

Renju Zacharia

List of Publications by Year in descending order

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37
papers

2,768
citations

331670

21
h-index

330143

37
g-index

40
all docs

40
docs citations

40
times ranked

4397
citing authors

#	ARTICLE	IF	CITATIONS
1	Hydrogen storage in a two-liter adsorbent prototype tank for fuel cell driven vehicles. Applied Energy, 2019, 250, 333-343.	10.1	28
2	Bio-regeneration of activated carbon: A comprehensive review. Separation and Purification Technology, 2018, 197, 345-359.	7.9	158
3	How the activation process modifies the hydrogen storage behavior of biomass-derived activated carbons. Journal of Porous Materials, 2018, 25, 221-234.	2.6	21
4	Thermodynamics and kinetics of CH ₄ /CO ₂ binary mixture separation by metal-organic frameworks from isotope exchange and adsorption break-through. Microporous and Mesoporous Materials, 2018, 263, 165-172.	4.4	21
5	Biotransformation of carbon dioxide in bioelectrochemical systems: State of the art and future prospects. Journal of Power Sources, 2017, 356, 256-273.	7.8	194
6	Outlook and challenges for hydrogen storage in nanoporous materials. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	129
7	Investigation of the hydrogen adsorbed density inside the pores of MOF-5 from path integral grand canonical Monte Carlo at supercritical and subcritical temperature. Science Bulletin, 2016, 61, 594-600.	9.0	15
8	Charge/discharge cycling, flowthrough cooling and para - ortho conversion for cooling bulk hydrogen storage tank filled with MOF-5. International Journal of Hydrogen Energy, 2016, 41, 1044-1052.	7.1	4
9	Simulation of Binary CO ₂ /CH ₄ Mixture Breakthrough Profiles in MIL-53 (Al). Journal of Nanomaterials, 2015, 2015, 1-15.	2.7	13
10	Nanomaterials for Renewable Energy Storage: Synthesis, Characterization, and Applications. Journal of Nanomaterials, 2015, 2015, 1-2.	2.7	2
11	Review of Solid State Hydrogen Storage Methods Adopting Different Kinds of Novel Materials. Journal of Nanomaterials, 2015, 2015, 1-18.	2.7	69
12	Effect of flowthrough cooling heat removal on the performances of MOF-5 cryo-adsorptive hydrogen reservoir for bulk storage applications. International Journal of Hydrogen Energy, 2015, 40, 9314-9325.	7.1	12
13	Specific heat capacities of MOF-5, Cu-BTC, Fe-BTC, MOF-177 and MIL-53 (Al) over wide temperature ranges: Measurements and application of empirical group contribution method. Microporous and Mesoporous Materials, 2015, 217, 1-5.	4.4	35
14	Multicomponent adsorption of biogas compositions containing CO ₂ , CH ₄ and N ₂ on Maxsorb and Cu-BTC using extended Langmuir and Doong-Yang models. Adsorption, 2015, 21, 433-443.	3.0	21
15	Isosteric heat of hydrogen adsorption on MOFs: comparison between adsorption calorimetry, sorption isosteric method, and analytical models. Applied Physics A: Materials Science and Processing, 2015, 121, 1417-1424.	2.3	41
16	Soft-Templated Mesoporous Carbons: Chemistry and Structural Characteristics. ACS Symposium Series, 2014, , 61-83.	0.5	10
17	Effect of para-ortho conversion on hydrogen storage system performance. International Journal of Hydrogen Energy, 2014, 39, 11651-11660.	7.1	18
18	Performance comparison of adsorption isotherm models for supercritical hydrogen sorption on MOFs. Fluid Phase Equilibria, 2014, 363, 74-85.	2.5	24

#	ARTICLE	IF	CITATIONS
19	Potential theory for prediction of high-pressure gas mixture adsorption on activated carbon and MOFs. Separation and Purification Technology, 2014, 135, 229-242.	7.9	9
20	Development of a scalable and versatile multicomponent real-gas mixing system. Separation and Purification Technology, 2013, 118, 639-644.	7.9	2
21	Synthesis, characterization and hydrogen adsorption properties of metal-organic framework Al-TCBPB. International Journal of Hydrogen Energy, 2012, 37, 5100-5107.	7.1	15
22	Modified potential theory for modeling supercritical gas adsorption. International Journal of Hydrogen Energy, 2012, 37, 9137-9147.	7.1	26
23	Synthesis, characterization and hydrogen adsorption on metal-organic frameworks Al, Cr, Fe and Ga-BTB. Chemical Engineering Journal, 2011, 171, 517-525.	12.7	20
24	Volumetric hydrogen sorption capacity of monoliths prepared by mechanical densification of MOF-177. Journal of Materials Chemistry, 2010, 20, 2145.	6.7	122
25	Hydrogen storage of nanostructured TiO ₂ -impregnated carbon nanotubes. International Journal of Hydrogen Energy, 2009, 34, 961-966.	7.1	83
26	Comparative study of dehydrogenation of sodium aluminum hydride wet-doped with ScCl ₃ , TiCl ₃ , VCl ₃ , and MnCl ₂ . Journal of Alloys and Compounds, 2009, 471, L16-L22.	5.5	26
27	Surface adsorption and micropore filling of the hydrogen in activated MWCNTs. International Journal of Hydrogen Energy, 2008, 33, 6710-6718.	7.1	40
28	Spillover of physisorbed hydrogen from sputter-deposited arrays of platinum nanoparticles to multi-walled carbon nanotubes. Chemical Physics Letters, 2007, 434, 286-291.	2.6	102
29	Hyperstoichiometric hydrogen storage in monodispersed palladium nanoparticles. Chemical Physics Letters, 2007, 438, 78-84.	2.6	27
30	Hydrogen uptake of palladium-embedded MWCNTs produced by impregnation and condensed phase reduction method. Chemical Physics Letters, 2007, 441, 261-267.	2.6	73
31	Intrinsic linear scaling of hydrogen storage capacity of carbon nanotubes with the specific surface area. Catalysis Today, 2007, 120, 426-431.	4.4	32
32	Thermal desorption of gases and solvents from graphite and carbon nanotube surfaces. Carbon, 2006, 44, 2931-2942.	10.3	160
33	Perspectives on an Advanced Hydrogen Storage System: Platinum-Carbon Nanotube Nanocomposite Materials. Materials Research Society Symposia Proceedings, 2006, 973, 1.	0.1	2
34	Application of the Taguchi Analytical Method for Optimization of Effective Parameters of the Chemical Vapor Deposition Process Controlling the Production of Nanotubes/Nanobeads. Journal of Nanoscience and Nanotechnology, 2005, 5, 288-295.	0.9	13
35	Enhancement of hydrogen storage capacity of carbon nanotubes via spill-over from vanadium and palladium nanoparticles. Chemical Physics Letters, 2005, 412, 369-375.	2.6	205
36	Application of Carbon Nanomaterial as a Microwave Absorber. Journal of Nanoscience and Nanotechnology, 2005, 5, 2117-2120.	0.9	24

#	ARTICLE	IF	CITATIONS
37	Interlayer cohesive energy of graphite from thermal desorption of polyaromatic hydrocarbons. Physical Review B, 2004, 69, .	3.2	972