

Xiangping Zhang

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

155
papers

8,239
citations

47
h-index

88
g-index

162
ext. papers

9,965
ext. citations

7.4
avg, IF

6.37
L-index

#	Paper	IF	Citations
155	Physical Properties of Ionic Liquids: Database and Evaluation. <i>Journal of Physical and Chemical Reference Data</i> , 2006 , 35, 1475-1517	4.3	920
154	Carbon capture with ionic liquids: overview and progress. <i>Energy and Environmental Science</i> , 2012 , 5, 6668	35.4	635
153	Ionic-Liquid-Based CO Capture Systems: Structure, Interaction and Process. <i>Chemical Reviews</i> , 2017 , 117, 9625-9673	68.1	469
152	Multiscale Studies on Ionic Liquids. <i>Chemical Reviews</i> , 2017 , 117, 6636-6695	68.1	410
151	Dual amino-functionalised phosphonium ionic liquids for CO ₂ capture. <i>Chemistry - A European Journal</i> , 2009 , 15, 3003-11	4.8	355
150	Combination of ionic liquids with membrane technology: A new approach for CO ₂ separation. <i>Journal of Membrane Science</i> , 2016 , 497, 1-20	9.6	353
149	Glycolysis of poly(ethylene terephthalate) catalyzed by ionic liquids. <i>European Polymer Journal</i> , 2009 , 45, 1535-1544	5.2	157
148	Recent development of ionic liquid membranes. <i>Green Energy and Environment</i> , 2016 , 1, 43-61	5.7	155
147	Cascade utilization of lignocellulosic biomass to high-value products. <i>Green Chemistry</i> , 2019 , 21, 3499-3535		139
146	Fe-containing magnetic ionic liquid as an effective catalyst for the glycolysis of poly(ethylene terephthalate). <i>Catalysis Communications</i> , 2010 , 11, 763-767	3.2	133
145	Efficient and reversible capture of SO ₂ by pyridinium-based ionic liquids. <i>Chemical Engineering Journal</i> , 2014 , 251, 248-256	14.7	132
144	Solubilities of CO ₂ in 1-Butyl-3-methylimidazolium Hexafluorophosphate and 1,1,3,3-Tetramethylguanidium Lactate at Elevated Pressures. <i>Journal of Chemical & Engineering Data</i> , 2005 , 50, 1582-1585	2.8	127
143	Density, Viscosity, and Performances of Carbon Dioxide Capture in 16 Absorbents of Amine + Ionic Liquid + H ₂ O, Ionic Liquid + H ₂ O, and Amine + H ₂ O Systems. <i>Journal of Chemical & Engineering Data</i> , 2010 , 55, 3513-3519	2.8	123
142	A Novel Dual Amino-Functionalized Cation-Tethered Ionic Liquid for CO ₂ Capture. <i>Industrial & Engineering Chemistry Research</i> , 2013 , 52, 5835-5841	3.9	120
141	Degradation of poly(ethylene terephthalate) using ionic liquids. <i>Green Chemistry</i> , 2009 , 11, 1568	10	119
140	Toxicity of ionic liquids: database and prediction via quantitative structure-activity relationship method. <i>Journal of Hazardous Materials</i> , 2014 , 278, 320-9	12.8	117
139	Protic ionic liquid [Bim][NTf ₂] with strong hydrogen bond donating ability for highly efficient ammonia absorption. <i>Green Chemistry</i> , 2017 , 19, 937-945	10	104

