Shaojuan Zeng

List of Publications by Citations

163 papers	7,688 citations	44 h-index	84 g-index
173 ext. papers	9,384 ext. citations	7.4 avg, IF	6.33 L-index

#	Paper	IF	Citations
163	Physical Properties of Ionic Liquids: Database and Evaluation. *Journal of Physical and Chemical Reference Data*, **2006**, 35, 1475-1517	4.3	920
162	Carbon capture with ionic liquids: overview and progress. *Energy and Environmental Science*, **2012**, 5, 6668	35.4	635
161	Ionic-Liquid-Based CO Capture Systems: Structure, Interaction and Process. *Chemical Reviews*, **2017**, 117, 9625-9673	68.1	469
160	Multiscale Studies on Ionic Liquids. *Chemical Reviews*, **2017**, 117, 6636-6695	68.1	410
159	Dual amino-functionalised phosphonium ionic liquids for CO2 capture. *Chemistry - A European Journal*, **2009**, 15, 3003-11	4.8	355
158	Combination of ionic liquids with membrane technology: A new approach for CO2 separation. *Journal of Membrane Science*, **2016**, 497, 1-20	9.6	353
157	Alumina-Supported CoFe Alloy Catalysts Derived from Layered-Double-Hydroxide Nanosheets for Efficient Photothermal CO Hydrogenation to Hydrocarbons. *Advanced Materials*, **2018**, 30, 1704663	24	208
156	Cascade utilization of lignocellulosic biomass to high-value products. *Green Chemistry*, **2019**, 21, 3499-3535	10	139
155	Efficient and reversible capture of SO2 by pyridinium-based ionic liquids. *Chemical Engineering Journal*, **2014**, 251, 248-256	14.7	132
154	A Novel Dual Amino-Functionalized Cation-Tethered Ionic Liquid for CO2 Capture. *Industrial & Engineering Chemistry Research*, **2013**, 52, 5835-5841	3.9	120
153	Degradation of poly(ethylene terephthalate) using ionic liquids. *Green Chemistry*, **2009**, 11, 1568	10	119
152	Toxicity of ionic liquids: database and prediction via quantitative structure-activity relationship method. *Journal of Hazardous Materials*, **2014**, 278, 320-9	12.8	117
151	Protic ionic liquid [Bim][NTf2] with strong hydrogen bond donating ability for highly efficient ammonia absorption. *Green Chemistry*, **2017**, 19, 937-945	10	104
150	A Mn-N single-atom catalyst embedded in graphitic carbon nitride for efficient CO electroreduction. *Nature Communications*, **2020**, 11, 4341	17.4	96
149	Electrodeposition in Ionic Liquids. *ChemPhysChem*, **2016**, 17, 335-51	3.2	88
148	Efficient absorption of ammonia with hydroxyl-functionalized ionic liquids. *RSC Advances*, **2015**, 5, 81362-81370	3.9	86
147	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	10	86

146	Solubilities of ammonia in basic imidazolium ionic liquids. *Fluid Phase Equilibria*, **2010**, 297, 34-39	2.5	86
145	Imidazole tailored deep eutectic solvents for CO2 capture enhanced by hydrogen bonds. *Physical Chemistry Chemical Physics*, **2015**, 17, 27306-16	3.6	83
144	Thermodynamic Modeling and Assessment of Ionic Liquid-Based CO2Capture Processes. *Industrial & Engineering Chemistry Research*, **2014**, 53, 11805-11817	3.9	83
143	Ionic Liquid Design and Process Simulation for Decarbonization of Shale Gas. *Industrial & Engineering Chemistry Research*, **2016**, 55, 5931-5944	3.9	75
142	A new fragment contribution-corresponding states method for physicochemical properties prediction of ionic liquids. *AICHE Journal*, **2013**, 59, 1348-1359	3.6	73
141	Efficient and reversible absorption of ammonia by cobalt ionic liquids through Lewis acid□base and cooperative hydrogen bond interactions. *Green Chemistry*, **2018**, 20, 2075-2083	10	71
140	Ionic liquids for absorption and separation of gases: An extensive database and a systematic screening method. *AICHE Journal*, **2017**, 63, 1353-1367	3.6	62
