Xiaomin Zhang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5956834/publications.pdf

Version: 2024-02-01

42 papers	1,891 citations	236925 25 h-index	265206 42 g-index
42 all docs	42 docs citations	42 times ranked	1242 citing authors

#	Article	IF	Citations
1	A novel proton-gradient-transfer acid complexes as an efficient and reusable catalyst for fatty acid esterification. Green Energy and Environment, 2022, 7, 137-144.	8.7	18
2	Aerobic oxidation of aldehydes to acids in water with cyclic (alkyl)(amino)carbene copper under mild conditions. Chemical Communications, 2022, 58, 2132-2135.	4.1	13
3	Highly efficient and selective H2S capture by task-specific deep eutectic solvents through chemical dual-site absorption. Separation and Purification Technology, 2022, 283, 120167.	7.9	35
4	Facilitated transport separation of CO2 and H2S by supported liquid membrane based on task-specific protic ionic liquids. Green Chemical Engineering, 2022, 3, 259-266.	6.3	27
5	Effective absorption of <scp>SO₂</scp> by imidazoleâ€based protic ionic liquids with multiple active sites: Thermodynamic and mechanical studies. AICHE Journal, 2022, 68, .	3.6	27
6	Unexpectedly efficient absorption of low-concentration SO2 with phase-transition mechanism using deep eutectic solvent consisting of tetraethylammonium chloride and imidazole. Separation and Purification Technology, 2022, 286, 120489.	7.9	23
7	Highly efficient absorption of HCl in deep eutectic solvents and their corresponding ethylene glycol blends. Chemical Engineering Journal, 2022, 434, 134707.	12.7	18
8	Natural deep eutectic solvent-based gels with multi-site interaction mechanism for selective membrane separation of SO2 from N2 and CO2. Chemical Engineering Journal, 2022, 438, 135626.	12.7	38
9	Reversible absorption of NF3 with high solubility in Lewis acidic ionic liquids. Chemical Engineering Journal, 2022, 440, 135902.	12.7	17
10	Rich Ether-Based Protic Ionic Liquids with Low Viscosity for Selective Absorption of SO₂ through Multisite Interaction. Industrial & Engineering Chemistry Research, 2022, 61, 5971-5983.	3.7	16
11	Homologue-paired liquids as special non-ionic deep eutectic solvents for efficient absorption of SO₂. Chemical Communications, 2022, 58, 7801-7804.	4.1	9
12	Selective and simultaneous membrane separation of CO and H2 from N2 by protic chlorocuprate ionic liquids. Renewable Energy, 2022, , .	8.9	5
13	Ionic Liquids Endowed with Novel Hybrid Anions for Supercapacitors. ACS Omega, 2022, 7, 26368-26374.	3.5	4
14	Efficient conversion of H2S into mercaptan alcohol by tertiary-amine functionalized ionic liquids. Chinese Journal of Chemical Engineering, 2022, 50, 197-204.	3.5	7
15	Tuning the composition of deep eutectic solvents consisting of tetrabutylammonium chloride and n-decanoic acid for adjustable separation of ethylene and ethane. Separation and Purification Technology, 2022, 298, 121680.	7.9	11
16	Task-specific ionic liquids as absorbents and catalysts for efficient capture and conversion of H2S into value-added mercaptan acids. Chemical Engineering Journal, 2021, 408, 127866.	12.7	72
17	Highly-selective separation of CO2 from N2 or CH4 in task-specific ionic liquid membranes: Facilitated transport and salting-out effect. Separation and Purification Technology, 2021, 254, 117621.	7.9	36
18	The efficient conversion of H₂S into mercaptan alcohols mediated in protic ionic liquids under mild conditions. Green Chemistry, 2021, 23, 7969-7975.	9.0	43