138	A Mn-N single-atom catalyst embedded in graphitic carbon nitride for efficient CO electroreduction. <i>Nature Communications</i> , 2020 , 11, 4341	17.4	96
137	The Research Progress of CO ₂ Capture with Ionic Liquids. <i>Chinese Journal of Chemical Engineering</i> , 2012 , 20, 120-129	3.2	93
136	Efficient absorption of ammonia with hydroxyl-functionalized ionic liquids. <i>RSC Advances</i> , 2015 , 5, 81362-81370	3.8	86
135	Urea as an efficient and reusable catalyst for the glycolysis of poly(ethylene terephthalate) wastes and the role of hydrogen bond in this process. <i>Green Chemistry</i> , 2012 , 14, 2559	10	86
134	Solubilities of ammonia in basic imidazolium ionic liquids. <i>Fluid Phase Equilibria</i> , 2010 , 297, 34-39	2.5	86
133	Imidazole tailored deep eutectic solvents for CO ₂ capture enhanced by hydrogen bonds. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 27306-16	3.6	83
132	Thermodynamic Modeling and Assessment of Ionic Liquid-Based CO ₂ Capture Processes. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 11805-11817	3.9	83
131	Ionic Liquid Design and Process Simulation for Decarbonization of Shale Gas. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 5931-5944	3.9	75
130	A new fragment contribution-corresponding states method for physicochemical properties prediction of ionic liquids. <i>AIChE Journal</i> , 2013 , 59, 1348-1359	3.6	73
129	Efficient and reversible absorption of ammonia by cobalt ionic liquids through Lewis acid-base and cooperative hydrogen bond interactions. <i>Green Chemistry</i> , 2018 , 20, 2075-2083	10	71
128	Novel Ether-Functionalized Pyridinium Chloride Ionic Liquids for Efficient SO ₂ Capture. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 16832-16839	3.9	71
127	Prediction of the melting points for two kinds of room temperature ionic liquids. <i>Fluid Phase Equilibria</i> , 2006 , 246, 137-142	2.5	71
126	Ionic liquids for absorption and separation of gases: An extensive database and a systematic screening method. <i>AIChE Journal</i> , 2017 , 63, 1353-1367	3.6	62
125	Pebax-based composite membranes with high gas transport properties enhanced by ionic liquids for CO ₂ separation. <i>RSC Advances</i> , 2017 , 7, 6422-6431	3.7	61
124	Assessment of the energy consumption of the biogas upgrading process with pressure swing adsorption using novel adsorbents. <i>Journal of Cleaner Production</i> , 2015 , 101, 251-261	10.3	61
123	Recovery of ionic liquids from dilute aqueous solutions by electrodialysis. <i>Desalination</i> , 2012 , 285, 205-210	10.3	61
122	A quantitative prediction of the viscosity of ionic liquids using S(Eprofile) molecular descriptors. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 3761-7	3.6	60
121	Post-combustion Carbon Capture with a Gas Separation Membrane: Parametric Study, Capture Cost, and Exergy Analysis. <i>Energy & Fuels</i> , 2013 , 27, 4137-4149	4.1	60

120	Improving SO ₂ capture by tuning functional groups on the cation of pyridinium-based ionic liquids. <i>RSC Advances</i> , 2015 , 5, 2470-2478	3.7	59
119	Highly Selective Capture of CO ₂ by Ether-Functionalized Pyridinium Ionic Liquids with Low Viscosity. <i>Energy & Fuels</i> , 2015 , 29, 6039-6048	4.1	57
118	Efficient transformation of CO ₂ to cyclic carbonates using bifunctional protic ionic liquids under mild conditions. <i>Green Chemistry</i> , 2019 , 21, 3456-3463	10	55
117	Enhanced NH ₃ capture by imidazolium-based protic ionic liquids with different anions and cation substituents. <i>Journal of Chemical Technology and Biotechnology</i> , 2018 , 93, 1228-1236	3.5	53
116	Engineering Electronic Structure of Stannous Sulfide by Amino-Functionalized Carbon: Toward Efficient Electrocatalytic Reduction of CO ₂ to Formate. <i>Advanced Energy Materials</i> , 2020 , 10, 1903664	21.8	52
115	Temperature-Controlled Reaction/Separation for Conversion of CO ₂ to Carbonates with Functional Ionic Liquids Catalyst. <i>ACS Sustainable Chemistry and Engineering</i> , 2017 , 5, 3081-3086	8.3	51
114	CO ₂ Electroreduction in Ionic Liquids: A Review. <i>Chinese Journal of Chemistry</i> , 2018 , 36, 961-970	4.9	51
113	Functionalized ionic liquid membranes for CO separation. <i>Chemical Communications</i> , 2018 , 54, 12671-12685	9.85	51
112	Study on Extraction Asphaltene from Direct Coal Liquefaction Residue with Ionic Liquids. <i>Industrial & Engineering Chemistry Research</i> , 2011 , 50, 10278-10282	3.9	50
111	Extractive desulfurization of fuel using N-butylpyridinium-based ionic liquids. <i>RSC Advances</i> , 2015 , 5, 30234-30238	3.7	49
110	Superbase Ionic Liquid-Based Deep Eutectic Solvents for Improving CO ₂ Absorption. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 2523-2530	8.3	49
109	Surface morphology, crystal structure and orientation of aluminium coatings electrodeposited on mild steel in ionic liquid. <i>Chemical Engineering Journal</i> , 2009 , 147, 79-86	14.7	49
108	Metal chloride anion-based ionic liquids for efficient separation of NH ₃ . <i>Journal of Cleaner Production</i> , 2019 , 206, 661-669	10.3	46
107	Carbon hollow fiber membranes for a molecular sieve with precise-cutoff ultramicropores for superior hydrogen separation. <i>Nature Communications</i> , 2021 , 12, 268	17.4	42
106	Ether-functionalized ionic liquid based composite membranes for carbon dioxide separation. <i>RSC Advances</i> , 2016 , 6, 45184-45192	3.7	41
105	Gas-liquid mass-transfer properties in CO ₂ absorption system with ionic liquids. <i>AIChE Journal</i> , 2014 , 60, 2929-2939	3.6	41
104	Amination strategy to boost the CO ₂ electroreduction current density of Mn/C single-atom catalysts to the industrial application level. <i>Energy and Environmental Science</i> , 2021 , 14, 2349-2356	35.4	40
103	Predictive deep learning models for environmental properties: the direct calculation of octanol/water partition coefficients from molecular graphs. <i>Green Chemistry</i> , 2019 , 21, 4555-4565	10	39