139	Pebax-based composite membranes with high gas transport properties enhanced by ionic liquids for CO2 separation. *RSC Advances*, **2017**, 7, 6422-6431	3.7	61
138	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	10.3	61
137	A quantitative prediction of the viscosity of ionic liquids using S(□profile) molecular descriptors. *Physical Chemistry Chemical Physics*, **2015**, 17, 3761-7	3.6	60
136	Post-combustion Carbon Capture with a Gas Separation Membrane: Parametric Study, Capture Cost, and Exergy Analysis. *Energy & Fuels*, **2013**, 27, 4137-4149	4.1	60
135	Improving SO2 capture by tuning functional groups on the cation of pyridinium-based ionic liquids. *RSC Advances*, **2015**, 5, 2470-2478	3.7	59
134	Efficient transformation of CO2 to cyclic carbonates using bifunctional protic ionic liquids under mild conditions. *Green Chemistry*, **2019**, 21, 3456-3463	10	55
133	Densities and Viscosities of the Binary Mixtures of 1-Ethyl-3-methylimidazolium Bis(trifluoromethylsulfonyl)imide with N-Methyl-2-pyrrolidone or Ethanol at T = (293.15 to 323.15) K. *Journal of Chemical & Engineering Data*, **2012**, 57, 875-881	2.8	55
132	Enhanced NH3 capture by imidazolium-based protic ionic liquids with different anions and cation substituents. *Journal of Chemical Technology and Biotechnology*, **2018**, 93, 1228-1236	3.5	53
131	Engineering Electronic Structure of Stannous Sulfide by Amino-Functionalized Carbon: Toward Efficient Electrocatalytic Reduction of CO2 to Formate. *Advanced Energy Materials*, **2020**, 10, 1903664	21.8	52
130	Temperature-Controlled Reaction□Separation for Conversion of CO2 to Carbonates with Functional Ionic Liquids Catalyst. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 3081-3086	8.3	51
129	CO2 Electroreduction in Ionic Liquids: A Review. *Chinese Journal of Chemistry*, **2018**, 36, 961-970	4.9	51

128	Functionalized ionic liquid membranes for CO separation. *Chemical Communications*, **2018**, 54, 12671-12685	5.8	51
127	Study on Extraction Asphaltenes from Direct Coal Liquefaction Residue with Ionic Liquids. *Industrial & Engineering Chemistry Research*, **2011**, 50, 10278-10282	3.9	50
126	Extractive desulfurization of fuel using N-butylpyridinium-based ionic liquids. *RSC Advances*, **2015**, 5, 30234-30238	3.7	49
125	Superbase Ionic Liquid-Based Deep Eutectic Solvents for Improving CO2 Absorption. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 2523-2530	8.3	49
124	Highly Efficient Dissolution of Wool Keratin by Dimethylphosphate Ionic Liquids. *ACS Sustainable Chemistry and Engineering*, **2015**, 3, 2925-2932	8.3	46
123	Metal chloride anion-based ionic liquids for efficient separation of NH3. *Journal of Cleaner Production*, **2019**, 206, 661-669	10.3	46
122	Application of Iron-Containing Magnetic Ionic Liquids in Extraction Process of Coal Direct Liquefaction Residues. *Industrial & Engineering Chemistry Research*, **2012**, 51, 3776-3782	3.9	45
121	Environmental Impact Assessment of Chemical Process Using the Green Degree Method. *Industrial & Engineering Chemistry Research*, **2008**, 47, 1085-1094	3.9	45
120	Energetic-environmental-economic assessment of the biogas system with three utilization pathways: Combined heat and power, biomethane and fuel cell. *Bioresource Technology*, **2016**, 214, 722-728	11	44
119	DBN-based ionic liquids with high capability for the dissolution of wool keratin. *RSC Advances*, **2017**, 7, 1981-1988	3.7	42
118	Molecular dynamics simulation of desulfurization by ionic liquids. *AICHE Journal*, **2010**, 56, 2983-2996	3.6	42
