Xiangping Zhang

List of Publications by Year
in descending order

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160	11,767	29994 54	29081 104
papers	citations	h-index	g-index

162	162	162	9162
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Physical Properties of Ionic Liquids: Database and Evaluation. Journal of Physical and Chemical Reference Data, 2006, 35, 1475-1517.	1.9	1,045
2	Carbon capture with ionic liquids: overview and progress. Energy and Environmental Science, 2012, 5, 6668.	15.6	731
3	Ionic-Liquid-Based CO₂ Capture Systems: Structure, Interaction and Process. Chemical Reviews, 2017, 117, 9625-9673.	23.0	696
4	Multiscale Studies on Ionic Liquids. Chemical Reviews, 2017, 117, 6636-6695.	23.0	584
5	Combination of ionic liquids with membrane technology: A new approach for CO2 separation. Journal of Membrane Science, 2016, 497, 1-20.	4.1	439
6	Dual Aminoâ€Functionalised Phosphonium Ionic Liquids for CO₂ Capture. Chemistry - A European Journal, 2009, 15, 3003-3011.	1.7	399
7	Cascade utilization of lignocellulosic biomass to high-value products. Green Chemistry, 2019, 21, 3499-3535.	4.6	273
8	A Mn-N3 single-atom catalyst embedded in graphitic carbon nitride for efficient CO2 electroreduction. Nature Communications, 2020, 11, 4341.	5.8	257
9	Glycolysis of poly(ethylene terephthalate) catalyzed by ionic liquids. European Polymer Journal, 2009, 45, 1535-1544.	2.6	206
10	Recent development of ionic liquid membranes. Green Energy and Environment, 2016, 1, 43-61.	4.7	203
11	Degradation of poly(ethylene terephthalate) using ionic liquids. Green Chemistry, 2009, 11, 1568.	4.6	173
12	Fe-containing magnetic ionic liquid as an effective catalyst for the glycolysis of poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 302	1.6	171
13	Protic ionic liquid [Bim][NTf₂] with strong hydrogen bond donating ability for highly efficient ammonia absorption. Green Chemistry, 2017, 19, 937-945.	4.6	156
14	Efficient and reversible capture of SO2 by pyridinium-based ionic liquids. Chemical Engineering Journal, 2014, 251, 248-256.	6.6	153
15	Amination strategy to boost the CO₂ electroreduction current density of Mâ€“N/C single-atom catalysts to the industrial application level. Energy and Environmental Science, 2021, 14, 2349-2356.	15.6	148
16	A Novel Dual Amino-Functionalized Cation-Tethered Ionic Liquid for CO₂ Capture. Industrial & Engineering Chemistry Research, 2013, 52, 5835-5841.	1.8	145
17	Toxicity of ionic liquids: Database and prediction via quantitative structureâ€“activity relationship method. Journal of Hazardous Materials, 2014, 278, 320-329.	6.5	142
18	Density, Viscosity, and Performances of Carbon Dioxide Capture in 16 Absorbents of Amine + Ionic Liquid + H₂O, Ionic Liquid + H₂O, and Amine + H₂O Systems. Journal of Chemical & Engineering Data, 2010, 55, 3513-3519.	1.0	137

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19	Carbon hollow fiber membranes for a molecular sieve with precise-cutoff ultramicropores for superior hydrogen separation. Nature Communications, 2021, 12, 268.	5.8	133
20	Solubilities of CO2in 1-Butyl-3-methylimidazolium Hexafluorophosphate and 1,1,3,3-Tetramethylguanidium Lactate at Elevated Pressures. Journal of Chemical & Engineering Data, 2005, 50, 1582-1585.	1.0	131
21	Urea as an efficient and reusable catalyst for the glycolysis of poly(ethylene terephthalate) wastes and the role of hydrogen bond in this process. Green Chemistry, 2012, 14, 2559.	4.6	129
22	Efficient and reversible absorption of ammonia by cobalt ionic liquids through Lewis acidâ€“base and cooperative hydrogen bond interactions. Green Chemistry, 2018, 20, 2075-2083.	4.6	121
23	Efficient absorption of ammonia with hydroxyl-functionalized ionic liquids. RSC Advances, 2015, 5, 81362-81370.	1.7	119
