Wenfeng Han

List of Publications by Year
in descending order

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84	1,517	331259	414034
papers	citations	21 h-index	32 g-index

84	84	84	1368
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Treatment of the potent greenhouse gas, CHF3â€”An overview. Journal of Fluorine Chemistry, 2012, 140, 7-16.	0.9	79
2	Defect-rich activated carbons as active and stable metal-free catalyst for acetylene hydrochlorination. Carbon, 2019, 146, 406-412.	5.4	78
3	Decoration of Pd Nanoparticles with N and S Doped Carbon Quantum Dots as a Robust Catalyst for the Chemoselective Hydrogenation Reaction. ACS Sustainable Chemistry and Engineering, 2019, 7, 8542-8553.	3.2	64
4	Wheat flour-derived N-doped mesoporous carbon extrudate as superior metal-free catalysts for acetylene hydrochlorination. Chemical Communications, 2018, 54, 623-626.	2.2	50
5	An efficient route for the preparation of activated carbon supported ruthenium catalysts with high performance for ammonia synthesis. Catalysis Today, 2011, 174, 97-105.	2.2	44
6	Defective graphene@diamond hybrid nanocarbon material as an effective and stable metal-free catalyst for acetylene hydrochlorination. Chemical Communications, 2019, 55, 1430-1433.	2.2	41
7	Effect of activated carbon on the dispersion of Ru and K over supported Ru-based catalyst for ammonia synthesis. Catalysis Communications, 2007, 8, 351-354.	1.6	39
8	Role of surface defects of carbon nanotubes on catalytic performance of barium promoted ruthenium catalyst for ammonia synthesis. Journal of Energy Chemistry, 2020, 41, 79-86.	7.1	39
9	Experimental and chemical kinetic study of the pyrolysis of trifluoroethane and the reaction of trifluoromethane with methane. Journal of Fluorine Chemistry, 2010, 131, 751-760.	0.9	38
10	Direct synthesis of mesoporous nitrogen doped Ru-carbon catalysts with semi-embedded Ru nanoparticles for acetylene hydrochlorination. Microporous and Mesoporous Materials, 2018, 264, 248-253.	2.2	38
11	Aqueous Ammonia (NH₃) Based Post Combustion CO₂Capture: A Review. Oil and Gas Science and Technology, 2014, 69, 931-945.	1.4	31
12	Direct Synthesis of Rutheniumâ€Containing Ordered Mesoporous Carbon with Tunable Embedding Degrees by Using a Boric Acidâ€Assisted Approach. ChemCatChem, 2014, 6, 353-360.	1.8	31
13	Sub-nano MgF₂ embedded in carbon nanofibers and electrospun MgF₂ nanofibers by one-step electrospinning as highly efficient catalysts for 1,1,1-trifluoroethane dehydrofluorination. Catalysis Science and Technology, 2017, 7, 6000-6012.	2.1	29
14	La2Ce2O7 supported ruthenium as a robust catalyst for ammonia synthesis. Journal of Rare Earths, 2019, 37, 492-499.	2.5	29
15	High thermal stability of ceria-based mixed oxide catalysts supported on ZrO2 for toluene combustion. Catalysis Science and Technology, 2013, 3, 1480.	2.1	28
16	CO₂ absorption by piperazine promoted aqueous ammonia solution: absorption kinetics and ammonia loss. , 2013, 3, 231-245.		28
17	Quasi metal organic framework with highly concentrated Cr2O3 molecular clusters as the efficient catalyst for dehydrofluorination of 1,1,1,3,3-pentafluoropropane. Applied Catalysis B: Environmental, 2019, 257, 117939.	10.8	28
18	Influence of oxidation on heat-treated activated carbon support properties and metallic dispersion of Ru/C catalyst. Catalysis Letters, 2007, 115, 13-18.	1.4	24