#	Article	IF	Citations
19	Selective membrane separation of CO2 using novel epichlorohydrin-amine-based crosslinked protic ionic liquids: Crosslinking mechanism and enhanced salting-out effect. Journal of CO2 Utilization, 2021, 46, 101473.	6.8	18
20	Low viscosity superbase protic ionic liquids for the highly efficient simultaneous removal of H2S and CO2 from CH4. Separation and Purification Technology, 2021, 263, 118417.	7.9	57
21	Supported Ionic Liquid Gel Membranes Enhanced by Ionization Modification for Sodium Metal Batteries. ACS Sustainable Chemistry and Engineering, 2021, 9, 12100-12108.	6.7	9
22	Task-specific deep eutectic solvents for the highly efficient and selective separation of H2S. Separation and Purification Technology, 2021, 276, 119357.	7.9	48
23	Highly selective absorption separation of H₂S and CO₂ from CH₄ by novel azoleâ€based protic ionic liquids. AICHE Journal, 2020, 66, e16936.	3.6	105
24	Research progress in the ionic liquid-mediated capture and conversion of H₂S. Scientia Sinica Chimica, 2020, 50, 594-602.	0.4	6
25	Supported Ionic Liquid Gel Membrane Electrolytes for a Safe and Flexible Sodium Metal Battery. ACS Sustainable Chemistry and Engineering, 2019, 7, 3722-3726.	6.7	56
26	Supported Ionic Liquid Membranes with Dual-Site Interaction Mechanism for Efficient Separation of CO₂. ACS Sustainable Chemistry and Engineering, 2019, 7, 10792-10799.	6.7	54
27	Supported Ionic Liquid Gel Membrane Electrolytes for Flexible Supercapacitors. Advanced Energy Materials, 2018, 8, 1702702.	19.5	90
28	Low-viscous diamino protic ionic liquids with fluorine-substituted phenolic anions for improving CO2 reversible capture. Journal of Molecular Liquids, 2018, 268, 617-624.	4.9	29
29	Supported protic-ionic-liquid membranes with facilitated transport mechanism for the selective separation of CO2. Journal of Membrane Science, 2017, 527, 60-67.	8.2	59
30	Selective separation of H2S and CO2 from CH4 by supported ionic liquid membranes. Journal of Membrane Science, 2017, 543, 282-287.	8.2	71
31	Highly efficient and selective absorption of H2S in phenolic ionic liquids: A cooperative result of anionic strong basicity and cationic hydrogen-bond donation. Chemical Engineering Science, 2017, 173, 253-263.	3.8	109
32	Hydrophobic protic ionic liquids tethered with tertiary amine group for highly efficient and selective absorption of H₂S from CO₂. AICHE Journal, 2016, 62, 4480-4490.	3.6	102
33	Cyano-Containing Protic Ionic Liquids for Highly Selective Absorption of SO₂ from CO₂: Experimental Study and Theoretical Analysis. Industrial & Engineering Chemistry Research, 2016, 55, 11012-11021.	3.7	45
34	The ionic liquid-mediated Claus reaction: a highly efficient capture and conversion of hydrogen sulfide. Green Chemistry, 2016, 18, 1859-1863.	9.0	58
35	Low-viscous fluorine-substituted phenolic ionic liquids with high performance for capture of CO2. Chemical Engineering Journal, 2015, 274, 30-38.	12.7	73
36	Ionic liquid electrolytes for aluminium secondary battery: Influence of organic solvents. Journal of Electroanalytical Chemistry, 2015, 757, 167-175.	3.8	54

#	Article	IF	Citations
37	Amino Acid Modified Macroreticular Anion Exchange Resins for CO₂ Adsorption. Journal of Chemical Engineering of Japan, 2015, 48, 268-275.	0.6	5
38	Comparative Study of the Solubilities of SO₂ in Five Low Volatile Organic Solvents (Sulfolane, Ethylene Glycol, Propylene Carbonate, N-Methylimidazole, and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 697 Td (N	1.5	60
39	Protic ionic liquids for the selective absorption of H₂S from CO₂: Thermodynamic analysis. AICHE Journal, 2014, 60, 4232-4240.	3.6	123
40	Facilitated separation of CO2 and SO2 through supported liquid membranes using carboxylate-based ionic liquids. Journal of Membrane Science, 2014, 471, 227-236.	8.2	91
41	Experimental study and thermodynamical modelling of the solubilities of SO 2 , H 2 S and CO 2 in N-dodecylimidazole and 1,1â€²-[oxybis(2,1-ethanediyloxy-2,1-ethanediyl)]bis(imidazole): An evaluation of their potential application in the separation of acidic gases. Fluid Phase Equilibria, 2014, 378, 21-33.	2.5	22
42	SO2 absorption in acid salt ionic liquids/sulfolane binary mixtures: Experimental study and thermodynamic analysis. Chemical Engineering Journal, 2014, 237, 478-486.	12.7	121