117	Carbon hollow fiber membranes for a molecular sieve with precise-cutoff ultramicropores for superior hydrogen separation. *Nature Communications*, **2021**, 12, 268	17.4	42
116	Ether-functionalized ionic liquid based composite membranes for carbon dioxide separation. *RSC Advances*, **2016**, 6, 45184-45192	3.7	41
115	Gas–liquid mass-transfer properties in CO2 absorption system with ionic liquids. *AICHE Journal*, **2014**, 60, 2929-2939	3.6	41
114	Amination strategy to boost the CO2 electroreduction current density of Ni/C single-atom catalysts to the industrial application level. *Energy and Environmental Science*, **2021**, 14, 2349-2356	35.4	40
113	Predictive deep learning models for environmental properties: the direct calculation of octanol–water partition coefficients from molecular graphs. *Green Chemistry*, **2019**, 21, 4555-4565	10	39
112	Effect of Small Amount of Water on CO2 Bubble Behavior in Ionic Liquid Systems. *Industrial & Engineering Chemistry Research*, **2014**, 53, 428-439	3.9	39
111	The rise and deformation of a single bubble in ionic liquids. *Chemical Engineering Science*, **2010**, 65, 3240-3248	4	39

110	Effect of small amount of water on the dynamics properties and microstructures of ionic liquids. *AICHE Journal*, **2017**, 63, 2248-2256	3.6	38
109	Pebax /TSIL blend thin film composite membranes for CO2 separation. *Science China Chemistry*, **2016**, 59, 538-546	7.9	38
108	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	8.3	34
107	Predicting H2S solubility in ionic liquids by the quantitative structure property relationship method using S profile molecular descriptors. *RSC Advances*, **2016**, 6, 70405-70413	3.7	34
106	Experimental study on gas holdup and bubble behavior in carbon capture systems with ionic liquid. *Chemical Engineering Journal*, **2012**, 209, 607-615	14.7	33
105	1-Allyl-3-methylimidazolium halometallate ionic liquids as efficient catalysts for the glycolysis of poly(ethylene terephthalate). *Journal of Applied Polymer Science*, **2013**, 129, 3574-3581	2.9	32
104	Multi-scale simulation of the 1,3-butadiene extraction separation process with an ionic liquid additive. *Green Chemistry*, **2010**, 12, 1263	10	32
103	Fabrication of Multilayered Molecularly Imprinted Membrane for Selective Recognition and Separation of Artemisinin. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 3127-3137	8.3	31
102	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	2.8	29
101	Efficient extraction of direct coal liquefaction residue with the [bmim]Cl/NMP mixed solvent. *RSC Advances*, **2011**, 1, 1579	3.7	29
100	Biomethane production system: Energetic analysis of various scenarios. *Bioresource Technology*, **2016**, 206, 155-163	11	26
99	Protic Ionic-Liquid-Supported Activated Carbon with Hierarchical Pores for Efficient NH3 Adsorption. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 11769-11777	8.3	25
98	A novel ionic liquids-based scrubbing process for efficient CO2 capture. *Science China Chemistry*, **2010**, 53, 1549-1553	7.9	25
97	Synthesis, characterization and catalytic performance of SAPO-34 molecular sieves for methanol-to-olefin (MTO) reaction. *Asia-Pacific Journal of Chemical Engineering*, **2011**, 6, 596-605	1.3	24
96	Ionic Liquid Incorporated Metal Organic Framework for High Ionic Conductivity over Extended Temperature Range. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 7892-7899	8.3	23
95	Numerical simulations of bubble behavior and mass transfer in CO 2 capture system with ionic liquids. *Chemical Engineering Science*, **2015**, 135, 76-88	4.4	23