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19	Activation of a Carbon Support Through a Twoâ€Step Wet Oxidation and Highly Active Rutheniumâ€“Activated Carbon Catalysts for the Hydrogenation of Benzene. ChemCatChem, 2014, 6, 572-579.	1.8	24
20	Conversion of CHF3to CH2î—»CF2via Reaction with CH4and CaBr2. Environmental Science & Technology, 2008, 42, 5795-5799.	4.6	23
21	The origin of the extraordinary stability of mercury catalysts on the carbon support: the synergy effects between oxygen groups and defects revealed from a combined experimental and DFT study. Chinese Journal of Catalysis, 2019, 40, 141-146.	6.9	23
22	Solution combustion synthesis of nano-chromia as catalyst for the dehydrofluorination of 1,1-difluoroethane. Journal of Materials Science, 2016, 51, 11002-11013.	1.7	22
23	Microwave assisted combustion of phytic acid for the preparation of Ni₂P@C as a robust catalyst for hydrodechlorination. Chemical Communications, 2019, 55, 9279-9282.	2.2	22
24	Preparation of Iron Carbides Formed by Iron Oxalate Carburization for Fischerâ€“Tropsch Synthesis. Catalysts, 2019, 9, 347.	1.6	22
25	A highly stable and active mesoporous ruthenium catalyst for ammonia synthesis prepared by a RuCl3/SiO2-templated approach. Chinese Journal of Catalysis, 2019, 40, 114-123.	6.9	22
26	Effect of the graphitic degree of carbon supports on the catalytic performance of ammonia synthesis over Ba-Ru-K/HSGC catalyst. Journal of Energy Chemistry, 2014, 23, 443-452.	7.1	21
27	Promotion of Nb2O5 on the wustite-based iron catalyst for ammonia synthesis. Applied Surface Science, 2015, 353, 17-23.	3.1	21
28	WÃ¼stite-based catalyst for ammonia synthesis: Structure, property and performance. Catalysis Today, 2017, 297, 276-291.	2.2	21
29	Predominant Catalytic Performance of Nickel Nanoparticles Embedded into Nitrogen-Doped Carbon Quantum Dot-Based Nanosheets for the Nitroreduction of Halogenated Nitrobenzene. ACS Sustainable Chemistry and Engineering, 2022, 10, 8162-8171.	3.2	20
30	Conversion of CHF3 to CH2CF2 via reaction with CH4 in the presence of CBrF3: An experimental and kinetic modelling study. Journal of Hazardous Materials, 2010, 180, 181-187.	6.5	19
31	Catalytic hydrolysis of trifluoromethane over alumina. , 2014, 4, 121-130.		19
32	Combustion Synthesis of Amorphous Al and Cr Composite as the Catalyst for Dehydrofluorination of 1,1-Difluoroethane. Industrial & Engineering Chemistry Research, 2018, 57, 12774-12783.	1.8	19
33	Reverting fluoroform back to chlorodifluoromethane and dichlorofluoromethane: Intermolecular Cl/F exchange with chloroform at moderate temperatures. Chemical Engineering Journal, 2019, 355, 594-601.	6.6	19
34	Carbon-supported ruthenium catalysts prepared by a coordination strategy for acetylene hydrochlorination. Chinese Journal of Catalysis, 2020, 41, 1683-1691.	6.9	19
35	Mechanistic study of the reaction of CHF3 with CH4. Chemical Engineering Journal, 2011, 166, 822-831.	6.6	18
36	Solution Combustion Synthesis of Cr2O3 Nanoparticles and the Catalytic Performance for Dehydrofluorination of 1,1,1,3,3-Pentafluoropropane to 1,3,3,3-Tetrafluoropropene. Molecules, 2019, 24, 361.	1.7	18