24	Thermodynamic Modeling and Assessment of Ionic Liquid-Based CO₂ Capture Processes. Industrial & Engineering Chemistry Research, 2014, 53, 11805-11817.	1.8	112
25	Superbase Ionic Liquid-Based Deep Eutectic Solvents for Improving CO₂ Absorption. ACS Sustainable Chemistry and Engineering, 2020, 8, 2523-2530.	3.2	110
26	Imidazole tailored deep eutectic solvents for CO₂ capture enhanced by hydrogen bonds. Physical Chemistry Chemical Physics, 2015, 17, 27306-27316.	1.3	108
27	Ionic liquids/deep eutectic solvents for CO2 capture: Reviewing and evaluating. Green Energy and Environment, 2021, 6, 314-328.	4.7	108
28	Solubilities of ammonia in basic imidazolium ionic liquids. Fluid Phase Equilibria, 2010, 297, 34-39.	1.4	102
29	A new fragment contributionâ€corresponding states method for physicochemical properties prediction of ionic liquids. AICHE Journal, 2013, 59, 1348-1359.	1.8	102
30	The Research Progress of CO2 Capture with Ionic Liquids. Chinese Journal of Chemical Engineering, 2012, 20, 120-129.	1.7	101
31	Pebax-based composite membranes with high gas transport properties enhanced by ionic liquids for CO₂ separation. RSC Advances, 2017, 7, 6422-6431.	1.7	100
32	Efficient transformation of CO₂ to cyclic carbonates using bifunctional protic ionic liquids under mild conditions. Green Chemistry, 2019, 21, 3456-3463.	4.6	100
33	Ionic Liquid Design and Process Simulation for Decarbonization of Shale Gas. Industrial & Engineering Chemistry Research, 2016, 55, 5931-5944.	1.8	97
34	Engineering Electronic Structure of Stannous Sulfide by Aminoâ€Functionalized Carbon: Toward Efficient Electrocatalytic Reduction of CO₂ to Formate. Advanced Energy Materials, 2020, 10, 1903664.	10.2	86
35	Assessment of the energy consumption of the biogas upgrading process with pressure swing adsorption using novel adsorbents. Journal of Cleaner Production, 2015, 101, 251-261.	4.6	85
36	Novel Ether-Functionalized Pyridinium Chloride Ionic Liquids for Efficient SO₂ Capture. Industrial & Engineering Chemistry Research, 2014, 53, 16832-16839.	1.8	83

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37	Highly Selective Capture of CO₂ by Ether-Functionalized Pyridinium Ionic Liquids with Low Viscosity. Energy & Fuels, 2015, 29, 6039-6048.	2.5	82
38	Functionalized ionic liquid membranes for CO₂ separation. Chemical Communications, 2018, 54, 12671-12685.	2.2	81
39	A quantitative prediction of the viscosity of ionic liquids using S_{Ïƒ-profile}molecular descriptors. Physical Chemistry Chemical Physics, 2015, 17, 3761-3767.	1.3	79
40	Metal chloride anion-based ionic liquids for efficient separation of NH3. Journal of Cleaner Production, 2019, 206, 661-669.	4.6	79
41	Enhanced NH₃ capture by imidazoliumâ€based protic ionic liquids with different anions and cation substituents. Journal of Chemical Technology and Biotechnology, 2018, 93, 1228-1236.	1.6	78
42	CO₂ Electroreduction in Ionic Liquids: A Review. Chinese Journal of Chemistry, 2018, 36, 961-970.	2.6	77
43	Recovery of ionic liquids from dilute aqueous solutions by electrodialysis. Desalination, 2012, 285, 205-212.	4.0	76
44	Post-combustion Carbon Capture with a Gas Separation Membrane: Parametric Study, Capture Cost, and Exergy Analysis. Energy & Fuels, 2013, 27, 4137-4149.	2.5	76
45	Ionic liquids for absorption and separation of gases: An extensive database and a systematic screening method. AICHE Journal, 2017, 63, 1353-1367.	1.8	76
46	Prediction of the melting points for two kinds of room temperature ionic liquids. Fluid Phase Equilibria, 2006, 246, 137-142.	1.4	73
47	Temperature-Controlled Reactionâ€“Separation for Conversion of CO₂ to Carbonates with Functional Ionic Liquids Catalyst. ACS Sustainable Chemistry and Engineering, 2017, 5, 3081-3086.	3.2	69