94	Insights into Carbon Dioxide Electroreduction in Ionic Liquids: Carbon Dioxide Activation and Selectivity Tailored by Ionic Microhabitat. *ChemSusChem*, **2018**, 11, 3191-3197	8.3	23
93	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	7.9	23

92	Green process for methacrolein separation with ionic liquids in the production of methyl methacrylate. *AICHE Journal*, **2011**, 57, 2388-2396	3.6	22
91	Efficient adsorption of ammonia by incorporation of metal ionic liquids into silica gels as mesoporous composites. *Chemical Engineering Journal*, **2019**, 370, 81-88	14.7	21
90	Profitability analysis of a novel configuration to synergize biogas upgrading and Power-to-Gas. *Energy Conversion and Management*, **2020**, 224, 113369	10.6	21
89	Protic ionic liquid-based deep eutectic solvents with multiple hydrogen bonding sites for efficient absorption of NH3. *AICHE Journal*, **2020**, 66, e16253	3.6	20
88	Deep Desulfurization of Gasoline Fuel using FeCl3-Containing Lewis-Acidic Ionic Liquids. *Separation Science and Technology*, **2014**, 49, 1208-1214	2.5	20
87	Simultaneous desulfurization and denitrogen of liquid fuels using two functionalized group ionic liquids. *Science China Chemistry*, **2014**, 57, 1766-1773	7.9	20
86	Structure optimization of tailored ionic liquids and process simulation for shale gas separation. *AICHE Journal*, **2020**, 66, e16794	3.6	19
85	Enhanced CO2 capture by binary systems of pyridinium-based ionic liquids and porous ZIF-8 particles. *Journal of Chemical Thermodynamics*, **2019**, 128, 415-423	2.9	19
84	Morphology Modulation-Engineered Flowerlike In2S3 via Ionothermal Method for Efficient CO2 Electroreduction. *ChemCatChem*, **2020**, 12, 926-931	5.2	19
83	Encapsulation of multiple enzymes in a metal□organic framework with enhanced electro-enzymatic reduction of CO2 to methanol. *Green Chemistry*, **2021**, 23, 2362-2371	10	19
82	Extraction of Asphaltenes from Direct Coal Liquefaction Residue by Dialkylphosphate Ionic Liquids. *Separation Science and Technology*, **2012**, 47, 386-391	2.5	18
81	Emission characteristics of a pyrolysis-combustion system for the co-production of biochar and bioenergy from agricultural wastes. *Waste Management*, **2018**, 77, 59-66	8.6	18
80	Recovery of methacrylic acid from dilute aqueous solutions by ionic liquids though hydrogen bonding interaction. *Separation and Purification Technology*, **2017**, 184, 354-364	8.3	17
79	A self-stabilized suspension catholyte to enable long-term stable Li□ flow batteries. *Journal of Materials Chemistry A*, **2017**, 5, 12904-12913	13	17
78	Prediction of Henry□s law constant of CO2 in ionic liquids based on SEP and S□profile molecular descriptors. *Journal of Molecular Liquids*, **2018**, 262, 139-147	6	17
77	Ionic liquids and supercritical carbon dioxide: green and alternative reaction media for chemical processes. *Reviews in Chemical Engineering*, **2016**, 32,	5	17
76	A novel unambiguous strategy of molecular feature extraction in machine learning assisted predictive models for environmental properties. *Green Chemistry*, **2020**, 22, 3867-3876	10	16
75	Polycyclic aromatic hydrocarbons on particulate matter emitted during the co-generation of bioenergy and biochar from rice husk. *Bioresource Technology*, **2017**, 244, 1015-1023	11	16

74	Insight into the Performance of Acid Gas in Ionic Liquids by Molecular Simulation. *Industrial & Engineering Chemistry Research*, **2019**, 58, 1443-1453	3.9	16
73	Intentional construction of high-performance SnO catalysts with a 3D porous structure for electrochemical reduction of CO. *Nanoscale*, **2019**, 11, 18715-18722	7.7	15