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37	Geometric effect of Ru/HSAG@mSiO₂: a catalyst for selective hydrogenation of cinnamaldehyde. RSC Advances, 2014, 4, 30180-30185.	1.7	17
38	Experimental and Kinetic Studies of Gas-phase Pyrolysis of n-C₄F₁₀. Industrial & Engineering Chemistry Research, 2008, 47, 2579-2584.	1.8	16
39	Catalytic pyrolysis of CHF3 over activated carbon and activated carbon supported potassium catalyst. Journal of Fluorine Chemistry, 2010, 131, 698-703.	0.9	16
40	Preparation of N-doped ordered mesoporous carbon and catalytic performance for the pyrolysis of 1-chloro-1,1-difluoroethane to vinylidene fluoride. Microporous and Mesoporous Materials, 2019, 275, 200-206.	2.2	16
41	Single-Site Au/Carbon Catalysts with Single-Atom and Au Nanoparticles for Acetylene Hydrochlorination. ACS Applied Nano Materials, 2020, 3, 3004-3010.	2.4	15
42	Confinement of AlF3 in MOF derived structures for the formation of 4-fold coordinated Al and significantly improved dehydrofluorination activity. Chemical Engineering Journal, 2020, 394, 124946.	6.6	15
43	Hydrothermal synthesis of sulfur-resistant MoS2 catalyst for methanation reaction. Catalysis Communications, 2016, 84, 120-123.	1.6	14
44	Development and application of wÃ¼stite-based ammonia synthesis catalysts. Catalysis Today, 2020, 355, 110-127.	2.2	14
45	Effect of pore structure of mesoporous carbon on its supported Ru catalysts for ammonia synthesis. Chinese Journal of Catalysis, 2013, 34, 1395-1401.	6.9	13
46	Preparation of fluorinated Cr2O3 hexagonal prism and catalytic performance for the dehydrofluorination of 1,1-difluoroethane to vinyl fluoride. Journal of Nanoparticle Research, 2015, 17, 1.	0.8	13
47	Preparation and Catalytic Performance of Metal-Rich Pd Phosphides for the Solvent-Free Selective Hydrogenation of Chloronitrobenzene. Catalysts, 2019, 9, 177.	1.6	13
48	Î³-Fe2O3 as the precursor of iron based catalyst prepared by solid-state reaction at room temperature for Fischer-Tropsch to olefins. Applied Catalysis A: General, 2019, 572, 158-167.	2.2	13
49	Catalytic activity of Ru supported on SmCeOx for ammonia decomposition: The effect of Sm doping. Journal of Solid State Chemistry, 2021, 295, 121946.	1.4	13
50	Palladium Nanoparticles Inset into the Carbon Sphere with Robust Acid Resistance for Selective Hydrogenation of Chloronitrobenzene. Industrial & Engineering Chemistry Research, 2022, 61, 4310-4319.	1.8	13
51	Preparation of Nâ€Doped Activated Carbon for Catalytic Pyrolysis of 1â€Chloroâ€1,1â€difluoroethane to Vinylidene Fluoride. ChemistrySelect, 2018, 3, 1015-1018.	0.7	12
52	EDTA-assisted hydrothermal synthesis of cubic SrF₂ particles and their catalytic performance for the pyrolysis of 1-chloro-1,1-difluoroethane to vinylidene fluoride. CrystEngComm, 2019, 21, 1691-1700.	1.3	12
53	Effect of Methanol on the Gas-Phase Reaction of Trifluoromethane with Methane. Industrial & Engineering Chemistry Research, 2010, 49, 8406-8414.	1.8	11
54	CaBaFx composite as robust catalyst for the pyrolysis of 1-chloro-1,1-difluoroethane to vinylidene fluoride. Catalysis Communications, 2019, 120, 42-45.	1.6	11

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55	Coordinatively unsaturated aluminum anchored Ru cluster for catalytic hydrogenation of benzene. Journal of Catalysis, 2021, 400, 255-264.	3.1	11
56	Strong Interaction of Ruthenium Species with Graphite Structure for the Self-Dispersion of Ru under Solvent-Free Conditions. ACS Sustainable Chemistry and Engineering, 2017, 5, 7195-7202.	3.2	10
57	Effect of nitrogen co-doping with ruthenium on the catalytic performance of Ba/Ruâ€“N-MC catalysts for ammonia synthesis. RSC Advances, 2019, 9, 22045-22052.	1.7	10
58	Experimental and DFT Mechanistic Study of Dehydrohalogenation of 1-Chloro-1,1-difluoroethane over Metal Fluorides. Industrial & Engineering Chemistry Research, 2019, 58, 18149-18159.	1.8	10
59	Synergistic catalysis of carbon-partitioned LaF₃â€“BaF₂ composites for the coupling of CH₄ with CHF₃ to VDF. Catalysis Science and Technology, 2019, 9, 1338-1348.	2.1	10
60	Solution Combustion Synthesis of Fe2O3-Based Catalyst for Ammonia Synthesis. Catalysts, 2020, 10, 1027.	1.6	9
61	Confined aluminum fluoride layers derived from the in situ etching of Ti3AlC2 as the robust catalyst for dehydrofluorination reaction. Applied Surface Science, 2021, 538, 148022.	3.1	9
62	PVDF mediated fabrication of freestanding AlF3 sub-microspheres: Facile and controllable synthesis of Î±, Î² and Î¸-AlF3. Materials Chemistry and Physics, 2020, 240, 122287.	2.0	8
63	Conversion of a CFCs, HFCs and HCFCs waste mixture via reaction with methane. Journal of Hazardous Materials, 2010, 184, 696-703.	6.5	7
64	Catalytic coupling of CH₄ with CHF₃ for the synthesis of VDF over LaOF catalyst. , 2018, 8, 587-602.		7
65	Under-coordinated AlF3 clusters confined in carbon matrix with robust sintering resistance for dehydrofluorination of hydrofluorocarbons. Chemical Engineering Journal, 2022, 431, 134178.	6.6	7
66	Morphological effect of fluorinated alumina on the Cl/F exchange reaction. Journal of Fluorine Chemistry, 2017, 202, 65-70.	0.9	6
67	Promotion of O₂ on the coâ€pyrolysis of CHF₃ and CH₄ for VDF synthesis. , 2017, 7, 891-902.		6
68	Rational design of MgF₂ catalysts with long-term stability for the dehydrofluorination of 1,1-difluoroethane (HFC-152a). RSC Advances, 2019, 9, 23744-23751.	1.7	6
69	Thermally conductive SiC as support of aluminum fluoride for the catalytic dehydrofluorination reaction. Catalysis Communications, 2020, 142, 106033.	1.6	6
70	Synthesis of Vinylidene Fluoride via Reaction of Chlorodifluoromethane (HCFC-22) with Methane. Industrial & Engineering Chemistry Research, 2010, 49, 6010-6019.	1.8	5
71	Preparation of efficient ruthenium catalysts for ammonia synthesis via high surface area graphite dispersion. Reaction Kinetics, Mechanisms and Catalysis, 2014, 113, 361-374.	0.8	5
72	Synthesis of titanium oxyfluoride with oxygen vacancy as novel catalysts for pyrolysis of fluorinated greenhouse gasses to hydrofluoroolefins. Journal of the Taiwan Institute of Chemical Engineers, 2021, 129, 189-189.	2.7	5

