Houfang Lu

List of Publications by Year
in descending order

58 papers	1,882 citations	331670 21 h-index	265206 42 g-index
58 all docs	58 docs citations	58 times ranked	2142 citing authors

#	Article	IF	Citations
1	The quasi-activity coefficients of non-electrolytes in aqueous solution with organic ions and its application on the phase splitting behaviors prediction for CO2 absorption. Chinese Journal of Chemical Engineering, 2022, 43, 316-323.	3.5	6
2	Preparation strategy and stability of deep eutectic solvents: A case study based on choline chloride-carboxylic acid. Journal of Cleaner Production, 2022, 345, 131028.	9.3	41
3	Direct Methanation of CO₂ in Biogas with Hydrogen from Water Electrolysis: The Catalyst and System Efficiency. Energy & Fuels, 2022, 36, 4416-4426.	5.1	2
4	Tuning the mesopore size of lignin-based porous carbon via salt templating for kraft lignin decomposition. Industrial Crops and Products, 2022, 181, 114865.	5.2	1
5	Electrochemical Acid-Catalyzed Desorption and Regeneration of MDEA CO₂-Rich Liquid by Hydroquinone Derivatives (Tiron). Energy & Fuels, 2022, 36, 4871-4879.	5.1	4
6	Phase Splitting Rules of the Primary/Secondary Amineâ€“Tertiary Amine Systems: Experimental Rapid Screening and Corrected Quasi-Activity Coefficient Model. Industrial & Engineering Chemistry Research, 2022, 61, 7709-7717.	3.7	3
7	Hierarchical meso- and macroporous carbon from lignin for kraft lignin decomposition to aromatic monomers. Catalysis Today, 2021, 365, 214-222.	4.4	13
8	Insights into the relationships between physicochemical properties, solvent performance, and applications of deep eutectic solvents. Environmental Science and Pollution Research, 2021, 28, 35537-35563.	5.3	65
9	Cu(II)-Assisted CO2 Absorption and Desorption Performances of the MMEAâ€“H2O System. Energy & Fuels, 2021, 35, 9509-9520.	5.1	1
10	Regeneration of Na₂Q in an Electrochemical CO₂ Capture System. Energy & Fuels, 2021, 35, 12260-12269.	5.1	5
11	Predicting phase-splitting behaviors of an amine-organic solventâ€“water system for CO2 absorption: A new model developed by density functional theory and statistical and experimental methods. Chemical Engineering Journal, 2021, 422, 130389.	12.7	14
12	Catalytic solvent regeneration of a CO₂â€loaded MEA solution using an acidic catalyst from industrial rough metatitanic acid. , 2020, 10, 449-460.		8
13	Hydrolysis of mechanically pre-treated cellulose catalyzed by solid acid SO42â€™-TiO2 in waterâ€“ethanol solvent. Chinese Journal of Chemical Engineering, 2020, 28, 136-142.	3.5	18
14	Ball milling promoted direct liquefaction of lignocellulosic biomass in supercritical ethanol. Frontiers of Chemical Science and Engineering, 2020, 14, 605-613.	4.4	7
15	DBU-based CO2 absorptionâ€“mineralization system: Reaction process, feasibility and process intensification. Chinese Journal of Chemical Engineering, 2020, 28, 1145-1155.	3.5	9
16	Nano molybdenum carbides supported on porous zeolites for Kraft lignin decomposition to aromatic monomers in ethanol. Bioresource Technology Reports, 2020, 11, 100484.	2.7	3
17	Hydrothermally Modified Graphite Felt as an Efficient Cathode for Salty Organic Wastewater Treatment. Environmental Engineering Science, 2020, 37, 790-802.	1.6	3
18	Phase-Change CO₂ Absorption Using Novel 3-Dimethylaminopropylamine with Primary and Tertiary Amino Groups. Industrial & Engineering Chemistry Research, 2020, 59, 8902-8910.	3.7	25