102	Effect of Small Amount of Water on CO ₂ Bubble Behavior in Ionic Liquid Systems. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 428-439	3.9	39
101	Ionic liquids to extract valuable components from direct coal liquefaction residues. <i>Fuel</i> , 2012 , 94, 617-619	3.9	39
100	The rise and deformation of a single bubble in ionic liquids. <i>Chemical Engineering Science</i> , 2010 , 65, 3240-3248	3.9	39
99	Effect of small amount of water on the dynamics properties and microstructures of ionic liquids. <i>AIChE Journal</i> , 2017 , 63, 2248-2256	3.6	38
98	Pebax/TSIL blend thin film composite membranes for CO ₂ separation. <i>Science China Chemistry</i> , 2016 , 59, 538-546	7.9	38
97	Protic ionic liquids extract asphaltenes from direct coal liquefaction residue at room temperature. <i>Fuel Processing Technology</i> , 2013 , 108, 94-100	7.2	38
96	Ionic liquids in gas separation processing. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2017 , 5, 74-81	7.9	36
95	Quantitative Change in Disulfide Bonds and Microstructure Variation of Regenerated Wool Keratin from Various Ionic Liquids. <i>ACS Sustainable Chemistry and Engineering</i> , 2017 , 5, 2614-2622	8.3	34
94	Predicting H ₂ S solubility in ionic liquids by the quantitative structure-property relationship method using S-profile molecular descriptors. <i>RSC Advances</i> , 2016 , 6, 70405-70413	3.7	34
93	Novel alcamines ionic liquids based solvents: Preparation, characterization and applications in carbon dioxide capture. <i>International Journal of Greenhouse Gas Control</i> , 2011 , 5, 367-373	4.2	34
92	Selective Separation of Hydrogen Sulfide with Pyridinium-Based Ionic Liquids. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 1284-1293	3.9	33
91	Experimental study on gas holdup and bubble behavior in carbon capture systems with ionic liquid. <i>Chemical Engineering Journal</i> , 2012 , 209, 607-615	14.7	33
90	Prediction of viscosity of imidazolium-based ionic liquids using MLR and SVM algorithms. <i>Computers and Chemical Engineering</i> , 2016 , 92, 37-42	4	33
89	1-Allyl-3-methylimidazolium halometallate ionic liquids as efficient catalysts for the glycolysis of poly(ethylene terephthalate). <i>Journal of Applied Polymer Science</i> , 2013 , 129, 3574-3581	2.9	32
88	SO ₂ -Induced Variations in the Viscosity of Ionic Liquids Investigated by in Situ Fourier Transform Infrared Spectroscopy and Simulation Calculations. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 10854-10862	3.9	31
87	Numerical simulation of single bubble motion in ionic liquids. <i>Chemical Engineering Science</i> , 2010 , 65, 6036-6047	4.4	30
86	Hydrogen Sulfide Solubility in Ionic Liquids (ILs): An Extensive Database and a New ELM Model Mainly Established by Imidazolium-Based ILs. <i>Journal of Chemical & Engineering Data</i> , 2016 , 61, 3970-3978	2.8	29
85	Efficient extraction of direct coal liquefaction residue with the [bmim]Cl/NMP mixed solvent. <i>RSC Advances</i> , 2011 , 1, 1579	3.7	29