72	Ultralow Thermal Resistance across the Solid□Ionic Liquid Interface Caused by the Charge-Induced Ordered Ionic Layer. *Industrial & Engineering Chemistry Research*, **2019**, 58, 20109-20115	3.9	15
71	Absorption degree analysis on biogas separation with ionic liquid systems. *Bioresource Technology*, **2015**, 175, 135-41	11	15
70	Role of ionic liquids in the efficient transfer of lithium by Cyanex 923 in solvent extraction system. *AICHE Journal*, **2019**, 65, e16606	3.6	14
69	Synergistic Effects of Cosolvents on the Dissolution of Wool Keratin Using Ionic Liquids. *Chemical Engineering and Technology*, **2016**, 39, 979-986	2	14
68	NH3 absorption performance and reversible absorption mechanisms of protic ionic liquids with six-membered N-heterocyclic cations. *Separation and Purification Technology*, **2020**, 248, 117087	8.3	13
67	Screening Deep Eutectic Solvents for CO Capture With COSMO-RS. *Frontiers in Chemistry*, **2020**, 8, 82	5	13
66	Dual-functionalized protic ionic liquids for efficient absorption of NH3 through synergistically physicochemical interaction. *Journal of Chemical Technology and Biotechnology*, **2020**, 95, 1815-1824	3.5	13
65	Aromatic Ester-Functionalized Ionic Liquid for Highly Efficient CO Electrochemical Reduction to Oxalic Acid. *ChemSusChem*, **2020**, 13, 4900-4905	8.3	13
64	CO2 absorption with ionic liquids at elevated temperatures. *Journal of Energy Chemistry*, **2017**, 26, 1001-1006	12	12
63	Highly efficient carbon dioxide capture by a novel amine solvent containing multiple amino groups. *Journal of Chemical Technology and Biotechnology*, **2015**, 90, 1918-1926	3.5	12
62	Effect of SiO2/Al2O3 ratio on the conversion of methanol to olefins over molecular sieve catalysts. *Frontiers of Chemical Science and Engineering*, **2011**, 5, 79-88	4.5	12
61	Spinning Cellulose Hollow Fibers Using 1-Ethyl-3-methylimidazolium Acetate?Dimethylsulfoxide Co-Solvent. *Polymers*, **2018**, 10,	4.5	12
60	Ionic liquid□based green processes for ammonia separation and recovery. *Current Opinion in Green and Sustainable Chemistry*, **2020**, 25, 100354	7.9	11
59	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	6	11
58	Highly Selective Oxygen/Nitrogen Separation Membrane Engineered Using a Porphyrin-Based Oxygen Carrier. *Membranes*, **2019**, 9,	3.8	10
57	Analysis of dual fluidized bed gasification integrated system with liquid fuel and electricity products. *International Journal of Hydrogen Energy*, **2016**, 41, 11062-11071	6.7	10

56	Studies on the physical properties variations of protic ionic liquid during NH3 absorption. *Journal of Molecular Liquids*, **2019**, 296, 111791	6	10
55	Utilizing ionic liquids as additives for oil property modulation. *RSC Advances*, **2014**, 4, 6463	3.7	10
54	Technoeconomic Analysis and Process Design for CO2 Electroreduction to CO in Ionic Liquid Electrolyte. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 9045-9052	8.3	10
53	Supported ionic liquids for air purification. *Current Opinion in Green and Sustainable Chemistry*, **2020**, 25, 100391	7.9	9
52	An ionic fragments contribution-COSMO method to predict the surface charge density profiles of ionic liquids. *Journal of Molecular Liquids*, **2019**, 282, 292-302	6	8
51	Rheological properties of cotton pulp cellulose dissolved in 1-butyl-3-methylimidazolium chloride solutions. *Polymer Engineering and Science*, **2011**, 51, 2381-2386	2.3	8
50	Combining Ionic Liquids and Sodium Salts into Metal-Organic Framework for High-Performance Ionic Conduction. *ChemElectroChem*, **2020**, 7, 183-190	4.3	8