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19	DBU-Glycerol Solution: A CO₂ Absorbent with High Desorption Ratio and Low Regeneration Energy. Environmental Science & Technology, 2020, 54, 7570-7578.	10.0	20
20	Analysis of Wetting Behavior and Solidification Process of Molten Urea on a Superhydrophobic Surface and Its Application in Large Granular Urea Production. ACS Sustainable Chemistry and Engineering, 2019, 7, 14906-14914.	6.7	8
21	Quantitative Relationship between CO₂ Absorption Capacity and Amine Water System: DFT, Statistical, and Experimental Study. Industrial & Engineering Chemistry Research, 2019, 58, 13848-13857.	3.7	7
22	Supported Î²-Mo₂C on Carbon Materials for Kraft Lignin Decomposition into Aromatic Monomers in Ethanol. Industrial & Engineering Chemistry Research, 2019, 58, 12602-12610.	3.7	17
23	Synthesis-Controlled Î±- and Î²-Molybdenum Carbide for Base-Promoted Transfer Hydrogenation of Lignin to Aromatic Monomers in Ethanol. Industrial & Engineering Chemistry Research, 2019, 58, 20270-20281.	3.7	31
24	Preparation of edible superhydrophobic Fe foil with excellent stability and durability and its applications in food containers with little residue. New Journal of Chemistry, 2019, 43, 2908-2919.	2.8	18
25	Studies on viscosity and conductivity of 1,8-diazabicyclo[5.4.0]undec-7-ene (DBU)-glycerol and CO2-DBU-glycerol solutions at temperatures from 288.1â€¯K to 328.1â€¯K. Journal of Chemical Thermodynamics, 2019, 136, 16-27.	2.0	14
26	CO₂ Capture from Flue Gas Using an Electrochemically Reversible Hydroquinone/Quinone Solution. Energy & Fuels, 2019, 33, 3380-3389.	5.1	30
27	Investigation on the Phase-Change Absorbent System MEA + Solvent A (SA) + H₂O Used for the CO₂ Capture from Flue Gas. Industrial & Engineering Chemistry Research, 2019, 58, 3811-3821.	3.7	38
28	Enhanced hydrolysis of mechanically pretreated cellulose in water/CO2 system. Bioresource Technology, 2018, 261, 28-35.	9.6	18
29	Density studies of 1,8-diazabicyclo[5.4.0]undec-7-ene (DBU)-glycerol and CO2-DBU-glycerol solutions at temperatures between 288.15â€¯K and 328.15â€¯K. Journal of Chemical Thermodynamics, 2018, 123, 8-16.	2.0	13
30	Studies on surface tension of 1,8-diazabicyclo [5.4.0] undec-7-ene (DBU)-glycerol and CO2-DBU-glycerol solutions at temperatures from 288.1â€¯K to 323.1â€¯K. Journal of Chemical Thermodynamics, 2018, 125, 32-40.	2.0	6
31	The CO2 absorption and desorption performance of the triethylenetetramineâ€¯+â€¯N,N-diethylethanolamineâ€¯+â€¯H2O system. Chinese Journal of Chemical Engineering, 2018, 26, 2351-2360.	3.5	33
32	Separation application of superhydrophobic Cu gauze to a non-aqueous system: Biodiesel collection from glycerol/FAME two-phase mixture. Applied Surface Science, 2018, 457, 456-467.	6.1	10
33	An absorption mechanism and polarity-induced viscosity model for CO₂ capture using hydroxypyridine-based ionic liquids. Physical Chemistry Chemical Physics, 2017, 19, 1134-1142.	2.8	26
34	Enhancing the energetic efficiency of MDEA/PZ-based CO2 capture technology for a 650 MW power plant: Process improvement. Applied Energy, 2017, 185, 362-375.	10.1	150
35	Preparation of Superhydrophobic Cu Mesh and Its Application in Rolling-Spheronization Granulation. Industrial & Engineering Chemistry Research, 2016, 55, 5545-5555.	3.7	15
36	Effects of ball milling on structural changes and hydrolysis of lignocellulosic biomass in liquid hot-water compressed carbon dioxide. Korean Journal of Chemical Engineering, 2016, 33, 2134-2141.	2.7	34