84	Gas separation by ionic liquids: A theoretical study. <i>Chemical Engineering Science</i> , 2018 , 189, 43-55	4.4	29
83	Ionic liquids/deep eutectic solvents for CO ₂ capture: Reviewing and evaluating. <i>Green Energy and Environment</i> , 2021 , 6, 314-328	5.7	27
82	Protic Ionic-Liquid-Supported Activated Carbon with Hierarchical Pores for Efficient NH ₃ Adsorption. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 11769-11777	8.3	25
81	A novel ionic liquids-based scrubbing process for efficient CO ₂ capture. <i>Science China Chemistry</i> , 2010 , 53, 1549-1553	7.9	25
80	Protic ionic liquids with low viscosity for efficient and reversible capture of carbon dioxide. <i>International Journal of Greenhouse Gas Control</i> , 2019 , 90, 102801	4.2	24
79	Estimation of Heat Capacity of Ionic Liquids Using SEprofile Molecular Descriptors. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 12987-12992	3.9	24
78	Concentration of ionic liquids by nanofiltration for recycling: Filtration behavior and modeling. <i>Separation and Purification Technology</i> , 2016 , 165, 18-26	8.3	24
77	Ionic Liquid Incorporated Metal Organic Framework for High Ionic Conductivity over Extended Temperature Range. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 7892-7899	8.3	23
76	Numerical simulations of bubble behavior and mass transfer in CO ₂ capture system with ionic liquids. <i>Chemical Engineering Science</i> , 2015 , 135, 76-88	4.4	23
75	Insights into Carbon Dioxide Electroreduction in Ionic Liquids: Carbon Dioxide Activation and Selectivity Tailored by Ionic Microhabitat. <i>ChemSusChem</i> , 2018 , 11, 3191-3197	8.3	23
74	Study on the recovery of ionic liquids from dilute effluent by electrodialysis method and the fouling of cation-exchange membrane. <i>Science China Chemistry</i> , 2013 , 56, 1811-1816	7.9	23
73	Simultaneous measurement of CO ₂ sorption and swelling of phosphate-based ionic liquid. <i>Green Energy and Environment</i> , 2016 , 1, 258-265	5.7	23
72	Efficient adsorption of ammonia by incorporation of metal ionic liquids into silica gels as mesoporous composites. <i>Chemical Engineering Journal</i> , 2019 , 370, 81-88	14.7	21
71	Protic ionic liquid-based deep eutectic solvents with multiple hydrogen bonding sites for efficient absorption of NH ₃ . <i>AIChE Journal</i> , 2020 , 66, e16253	3.6	20
70	Deep Desulfurization of Gasoline Fuel using FeCl ₃ -Containing Lewis-Acidic Ionic Liquids. <i>Separation Science and Technology</i> , 2014 , 49, 1208-1214	2.5	20
69	Preparation of carbon molecular sieve membranes with remarkable CO ₂ /CH ₄ selectivity for high-pressure natural gas sweetening. <i>Journal of Membrane Science</i> , 2020 , 614, 118529	9.6	19
68	Defects and Conductive Nitrogen-Carbon Framework Regulated ZnInOx Nanosheets for Boosting CO ₂ Electrocatalytic Reduction. <i>Applied Catalysis B: Environmental</i> , 2020 , 279, 119383	21.8	19
67	Enhanced CO ₂ capture by binary systems of pyridinium-based ionic liquids and porous ZIF-8 particles. <i>Journal of Chemical Thermodynamics</i> , 2019 , 128, 415-423	2.9	19