48	Predictive deep learning models for environmental properties: the direct calculation of octanolâ€“water partition coefficients from molecular graphs. Green Chemistry, 2019, 21, 4555-4565.	4.6	69
49	Surface morphology, crystal structure and orientation of aluminium coatings electrodeposited on mild steel in ionic liquid. Chemical Engineering Journal, 2009, 147, 79-86.	6.6	64
50	Improving SO₂ capture by tuning functional groups on the cation of pyridinium-based ionic liquids. RSC Advances, 2015, 5, 2470-2478.	1.7	61
51	1â€Allylâ€3â€methylimidazolium halometallate ionic liquids as efficient catalysts for the glycolysis of poly(ethylene terephthalate). Journal of Applied Polymer Science, 2013, 129, 3574-3581.	1.3	59
52	Extractive desulfurization of fuel using N-butylpyridinium-based ionic liquids. RSC Advances, 2015, 5, 30234-30238.	1.7	57
53	Selective Separation of Hydrogen Sulfide with Pyridinium-Based Ionic Liquids. Industrial & Engineering Chemistry Research, 2018, 57, 1284-1293.	1.8	56
54	Study on Extraction Asphaltenes from Direct Coal Liquefaction Residue with Ionic Liquids. Industrial & Engineering Chemistry Research, 2011, 50, 10278-10282.	1.8	55

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55	Quantitative Change in Disulfide Bonds and Microstructure Variation of Regenerated Wool Keratin from Various Ionic Liquids. ACS Sustainable Chemistry and Engineering, 2017, 5, 2614-2622.	3.2	54
56	Gasâ€“liquid massâ€transfer properties in CO₂ absorption system with ionic liquids. AICHE Journal, 2014, 60, 2929-2939.	1.8	53
57	Ionic liquids in gas separation processing. Current Opinion in Green and Sustainable Chemistry, 2017, 5, 74-81.	3.2	53
58	PebaxÂ®/TSIL blend thin film composite membranes for CO2 separation. Science China Chemistry, 2016, 59, 538-546.	4.2	51
59	Encapsulation of multiple enzymes in a metalâ€“organic framework with enhanced electro-enzymatic reduction of CO₂ to methanol. Green Chemistry, 2021, 23, 2362-2371.	4.6	51
60	Protic ionic liquids extract asphaltenes from direct coal liquefaction residue at room temperature. Fuel Processing Technology, 2013, 108, 94-100.	3.7	50
61	Insights into Carbon Dioxide Electroreduction in Ionic Liquids: Carbon Dioxide Activation and Selectivity Tailored by Ionic Microhabitat. ChemSusChem, 2018, 11, 3191-3197.	3.6	50
62	Protic ionic <scp>liquidâ€based</scp> deep eutectic solvents with multiple hydrogen bonding sites for efficient absorption of <scp>NH₃</scp>. AICHE Journal, 2020, 66, e16253.	1.8	50
63	Effect of small amount of water on the dynamics properties and microstructures of ionic liquids. AICHE Journal, 2017, 63, 2248-2256.	1.8	48
64	Ether-functionalized ionic liquid based composite membranes for carbon dioxide separation. RSC Advances, 2016, 6, 45184-45192.	1.7	47
65	Protic Ionic-Liquid-Supported Activated Carbon with Hierarchical Pores for Efficient NH₃ Adsorption. ACS Sustainable Chemistry and Engineering, 2019, 7, 11769-11777.	3.2	47
66	Effect of Small Amount of Water on CO₂ Bubble Behavior in Ionic Liquid Systems. Industrial & Engineering Chemistry Research, 2014, 53, 428-439.	1.8	46
67	Prediction of viscosity of imidazolium-based ionic liquids using MLR and SVM algorithms. Computers and Chemical Engineering, 2016, 92, 37-42.	2.0	46
68	Preparation of carbon molecular sieve membranes with remarkable CO2/CH4 selectivity for high-pressure natural gas sweetening. Journal of Membrane Science, 2020, 614, 118529.	4.1	46
69	The rise and deformation of a single bubble in ionic liquids. Chemical Engineering Science, 2010, 65, 3240-3248.	1.9	45
70	Ionic liquids to extract valuable components from direct coal liquefaction residues. Fuel, 2012, 94, 617-619.	3.4	45
71	Efficient adsorption of ammonia by incorporation of metal ionic liquids into silica gels as mesoporous composites. Chemical Engineering Journal, 2019, 370, 81-88.	6.6	45
