Shixue Zhou

List of Publications by Year
in descending order

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45 papers	908 citations	361413 20 h-index	477307 29 g-index
45 all docs	45 docs citations	45 times ranked	663 citing authors

#	Article	IF	Citations
1	Efficient Extraction of Neutral Heterocyclic Nitrogen Compounds from Coal Tar via Ionic Liquids and Its Mechanism Analysis. Energy & Fuels, 2018, 32, 9358-9370.	5.1	48
2	Carbon-confined magnesium hydride nano-lamellae for catalytic hydrogenation of carbon dioxide to lower olefins. Journal of Catalysis, 2019, 379, 121-128.	6.2	47
3	In-situ synthesis of Mg2Ni-Ce6O11 catalyst for improvement of hydrogen storage in magnesium. Chemical Engineering Journal, 2020, 385, 123448.	12.7	44
4	Multiscale Exploration and Experimental Insights into Separating Neutral Heterocyclic Nitrogen Compounds Using [emim][NO₃] as an Extractant. ACS Sustainable Chemistry and Engineering, 2020, 8, 5662-5673.	6.7	42
5	Mechanochemical in-situ incorporation of Ni on MgO/MgH2 surface for the selective O-/C-terminal catalytic hydrogenation of CO2 to CH4. Journal of Catalysis, 2021, 394, 397-405.	6.2	41
6	Enhancement in dehydriding performance of magnesium hydride by iron incorporation: A combined experimental and theoretical investigation. Journal of Power Sources, 2016, 322, 179-186.	7.8	40
7	MgH₂/Cu_xO Hydrogen Storage Composite with Defect-Rich Surfaces for Carbon Dioxide Hydrogenation. ACS Applied Materials & Interfaces, 2019, 11, 31009-31017.	8.0	37
8	Effectiveness of crystallitic carbon from coal as milling aid and for hydrogen storage during milling with magnesium. Fuel, 2013, 109, 68-75.	6.4	34
9	Bio-precipitation of Calcite with Preferential Orientation Induced bySynechocystissp. PCC6803. Geomicrobiology Journal, 2014, 31, 884-899.	2.0	34
10	Separation of heterocyclic nitrogen compounds from coal tar fractions via ionic liquids: COSMO-SAC screening and experimental study. Chemical Engineering Communications, 2019, 206, 1199-1217.	2.6	34
11	Facile Fabrication of Biochar from Palm Kernel Shell Waste and Its Novel Application to Magnesium-Based Materials for Hydrogen Storage. Materials, 2020, 13, 625.	2.9	34
12	Location-dependent effect of nickel on hydrogen dissociation and diffusion on Mg (0001) surface: Insights into hydrogen storage material design. Journal of Magnesium and Alloys, 2022, 10, 1617-1630.	11.9	34
13	Nano-confined magnesium for hydrogen storage from reactive milling with anthracite carbon as milling aid. International Journal of Hydrogen Energy, 2014, 39, 13628-13633.	7.1	33
14	Dissociation and diffusion of hydrogen on defect-free and vacancy defective Mg (0001) surfaces: A density functional theory study. Applied Surface Science, 2017, 394, 371-377.	6.1	33
15	Oxygen vacancy in magnesium/cerium composite from ball milling for hydrogen storage improvement. International Journal of Hydrogen Energy, 2019, 44, 13606-13612.	7.1	29
16	Remarkable catalytic effect of Ni and ZrO2 nanoparticles on the hydrogen sorption properties of MgH2. International Journal of Hydrogen Energy, 2022, 47, 4716-4724.	7.1	24
17	Doped polyaniline/multiwalled carbon nanotube composites: Preparation and characterization. Polymer Composites, 2013, 34, 1119-1125.	4.6	23
18	Theoretical prediction and experimental study on catalytic mechanism of incorporated Ni for hydrogen absorption of Mg. International Journal of Hydrogen Energy, 2019, 44, 27885-27895.	7.1	23