66	Morphology Modulation-Engineered Flowerlike In ₂ S ₃ via Ionothermal Method for Efficient CO ₂ Electroreduction. <i>ChemCatChem</i> , 2020 , 12, 926-931	5.2	19
65	Encapsulation of multiple enzymes in a metal-organic framework with enhanced electro-enzymatic reduction of CO ₂ to methanol. <i>Green Chemistry</i> , 2021 , 23, 2362-2371	10	19
64	A novel unambiguous strategy of molecular feature extraction in machine learning assisted predictive models for environmental properties. <i>Green Chemistry</i> , 2020 , 22, 3867-3876	10	16
63	Feasible ionic liquid-amine hybrid solvents for carbon dioxide capture. <i>International Journal of Greenhouse Gas Control</i> , 2017 , 66, 120-128	4.2	15
62	Intentional construction of high-performance SnO catalysts with a 3D porous structure for electrochemical reduction of CO. <i>Nanoscale</i> , 2019 , 11, 18715-18722	7.7	15
61	Ultralow Thermal Resistance across the Solid-Liquid Interface Caused by the Charge-Induced Ordered Ionic Layer. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 20109-20115	3.9	15
60	Absorption degree analysis on biogas separation with ionic liquid systems. <i>Bioresource Technology</i> , 2015 , 175, 135-41	11	15
59	Modeling and simulation of high-pressure urea synthesis loop. <i>Computers and Chemical Engineering</i> , 2005 , 29, 983-992	4	15
58	Role of ionic liquids in the efficient transfer of lithium by Cyanex 923 in solvent extraction system. <i>AIChE Journal</i> , 2019 , 65, e16606	3.6	14
57	NH ₃ absorption performance and reversible absorption mechanisms of protic ionic liquids with six-membered N-heterocyclic cations. <i>Separation and Purification Technology</i> , 2020 , 248, 117087	8.3	13
56	Dual-functionalized protic ionic liquids for efficient absorption of NH ₃ through synergistically physicochemical interaction. <i>Journal of Chemical Technology and Biotechnology</i> , 2020 , 95, 1815-1824	3.5	13
55	Aromatic Ester-Functionalized Ionic Liquid for Highly Efficient CO Electrochemical Reduction to Oxalic Acid. <i>ChemSusChem</i> , 2020 , 13, 4900-4905	8.3	13
54	CO ₂ absorption with ionic liquids at elevated temperatures. <i>Journal of Energy Chemistry</i> , 2017 , 26, 1001-1006	10	12
53	Highly efficient carbon dioxide capture by a novel amine solvent containing multiple amino groups. <i>Journal of Chemical Technology and Biotechnology</i> , 2015 , 90, 1918-1926	3.5	12
52	Process Analysis and Multi-Objective Optimization of Ionic Liquid-Containing Acetonitrile Process to Produce 1,3-Butadiene. <i>Chemical Engineering and Technology</i> , 2011 , 34, 927-936	2	12
51	Ionic liquid-based green processes for ammonia separation and recovery. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2020 , 25, 100354	7.9	11
50	Highly efficient and reversible absorption of NH ₃ by dual functionalised ionic liquids with protic and Lewis acidic sites. <i>Journal of Molecular Liquids</i> , 2020 , 312, 113411	6	11
49	Studies on the physical properties variations of protic ionic liquid during NH ₃ absorption. <i>Journal of Molecular Liquids</i> , 2019 , 296, 111791	6	10