72	Predicting H₂S solubility in ionic liquids by the quantitative structureâ€“property relationship method using S_{ĩ*f*-profile} molecular descriptors. RSC Advances, 2016, 6, 70405-70413.	1.7	43

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73	Novel alcamines ionic liquids based solvents: Preparation, characterization and applications in carbon dioxide capture. International Journal of Greenhouse Gas Control, 2011, 5, 367-373.	2.3	42
74	Protic ionic liquids with low viscosity for efficient and reversible capture of carbon dioxide. International Journal of Greenhouse Gas Control, 2019, 90, 102801.	2.3	41
75	Ionic Liquid Incorporated Metal Organic Framework for High Ionic Conductivity over Extended Temperature Range. ACS Sustainable Chemistry and Engineering, 2019, 7, 7892-7899.	3.2	40
76	Gas separation by ionic liquids: A theoretical study. Chemical Engineering Science, 2018, 189, 43-55.	1.9	38
77	Morphology Modulationâ€Engineered Flowerlike In₂S₃ via Ionothermal Method for Efficient CO₂ Electroreduction. ChemCatChem, 2020, 12, 926-931.	1.8	37
78	Numerical simulation of single bubble motion in ionic liquids. Chemical Engineering Science, 2010, 65, 6036-6047.	1.9	36
79	Experimental study on gas holdup and bubble behavior in carbon capture systems with ionic liquid. Chemical Engineering Journal, 2012, 209, 607-615.	6.6	35
80	SO₂-Induced Variations in the Viscosity of Ionic Liquids Investigated by in Situ Fourier Transform Infrared Spectroscopy and Simulation Calculations. Industrial & Engineering Chemistry Research, 2015, 54, 10854-10862.	1.8	35
81	Hydrogen Sulfide Solubility in Ionic Liquids (ILs): An Extensive Database and a New ELM Model Mainly Established by Imidazolium-Based ILs. Journal of Chemical & Engineering Data, 2016, 61, 3970-3978.	1.0	35
82	An Overview of Ammonia Separation by Ionic Liquids. Industrial & Engineering Chemistry Research, 2021, 60, 6908-6924.	1.8	35
83	NH3 absorption performance and reversible absorption mechanisms of protic ionic liquids with six-membered N-heterocyclic cations. Separation and Purification Technology, 2020, 248, 117087.	3.9	34
84	Dualâ€functionalized protic ionic liquids for efficient absorption of NH₃ through synergistically physicochemical interaction. Journal of Chemical Technology and Biotechnology, 2020, 95, 1815-1824.	1.6	34
85	Aromatic Esterâ€Functionalized Ionic Liquid for Highly Efficient CO₂ Electrochemical Reduction to Oxalic Acid. ChemSusChem, 2020, 13, 4900-4905.	3.6	33
86	State of the art of ionic liquidâ€modified adsorbents for<scp>CO₂</scp>capture and separation. AICHE Journal, 2022, 68, e17500.	1.8	33
87	In Situ Carbon Encapsulation Confined Nickel-Doped Indium Oxide Nanocrystals for Boosting CO₂ Electroreduction to the Industrial Level. ACS Catalysis, 2021, 11, 14596-14604.	5.5	33
88	Efficient extraction of direct coal liquefaction residue with the [bmim]Cl/NMP mixed solvent. RSC Advances, 2011, 1, 1579.	1.7	32
89	Role of ionic liquids in the efficient transfer of lithium by Cyanex 923 in solvent extraction system. AICHE Journal, 2019, 65, e16606.	1.8	32
90	Enhanced CO2 capture by binary systems of pyridinium-based ionic liquids and porous ZIF-8 particles. Journal of Chemical Thermodynamics, 2019, 128, 415-423.	1.0	32

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91	Estimation of Heat Capacity of Ionic Liquids Using S_{Ïf-profile} Molecular Descriptors. Industrial & Engineering Chemistry Research, 2015, 54, 12987-12992.	1.8	31
92	Concentration of ionic liquids by nanofiltration for recycling: Filtration behavior and modeling. Separation and Purification Technology, 2016, 165, 18-26.	3.9	31
93	Super selective ammonia separation through multiple-site interaction with ionic liquid-based hybrid membranes. Journal of Membrane Science, 2021, 628, 119264.	4.1	31
