23508.	1.2	59
49	SBA-15-supported iron phosphate catalyst for partial oxidation of methane to formaldehyde. Catalysis Today, 2004, 93-95, 155-161.	2.2	71
50	Iron-Catalyzed Propylene Epoxidation by Nitrous Oxide: Dramatic Shift of Allylic Oxidaton to Epoxidation by the Modification with Alkali Metal Salts.. ChemInform, 2004, 35, no.	0.1	0
51	Iron-catalysed propylene epoxidation by nitrous oxide: dramatic shift of allylic oxidation to epoxidation by the modification with alkali metal salts. Chemical Communications, 2004, , 1396.	2.2	28
52	MCM-41-supported iron phosphate catalyst for partial oxidation of methane to oxygenates with oxygen and nitrous oxide. Journal of Catalysis, 2003, 217, 457-467.	3.1	121
53	Superior catalytic performance of phosphorus-modified molybdenum oxide clusters encapsulated inside SBA-15 in the partial oxidation of methane. New Journal of Chemistry, 2003, 27, 1301.	1.4	37
54	Excellent Catalytic Performances of SBA-15-supported Vanadium Oxide for Partial Oxidation of Methane to Formaldehyde. Chemistry Letters, 2003, 32, 860-861.	0.7	32