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37	Wall-loaded Pt/TiO₂/Ti catalyst and its application in ammonia oxidation reaction in microchannel reactor. RSC Advances, 2016, 6, 26637-26649.	3.6	7
38	Kinetic studies on biodiesel production using a trace acid catalyst. Catalysis Today, 2016, 264, 55-62.	4.4	15
39	Preparation of Silver Carbonate and its Application as Visible Lightâ€driven Photocatalyst Without Sacrificial Reagent. Photochemistry and Photobiology, 2015, 91, 1315-1323.	2.5	15
40	Photocatalytic performance of Ag₂S under irradiation with visible and near-infrared light and its mechanism of degradation. RSC Advances, 2015, 5, 24064-24071.	3.6	101
41	Preparation and Antiscaling Application of Superhydrophobic Anodized CuO Nanowire Surfaces. Industrial & Engineering Chemistry Research, 2015, 54, 6874-6883.	3.7	96
42	Inter-solubility of product systems in biodiesel production from Jatropha curcas L. oil with the switchable solvent DBU/methanol. RSC Advances, 2015, 5, 8311-8317.	3.6	12
43	Synthesis and characterization of switchable ionic compound based on DBU, CH3OH, and CO2. Chinese Journal of Chemical Engineering, 2015, 23, 1728-1732.	3.5	7
44	Effect of Carbon Dioxide on the Liquid Hot-Water Treatment of Lignocellulosics. Journal of Biobased Materials and Bioenergy, 2015, 9, 334-341.	0.3	4
45	A fast method to fabricate superhydrophobic surfaces on zinc substrate with ion assisted chemical etching. Applied Surface Science, 2014, 305, 716-724.	6.1	46
46	Simultaneous mineralization of CO2 and recovery of soluble potassium using earth-abundant potassium feldspar. Science Bulletin, 2013, 58, 128-132.	1.7	30
47	Superhydrophilicity/superhydrophobicity of nickel micro-arrays fabricated by electroless deposition on an etched porous aluminum template. Chemical Engineering Journal, 2012, 203, 1-8.	12.7	61
48	Biodiesel Production from Crude Jatropha curcas L. Oil with Trace Acid Catalyst. Chinese Journal of Chemical Engineering, 2012, 20, 740-746.	3.5	34
49	Production of Tung Oil Biodiesel and Variation of Fuel Properties During Storage. Applied Biochemistry and Biotechnology, 2012, 168, 106-115.	2.9	9
50	Fabrication of micro-Ni arrays by electroless and electrochemical depositions with etched porous aluminum template. Bulletin of Materials Science, 2010, 33, 641-645.	1.7	4
51	Properties of Tung oil biodiesel and its blends with 0# diesel. Bioresource Technology, 2010, 101, 826-828.	9.6	103
52	De-emulsification of Kerosene/Water Emulsions with Plate-Type Microchannels. Industrial & Engineering Chemistry Research, 2010, 49, 9279-9288.	3.7	30
53	Production of biodiesel from Jatropha curcas L. oil. Computers and Chemical Engineering, 2009, 33, 1091-1096.	3.8	245
54	Solubility Measurement for the Reaction Systems in Pre-Esterification of High Acid Value Jatropha curcas L. Oil. Journal of Chemical & Engineering Data, 2009, 54, 1421-1425.	1.9	19

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55	Supported CaO Catalysts Used in the Transesterification of Rapeseed Oil for the Purpose of Biodiesel Production. Energy & Fuels, 2008, 22, 646-651.	5.1	187
56	Solubility of Multicomponent Systems in the Biodiesel Production by Transesterification of Jatropha curcas L. Oil with Methanol. Journal of Chemical & Engineering Data, 2006, 51, 1130-1135.	1.9	139
57	Nano Î²-Mo2C supported on ordered mesoporous carbon for Kraft lignin decomposition to aromatic monomers. Biomass Conversion and Biorefinery, 0, , 1.	4.6	1
58	Bifunctional Pt-Mo catalyst for in-situ hydrogenation of methyl stearate into alkanes using formic acid as a hydrogen donor. New Journal of Chemistry, 0, , .	2.8	1