94	Simultaneous measurement of CO2 sorption and swelling of phosphate-based ionic liquid. Green Energy and Environment, 2016, 1, 258-265.	4.7	30
95	Numerical simulations of bubble behavior and mass transfer in CO 2 capture system with ionic liquids. Chemical Engineering Science, 2015, 135, 76-88.	1.9	29
96	A novel unambiguous strategy of molecular feature extraction in machine learning assisted predictive models for environmental properties. Green Chemistry, 2020, 22, 3867-3876.	4.6	29
97	Defects and Conductive Nitrogen-Carbon Framework Regulated ZnInOx Nanosheets for Boosting CO2 Electrocatalytic Reduction. Applied Catalysis B: Environmental, 2020, 279, 119383.	10.8	28
98	Task-Specific Ionic Liquids Tuning ZIF-67/PIM-1 Mixed Matrix Membranes for Efficient CO₂ Separation. Industrial & Engineering Chemistry Research, 2021, 60, 593-603.	1.8	28
99	Study on the recovery of ionic liquids from dilute effluent by electrodialysis method and the fouling of cation-exchange membrane. Science China Chemistry, 2013, 56, 1811-1816.	4.2	27
100	A novel ionic liquids-based scrubbing process for efficient CO2 capture. Science China Chemistry, 2010, 53, 1549-1553.	4.2	25
101	Deep Desulfurization of Gasoline Fuel using FeCl₃-Containing Lewis-Acidic Ionic Liquids. Separation Science and Technology, 2014, 49, 1208-1214.	1.3	25
102	Ultralow Thermal Resistance across the Solidâ€“Ionic Liquid Interface Caused by the Charge-Induced Ordered Ionic Layer. Industrial & Engineering Chemistry Research, 2019, 58, 20109-20115.	1.8	25
103	Highly efficient and reversible absorption of NH3 by dual functionalised ionic liquids with protic and Lewis acidic sites. Journal of Molecular Liquids, 2020, 312, 113411.	2.3	24
104	Rotten Eggs Revaluated: Ionic Liquids and Deep Eutectic Solvents for Removal and Utilization of Hydrogen Sulfide. Industrial & Engineering Chemistry Research, 2022, 61, 2643-2671.	1.8	23
105	Absorption degree analysis on biogas separation with ionic liquid systems. Bioresource Technology, 2015, 175, 135-141.	4.8	22
106	Intentional construction of high-performance SnO₂ catalysts with a 3D porous structure for electrochemical reduction of CO₂. Nanoscale, 2019, 11, 18715-18722.	2.8	22
107	Constructing single Cuâ€“N₃ sites for CO₂ electrochemical reduction over a wide potential range. Green Chemistry, 2021, 23, 5461-5466.	4.6	22
108	Feasible ionic liquid-amine hybrid solvents for carbon dioxide capture. International Journal of Greenhouse Gas Control, 2017, 66, 120-128.	2.3	21

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109	Ionic liquids for CO2 electrochemical reduction. Chinese Journal of Chemical Engineering, 2021, 31, 75-93.	1.7	21
110	Modeling and simulation of high-pressure urea synthesis loop. Computers and Chemical Engineering, 2005, 29, 983-992.	2.0	20
111	Supported ionic liquids for air purification. Current Opinion in Green and Sustainable Chemistry, 2020, 25, 100391.	3.2	20
112	Technoeconomic Analysis and Process Design for CO₂ Electroreduction to CO in Ionic Liquid Electrolyte. ACS Sustainable Chemistry and Engineering, 2021, 9, 9045-9052.	3.2	20
113	Combining Ionic Liquids and Sodium Salts into Metalâ€Organic Framework for Highâ€Performance Ionic Conduction. ChemElectroChem, 2020, 7, 183-190.	1.7	19
114	Ionic liquidâ€“based green processes for ammonia separation and recovery. Current Opinion in Green and Sustainable Chemistry, 2020, 25, 100354.	3.2	18
115	Highly efficient carbon dioxide capture by a novel amine solvent containing multiple amino groups. Journal of Chemical Technology and Biotechnology, 2015, 90, 1918-1926.	1.6	17
116	CO2 absorption with ionic liquids at elevated temperatures. Journal of Energy Chemistry, 2017, 26, 1001-1006.	7.1	16
117	An ionic fragments contribution-COSMO method to predict the surface charge density profiles of ionic liquids. Journal of Molecular Liquids, 2019, 282, 292-302.	2.3	16