48	Technoeconomic Analysis and Process Design for CO ₂ Electroreduction to CO in Ionic Liquid Electrolyte. <i>ACS Sustainable Chemistry and Engineering</i> , 2021 , 9, 9045-9052	8.3	10
47	MgO@BA-15 Supported Pd/Pb Catalysts for Oxidative Esterification of Methacrolein with Methanol to Methyl Methacrylate. <i>Chinese Journal of Chemical Engineering</i> , 2014 , 22, 1098-1104	3.2	9
46	Supported ionic liquids for air purification. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2020 , 25, 100391	7.9	9
45	An ionic fragments contribution-COSMO method to predict the surface charge density profiles of ionic liquids. <i>Journal of Molecular Liquids</i> , 2019 , 282, 292-302	6	8
44	Combining Ionic Liquids and Sodium Salts into Metal-Organic Framework for High-Performance Ionic Conduction. <i>ChemElectroChem</i> , 2020 , 7, 183-190	4.3	8
43	Ionic liquid cobalt complex as O ₂ carrier in the PIM-1 membrane for O ₂ /N ₂ separation. <i>Separation and Purification Technology</i> , 2020 , 248, 117041	8.3	7
42	Numerical simulation of CO ₂ -ionic liquid flow in a stirred tank. <i>Science China Chemistry</i> , 2015 , 58, 1918-1928	7.9	7
41	Task-Specific Ionic Liquids Tuning ZIF-67/PIM-1 Mixed Matrix Membranes for Efficient CO ₂ Separation. <i>Industrial & Engineering Chemistry Research</i> , 2021 , 60, 593-603	3.9	7
40	Modification to solution-diffusion model for performance prediction of nanofiltration of long-alkyl-chain ionic liquids aqueous solutions based on ion cluster. <i>Green Energy and Environment</i> , 2020 , 5, 105-113	5.7	7
39	InSitu Carbon Encapsulation Confined Nickel-Doped Indium Oxide Nanocrystals for Boosting CO ₂ Electroreduction to the Industrial Level. <i>ACS Catalysis</i> , 2021 , 11, 14596-14604	13.1	6
38	Review of Methods for Sustainability Assessment of Chemical Engineering Processes. <i>Industrial & Engineering Chemistry Research</i> , 2021 , 60, 52-66	3.9	6
37	Ionic liquids for CO ₂ electrochemical reduction. <i>Chinese Journal of Chemical Engineering</i> , 2021 , 31, 75-93	3.2	6
36	Effect of Ion Cluster on Concentration of Long-Alkyl-Chain Ionic Liquids Aqueous Solution by Nanofiltration. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 7633-7642	3.9	6
35	Multi-objective optimization of methane production system from biomass through anaerobic digestion. <i>Chinese Journal of Chemical Engineering</i> , 2018 , 26, 2084-2092	3.2	5
34	Efficient and Reversible Chemisorption of Carbon Dioxide with Dianionic-Functionalized Ionic Liquid-Based Solvents. <i>Energy & Fuels</i> , 2020 , 34, 8526-8533	4.1	5
33	Constructing single Cu ^{II} sites for CO ₂ electrochemical reduction over a wide potential range. <i>Green Chemistry</i> , 2021 , 23, 5461-5466	10	5
32	A new FCCS-CFD coupled method for understanding the influence of molecular structure of ionic liquid on bubble behaviors. <i>Chemical Engineering and Processing: Process Intensification</i> , 2018 , 125, 266-274	3.7	4
31	State of the art of ionic liquid-modified adsorbents for CO ₂ capture and separation. <i>AIChE Journal</i> , 2016 , 62, 1750-1766	10	4

30	Super selective ammonia separation through multiple-site interaction with ionic liquid-based hybrid membranes. <i>Journal of Membrane Science</i> , 2021 , 628, 119264	9.6	4
29	Metal Ionic Liquids Produce Metal-Dispersed Carbon-Nitrogen Networks for Efficient CO ₂ Electroreduction. <i>ChemCatChem</i> , 2019 , 11, 3166-3170	5.2	3
28	Developing and Regenerating Cofactors for Sustainable Enzymatic CO ₂ Conversion. <i>Processes</i> , 2022 , 10, 230	2.9	3
27	Efficient Electrochemical Reduction of CO ₂ to CO in Ionic Liquids. <i>ChemistrySelect</i> , 2021 , 6, 9873-9879	1.8	3
26	Highly Efficient Dehydration of Ethyl Acetate using Strong Hydrophilic Ionic Liquids. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 16751-16761	3.9	3
25	Dynamic Process Simulation and Assessment of CO ₂ Removal from Confined Spaces Using Pressure Swing Adsorption. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 16407-16419	3.9	3
24	An Overview of Ammonia Separation by Ionic Liquids. <i>Industrial & Engineering Chemistry Research</i> , 2021 , 60, 6908-6924	3.9	3
23	Removal of Trace Aluminum Impurity for High-Purity GdCl ₃ Preparation using an Amine-Group-Functionalized Ionic Liquid. <i>Industrial & Engineering Chemistry Research</i> , 2021 , 60, 11241-11250	2.9	3
22	Process Simulation and Optimization of Ammonia-Containing Gas Separation and Ammonia Recovery with Ionic Liquids. <i>ACS Sustainable Chemistry and Engineering</i> , 2021 , 9, 312-325	8.3	3
21	Ionic liquid screening for dichloromethane absorption by multi-scale simulations. <i>Separation and Purification Technology</i> , 2021 , 275, 119187	8.3	3
20	Zinc-based deep eutectic solvent [An efficient carbonic anhydrase mimic for CO ₂ hydration and conversion. <i>Separation and Purification Technology</i> , 2021 , 276, 119446	8.3	3
19	Pattern Matching and Active Simulation Method for Process Fault Diagnosis. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 12525-12535	3.9	2
18	Boosting CO ₂ electroreduction by iodine-treated porous nitrogen-doped carbon. <i>Chemical Engineering Science: X</i> , 2020 , 8, 100084	1.1	2
17	Dynamic process simulation and optimization of CO ₂ removal from confined space with pressure and temperature swing adsorption. <i>Chemical Engineering Journal</i> , 2021 , 416, 129104	14.7	2
16	Anti-electrostatic hydrogen bonding between anions of ionic liquids: a density functional theory study. <i>Physical Chemistry Chemical Physics</i> , 2021 , 23, 7426-7433	3.6	2
15	An integrated gradually thinning and dual-ion co-substitution strategy modulated In-O-ultrathin-SnS ₂ nanosheets to achieve efficient electrochemical reduction of CO ₂ . <i>Chemical Engineering Journal</i> , 2022 , 429, 132145	14.7	2
14	Strategy Combining Free Volume Theory and Fragment Contribution Corresponding State Method for Predicting Viscosities of Ionic Liquids. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 5640-5649 ¹	3.9	1
13	Hydrodynamic Characteristics of N ₂ -[Bmim][NO ₃] Two-Phase Taylor Flow in Microchannels. <i>Industrial & Engineering Chemistry Research</i> , 2021 , 60, 17248-17258	3.9	1