49	Numerical simulation of CO2-ionic liquid flow in a stirred tank. *Science China Chemistry*, **2015**, 58, 1918-1928	7.3	7
48	Task-Specific Ionic Liquids Tuning ZIF-67/PIM-1 Mixed Matrix Membranes for Efficient CO2 Separation. *Industrial & Engineering Chemistry Research*, **2021**, 60, 593-603	3.9	7
47	Separation of NH3/CO2 from melamine tail gas with ionic liquid: Process evaluation and thermodynamic properties modelling. *Separation and Purification Technology*, **2021**, 274, 119007	8.3	7
46	Two fluid model using kinetic theory for modeling of one-step hydrogen production gasifier. *AICHE Journal*, **2008**, 54, 2833-2851	3.6	6
45	Periodicity and map for discovery of new ionic liquids. *Science in China Series B: Chemistry*, **2006**, 49, 103-115		6
44	InSitu Carbon Encapsulation Confined Nickel-Doped Indium Oxide Nanocrystals for Boosting CO2 Electroreduction to the Industrial Level. *ACS Catalysis*, **2021**, 11, 14596-14604	13.1	6
43	Review of Methods for Sustainability Assessment of Chemical Engineering Processes. *Industrial & Engineering Chemistry Research*, **2021**, 60, 52-66	3.9	6
42	Effect of Ion Cluster on Concentration of Long-Alkyl-Chain Ionic Liquids Aqueous Solution by Nanofiltration. *Industrial & Engineering Chemistry Research*, **2018**, 57, 7633-7642	3.9	6
41	Practices for modeling oil shale pyrolysis and kinetics. *Reviews in Chemical Engineering*, **2017**, 34, 21-42	5	5
40	Novel drag coefficient models of ionic liquid–spherical particle system. *Chemical Engineering Science*, **2019**, 204, 177-185	4.4	5
39	A mass and energy balance stage model for cyclic distillation. *AICHE Journal*, **2020**, 66, e16259	3.6	5

38	Modified polyether glycols supported ionic liquids for CO2 adsorption and chemical fixation. *Molecular Catalysis*, **2020**, 492, 111008	3.3	5
37	Multi-objective optimization of methane production system from biomass through anaerobic digestion. *Chinese Journal of Chemical Engineering*, **2018**, 26, 2084-2092	3.2	5
36	Efficient and Reversible Chemisorption of Carbon Dioxide with Dianionic-Functionalized Ionic Liquid-Based Solvents. *Energy & Fuels*, **2020**, 34, 8526-8533	4.1	5
35	Constructing single CuN3 sites for CO2 electrochemical reduction over a wide potential range. *Green Chemistry*, **2021**, 23, 5461-5466	10	5
34	Ionic liquid assisted fabrication of cellulose-based conductive films for Li-ion battery. *Journal of Applied Polymer Science*, **2020**, 137, 49430	2.9	4
33	Biodegradable functional chitosan membrane for enhancement of artemisinin purification. *Carbohydrate Polymers*, **2020**, 246, 116590	10.3	4
32	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	3.7	4
31	State of the art of ionic liquid-modified adsorbents for CO2 capture and separation. *AICHE Journal*,e17500	3.6	4
30	Technical-environmental assessment of CO2 conversion process to dimethyl carbonate/ethylene glycol. *Journal of Cleaner Production*, **2021**, 288, 125598	10.3	4
29	Process Analysis for the Production of Hydrogen and Liquid Fuels from Oil Shale. *Energy Technology* , **2017**, 5, 1963-1978	3.5	3
28	Metal Ionic Liquids Produce Metal-Dispersed Carbon-Nitrogen Networks for Efficient CO2 Electroreduction. *ChemCatChem*, **2019**, 11, 3166-3170	5.2	3
27	Developing and Regenerating Cofactors for Sustainable Enzymatic CO2 Conversion. *Processes*, **2022**, 10, 230	2.9	3
26	Efficient Electrochemical Reduction of CO2 to CO in Ionic Liquids. *ChemistrySelect*, **2021**, 6, 9873-9879	1.8	3