118	Ionic liquid screening for dichloromethane absorption by multi-scale simulations. Separation and Purification Technology, 2021, 275, 119187.	3.9	16
119	Studies on the physical properties variations of protic ionic liquid during NH3 absorption. Journal of Molecular Liquids, 2019, 296, 111791.	2.3	15
120	MgOâ€“SBA-15 Supported Pdâ€“Pb Catalysts for Oxidative Esterification of Methacrolein with Methanol to Methyl Methacrylate. Chinese Journal of Chemical Engineering, 2014, 22, 1098-1104.	1.7	14
121	Removal of Trace Aluminum Impurity for High-Purity GdCl₃ Preparation using an Amine-Group-Functionalized Ionic Liquid. Industrial & Engineering Chemistry Research, 2021, 60, 11241-11250.	1.8	14
122	Process Analysis and Multiâ€Objective Optimization of Ionic Liquidâ€Containing Acetonitrile Process to Produce 1,3â€Butadiene. Chemical Engineering and Technology, 2011, 34, 927-936.	0.9	13
123	Developing and Regenerating Cofactors for Sustainable Enzymatic CO2 Conversion. Processes, 2022, 10, 230.	1.3	13
124	Dynamic Process Simulation and Assessment of CO₂ Removal from Confined Spaces Using Pressure Swing Adsorption. Industrial & Engineering Chemistry Research, 2020, 59, 16407-16419.	1.8	12
125	Efficient and Reversible Chemisorption of Carbon Dioxide with Dianionic-Functionalized Ionic Liquid-Based Solvents. Energy & Fuels, 2020, 34, 8526-8533.	2.5	12
126	Modification to solution-diffusion model for performance prediction of nanofiltration of long-alkyl-chain ionic liquids aqueous solutions based on ion cluster. Green Energy and Environment, 2020, 5, 105-113.	4.7	11

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127	Ionic liquid cobalt complex as O2 carrier in the PIM-1 membrane for O2/N2 separation. Separation and Purification Technology, 2020, 248, 117041.	3.9	11
128	Process Simulation and Optimization of Ammonia-Containing Gas Separation and Ammonia Recovery with Ionic Liquids. ACS Sustainable Chemistry and Engineering, 2021, 9, 312-325.	3.2	11
129	Exploring NH₃ Transport Properties by Tailoring Ionic Liquids in Pebax-Based Hybrid Membranes. Industrial & Engineering Chemistry Research, 2021, 60, 9570-9577.	1.8	11
130	Dynamic process simulation and optimization of CO2 removal from confined space with pressure and temperature swing adsorption. Chemical Engineering Journal, 2021, 416, 129104.	6.6	11
131	Zinc-based deep eutectic solvent â€“ An efficient carbonic anhydrase mimic for CO2 hydration and conversion. Separation and Purification Technology, 2021, 276, 119446.	3.9	11
132	Pt₃Fe Nanoparticles on B,N-Codoped Carbon as Oxygen Reduction and pH-Universal Hydrogen Evolution Electrocatalysts. ACS Applied Nano Materials, 2022, 5, 318-325.	2.4	11
133	Multi-objective optimization of methane production system from biomass through anaerobic digestion. Chinese Journal of Chemical Engineering, 2018, 26, 2084-2092.	1.7	10
134	Review of Methods for Sustainability Assessment of Chemical Engineering Processes. Industrial & Engineering Chemistry Research, 2021, 60, 52-66.	1.8	10
135	Process simulation and evaluation for NH3/CO2 separation from melamine tail gas with protic ionic liquids. Separation and Purification Technology, 2022, 288, 120680.	3.9	10
136	Numerical simulation of CO2-ionic liquid flow in a stirred tank. Science China Chemistry, 2015, 58, 1918-1928.	4.2	9
137	A multi-task deep learning neural network for predicting flammability-related properties from molecular structures. Green Chemistry, 2021, 23, 4451-4465.	4.6	9
138	Novel artificial ionic cofactors for efficient electro-enzymatic conversion of CO2 to formic acid. Journal of CO2 Utilization, 2022, 60, 101978.	3.3	9
139	Imidazolium salts facilitate mechanochemical synthesis of well-dispersed MFI zeolite crystals with c-axis orientation. Microporous and Mesoporous Materials, 2022, 341, 112094.	2.2	9