12	Exploring NH ₃ Transport Properties by Tailoring Ionic Liquids in Pebax-Based Hybrid Membranes. <i>Industrial & Engineering Chemistry Research</i> , 2021 , 60, 9570-9577	3.9	1
11	Ionic liquidBased adsorbents in indoor pollutants removal. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2021 , 27, 100405	7.9	1
10	Simulation and assessment of manufacturing ethylene carbonate from ethylene oxide in multiple process routes. <i>Chinese Journal of Chemical Engineering</i> , 2021 , 31, 135-144	3.2	1
9	A multi-task deep learning neural network for predicting flammability-related properties from molecular structures. <i>Green Chemistry</i> , 2021 , 23, 4451-4465	10	1
8	Insight into CO ₂ /CH ₄ separation performance in ionic liquids/polymer membrane from molecular dynamics simulation. <i>Journal of Molecular Liquids</i> , 2022 , 119119	6	1
7	Process simulation and evaluation for NH ₃ /CO ₂ separation from melamine tail gas with protic ionic liquids. <i>Separation and Purification Technology</i> , 2022 , 288, 120680	8.3	1
6	Novel artificial ionic cofactors for efficient electro-enzymatic conversion of CO ₂ to formic acid. <i>Journal of CO₂ Utilization</i> , 2022 , 60, 101978	7.6	1
5	Impregnation of 1-n-Butyl-3-methylimidazolium Dicyanide [BMIM][DCA] into ZIF-8 as a Versatile Sorbent for Efficient and Selective Separation of CO ₂ . <i>Industrial & Engineering Chemistry Research</i> , 2022 , 61, 706-715	3.9	1
4	Experimental study on hydrodynamics of ionic liquids systems in falling film evaporator. <i>Chemical Engineering and Processing: Process Intensification</i> , 2021 , 108701	3.7	0
3	Prediction of the Liquid-Liquid Extraction Properties of Imidazolium-Based Ionic Liquids for the Extraction of Aromatics from Aliphatics. <i>Journal of Chemical Information and Modeling</i> , 2021 , 61, 3376-3385	6.1	0
2	Pt ₃ Fe Nanoparticles on B,N-Codoped Carbon as Oxygen Reduction and pH-Universal Hydrogen Evolution Electrocatalysts. <i>ACS Applied Nano Materials</i> , 2022 , 5, 318-325	5.6	0
1	CO ₂ separation performance for PIM based mixed matrix membranes embedded by superbase ionic liquids. <i>Journal of Molecular Liquids</i> , 2022 , 119375	6	0