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19	Solid-phase hydrogen in a magnesiumâ€“carbon composite for efficient hydrogenation of carbon disulfide. Journal of Materials Chemistry A, 2018, 6, 3055-3062.	10.3	22
20	Novel application of MgH2/MoS2 hydrogen storage materials to thiophene hydrodesulfurization: A combined experimental and theoretical case study. Materials and Design, 2018, 158, 213-223.	7.0	21
21	Characterization of calcium deposition induced by Synechocystis sp. PCC6803 in BG11 culture medium. Chinese Journal of Oceanology and Limnology, 2014, 32, 503-510.	0.7	20
22	Hybrid activation mechanism of thermal annealing for hydrogen storage of magnesium based on experimental evidence and theoretical validation. Applied Surface Science, 2020, 504, 144491.	6.1	19
23	Crystalline structure, energy calculation and dehydriding thermodynamics of magnesium hydride from reactive milling. International Journal of Hydrogen Energy, 2015, 40, 11484-11490.	7.1	18
24	A copper-based sorbent with oxygen-vacancy defects from mechanochemical reduction for carbon disulfide absorption. Journal of Materials Chemistry A, 2016, 4, 17207-17214.	10.3	18
25	Mulch-assisted ambient-air synthesis of oxygen-rich activated carbon for hydrogen storage: A combined experimental and theoretical case study. Applied Surface Science, 2021, 544, 148963.	6.1	18
26	Hydrogen Release: Thermodynamic and Kinetic Studies of NaBH₄ Activated by Different Zeolite Nanoparticles. Energy & Fuels, 2020, 34, 10218-10224.	5.1	17
27	Effect of carbon from anthracite coal on decomposition kinetics of magnesium hydride. Journal of Alloys and Compounds, 2014, 592, 231-237.	5.5	16
28	Effect of atomic iron on hydriding reaction of magnesium: Atomic-substitution and atomic-adsorption cases from a density functional theory study. Applied Surface Science, 2020, 504, 144489.	6.1	14
29	Hydrogen activation on aluminium-doped magnesium hydride surface for methanation of carbon dioxide. Applied Surface Science, 2020, 515, 146038.	6.1	13
30	Room-Temperature Synthesis of Hydroxylnaphthalene-1,4-dione Derivative Catalyzed by Phenylphosphinic Acid. Synthetic Communications, 2014, 44, 1286-1290.	2.1	12
31	In Situ Formation of Mg₂Ni on Magnesium Surface via Hydrogen Activation for Improving Hydrogen Sorption Performance. ACS Applied Energy Materials, 2022, 5, 6043-6049.	5.1	10
32	Evolution of magnesium during reactive milling under hydrogen atmosphere with crystallitic carbon as milling aid. Journal of Alloys and Compounds, 2013, 581, 472-478.	5.5	9
33	Effect of Ni and SAPO-34 co-additive on enhancing hydrogen storage performance of MgH2. International Journal of Hydrogen Energy, 2021, 46, 23748-23756.	7.1	9
34	In situ synthesis of polyisoprene/grafted single-walled carbon nanotube composites. Polymer Journal, 2013, 45, 834-838.	2.7	8
35	Hydrogen release: In-situ calorimetry studies of NaBH4+2MgH2 doped by ZrF4. International Journal of Hydrogen Energy, 2021, 46, 922-929.	7.1	6
36	Influence of aluminum location on hydrogen sorption kinetics of magnesium-based materials. Functional Materials Letters, 2014, 07, 1450034.	1.2	5

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37	Efficient Hydrogen Generation From Hydrolysis of Sodium Borohydride in Seawater Catalyzed by Polyoxometalate Supported on Activated Carbon. Frontiers in Chemistry, 2020, 8, 676.	3.6	4
38	Crystal structure and hydrogen storage behaviors of Mg/MoS2 composites from ball milling. Journal Wuhan University of Technology, Materials Science Edition, 2016, 31, 773-778.	1.0	3
39	Enhancement of the hydrogen storage properties of Mg/C nanocomposites prepared by reactive milling with molybdenum. Journal Wuhan University of Technology, Materials Science Edition, 2017, 32, 299-304.	1.0	3
40	Facile In Situ Synthesis of Micro/Nano Structured MgH₂ Whiskers and Investigation of Their Growth Mechanisms. Crystal Research and Technology, 2018, 53, 1800147.	1.3	3
41	Syndiotactic polymerization of methyl methacrylate with Ni(acac)2-methylaluminoxane catalyst. Journal of Polymer Research, 2012, 19, 1.	2.4	2
42	CTAB modification of attapulgite and its inhibition to algae growth. , 2011, , .		1
43	Synthesis, Characterization, and Hydrodesulfurization Activity of Diatomite-Dispersed NiMoW Composition. Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry, 2014, 44, 310-314.	0.6	1
44	Confinement of Mg Nanoparticles by Bituminous Coal and Associated Synergistic Hydrogen Storage Effect. Journal of Materials Engineering and Performance, 2020, 29, 760-768.	2.5	1
45	Sand mulch-aided ambient-air fabrication of microporous cocoa waste derived-activated carbon for methylene blue adsorption. International Journal of Environmental Analytical Chemistry, 2024, 104, 198-214.	3.3	1