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73	The reaction mechanism of acetylene hydrochlorination on defective carbon supported ruthenium catalysts identified by DFT calculations and experimental approaches. Inorganic Chemistry Frontiers, 2022, 9, 458-467.	3.0	5
74	Facile Preparation of BaClxFy for the Catalytic Dehydrochlorination of 1-Chloro-1,1-Difluoroethane to Vinylidene Fluoride. Catalysts, 2020, 10, 377.	1.6	4
75	Catalytic Performance for the Conversion of Potent Fluorinated Greenhouse Gases by Aluminium Fluorides with Different Morphology. Catalysis Letters, 2021, 151, 2065-2074.	1.4	4
76	One-step Synthesis of N-Doped Mesoporous Carbon as Highly Efficient Support of Pd Catalyst for Hydrodechlorination of 2,4-Dichlorophenol. Chemical Research in Chinese Universities, 2018, 34, 1004-1008.	1.3	3
77	Selectivity Dependence of 1,1-Difluoro-1-Chloroethane Dehydrohalogenation on the Metalâ€“Support Interaction over SrF2 Catalyst. Catalysts, 2020, 10, 355.	1.6	3
78	Pyrolysis of Trifluoromethane over Activated Carbon: Role of the Surface Oxygen Groups. Progress in Reaction Kinetics and Mechanism, 2014, 39, 38-52.	1.1	1
79	Preparation and characterization of chromium-doped magnesium fluoride catalysts via an aqueous solâ€“gel method. Journal of Sol-Gel Science and Technology, 2019, 92, 200-207.	1.1	1
80	Pâ€doped Carbon as the Efficient Support of Nickel Catalysts for Hydrodechlorination of Chlorodifluoromethane. ChemistrySelect, 2020, 5, 13290-13294.	0.7	1
81	One-Pot Cascade Catalysis of Dehydrochlorination of Greenhouse Gas HCFC-142b and Hydrochlorination of Acetylene for the Spontaneous Production of VDF and VCM. ACS ES&T Engineering, 2022, 2, 121-128.	3.7	1
82	BaF(p-BDC)0.5 as the Catalyst Precursor for the Catalytic Dehydrochlorination of 1-Chloro-1,1-Difluoroethane to Vinylidene Fluoride. Catalysts, 2021, 11, 1268.	1.6	0
83	Effect of Hydrothermal Treatment of Activated Carbon by Nitric Acid on Activ-ity of Ba-Ru-K/AC Catalyst for Ammonia Synthesis. Chinese Journal of Catalysis, 2013, 33, 1191-1197.	6.9	0
84	Effect of Cr-doping on the acidity and pore structure of mesoporous magnesium fluoride. Chinese Journal of Catalysis, 2014, 34, 373-378.	6.9	0