25	Highly Efficient Dehydration of Ethyl Acetate using Strong Hydrophilic Ionic Liquids. *Industrial & Engineering Chemistry Research*, **2020**, 59, 16751-16761	3.9	3
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23	An Overview of Ammonia Separation by Ionic Liquids. *Industrial & Engineering Chemistry Research*, **2021**, 60, 6908-6924	3.9	3
22	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	3.9	3
21	Process Simulation and Optimization of Ammonia-Containing Gas Separation and Ammonia Recovery with Ionic Liquids. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 312-325	8.3	3

20	Ionic liquid screening for dichloromethane absorption by multi-scale simulations. *Separation and Purification Technology*, **2021**, 275, 119187	8.3	3
19	Pattern Matching and Active Simulation Method for Process Fault Diagnosis. *Industrial & Engineering Chemistry Research*, **2020**, 59, 12525-12535	3.9	2
18	Photothermal CO2 Hydrogenation: Alumina-Supported CoFe Alloy Catalysts Derived from Layered-Double-Hydroxide Nanosheets for Efficient Photothermal CO2 Hydrogenation to Hydrocarbons (Adv. Mater. 3/2018). *Advanced Materials*, **2018**, 30, 1870015	24	2
17	Boosting CO2 electroreduction by iodine-treated porous nitrogen-doped carbon. *Chemical Engineering Science: X*, **2020**, 8, 100084	1.1	2
16	Dynamic process simulation and optimization of CO2 removal from confined space with pressure and temperature swing adsorption. *Chemical Engineering Journal*, **2021**, 416, 129104	14.7	2
15	Experimental and thermodynamic analysis of NH3 absorption in dual-functionalized pyridinium-based ionic liquids. *Journal of Molecular Liquids*, **2021**, 323, 114601	6	2
14	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	3.9	1
13	Green chemical engineering in China. *Reviews in Chemical Engineering*, **2019**, 35, 995-1077	5	1
12	Exploring NH3 Transport Properties by Tailoring Ionic Liquids in Pebax-Based Hybrid Membranes. *Industrial & Engineering Chemistry Research*, **2021**, 60, 9570-9577	3.9	1
11	Ionic liquid-based adsorbents in indoor pollutants removal. *Current Opinion in Green and Sustainable Chemistry*, **2021**, 27, 100405	7.9	1
10	A multi-task deep learning neural network for predicting flammability-related properties from molecular structures. *Green Chemistry*, **2021**, 23, 4451-4465	10	1
9	Molecular level understanding of CO2 capture in ionic liquid/polyimide composite membrane. *Frontiers of Chemical Science and Engineering*,1	4.5	1
8	CO 2 Conversion to Value-Added Gas-Phase Products: Technology Overview and Catalysts Selection **2021**, 175-203		1
7	Degradation of bisphenol A through Ti-BiOI/ZIF-8/peroxymonosulfate (PMS): Catalyst preparation, experimental design and catalytic mechanism. *Journal of Solid State Chemistry*, **2021**, 304, 122596	3.3	1
6	Insight into CO2/CH4 separation performance in ionic liquids/polymer membrane from molecular dynamics simulation. *Journal of Molecular Liquids*, **2022**, 119119	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 CO2. *Industrial & Engineering Chemistry Research*, **2022**, 61, 706-715	3.9	1
4	Suspended particles behavior in aqueous [Bmim]BF4 solution by novel on-line electrical sensing zone method. *Chemical Engineering Science*, **2021**, 117280	4.4	0
3	Computational Identification of a New Adsorption Site of CO2 on the Ag (211) Surface. *ChemistrySelect*, **2020**, 5, 11503-11509	1.8	0

2	Prediction of the Liquid-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	6.1	0
1	Pt3Fe Nanoparticles on B,N-Codoped Carbon as Oxygen Reduction and pH-Universal Hydrogen Evolution Electrocatalysts. *ACS Applied Nano Materials*, **2022**, 5, 318-325	5.6	0