140	Effect of Ion Cluster on Concentration of Long-Alkyl-Chain Ionic Liquids Aqueous Solution by Nanofiltration. Industrial & Engineering Chemistry Research, 2018, 57, 7633-7642.	1.8	8
141	Anti-electrostatic hydrogen bonding between anions of ionic liquids: a density functional theory study. Physical Chemistry Chemical Physics, 2021, 23, 7426-7433.	1.3	8
142	Prediction of the Liquidâ€“Liquid Extraction Properties of Imidazolium-Based Ionic Liquids for the Extraction of Aromatics from Aliphatics. Journal of Chemical Information and Modeling, 2021, 61, 3376-3385.	2.5	8
143	Impregnation of 1-n-Butyl-3-methylimidazolium Dicyanide [BMIM][DCA] into ZIF-8 as a Versatile Sorbent for Efficient and Selective Separation of CO₂. Industrial & Engineering Chemistry Research, 2022, 61, 706-715.	1.8	8
144	Mixed matrix membranes containing Cu-based metal organic framework and functionalized ionic liquid for efficient NH3 separation. Journal of Membrane Science, 2022, 659, 120780.	4.1	8

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145	An integrated gradually thinning and dual-ion co-substitution strategy modulated In-O-ultrathin-SnS2 nanosheets to achieve efficient electrochemical reduction of CO2. Chemical Engineering Journal, 2022, 429, 132145.	6.6	7
146	Efficient Electrochemical Reduction of CO₂ to CO in Ionic Liquids. ChemistrySelect, 2021, 6, 9873-9879.	0.7	7
147	Insight into CO2/CH4 separation performance in ionic liquids/polymer membrane from molecular dynamics simulation. Journal of Molecular Liquids, 2022, 357, 119119.	2.3	7
148	Reaction Behaviors and Mechanism of Isobutane/Propene Alkylation Catalyzed by Composite Ionic Liquid. Industrial & Engineering Chemistry Research, 2022, 61, 8624-8633.	1.8	7
149	Metal Ionic Liquids Produce Metalâ€Dispersed Carbonâ€Nitrogen Networks for Efficient CO 2 Electroreduction. ChemCatChem, 2019, 11, 3166-3170.	1.8	6
150	Strategy Combining Free Volume Theory and Fragment Contribution Corresponding State Method for Predicting Viscosities of Ionic Liquids. Industrial & Engineering Chemistry Research, 2019, 58, 5640-5649.	1.8	6
151	Highly Efficient Dehydration of Ethyl Acetate using Strong Hydrophilic Ionic Liquids. Industrial & Engineering Chemistry Research, 2020, 59, 16751-16761.	1.8	6
152	A new FCCS-CFD coupled method for understanding the influence of molecular structure of ionic liquid on bubble behaviors. Chemical Engineering and Processing: Process Intensification, 2018, 125, 266-274.	1.8	4
153	Pattern Matching and Active Simulation Method for Process Fault Diagnosis. Industrial & Engineering Chemistry Research, 2020, 59, 12525-12535.	1.8	4
154	Ionic liquidâ€“based adsorbents in indoor pollutants removal. Current Opinion in Green and Sustainable Chemistry, 2021, 27, 100405.	3.2	4
155	Natural Deep Eutectic Solvents Enhanced Electro-Enzymatic Conversion of CO2 to Methanol. Frontiers in Chemistry, 2022, 10, .	1.8	4
156	Hydrodynamic Characteristics of N₂-[Bmim][NO₃] Two-Phase Taylor Flow in Microchannels. Industrial & Engineering Chemistry Research, 2021, 60, 17248-17258.	1.8	3
157	CO2 separation performance for PIM based mixed matrix membranes embedded by superbase ionic liquids. Journal of Molecular Liquids, 2022, , 119375.	2.3	3
158	Boosting CO2 electroreduction by iodine-treated porous nitrogen-doped carbon. Chemical Engineering Science: X, 2020, 8, 100084.	1.5	2
159	Simulation and assessment of manufacturing ethylene carbonate from ethylene oxide in multiple process routes. Chinese Journal of Chemical Engineering, 2021, 31, 135-144.	1.7	2
160	Experimental study on hydrodynamics of ionic liquids systems in falling film evaporator. Chemical Engineering and Processing: Process Intensification, 2021, , 108701.	1.8	2