Ya-Qin Zhang

List of Publications by Year
in descending order

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490 papers	26,521 citations	7568 77 h-index	11607 135 g-index
495 all docs	495 docs citations	495 times ranked	21809 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.	4.2	1,045
2	Carbon capture with ionic liquids: overview and progress. Energy and Environmental Science, 2012, 5, 6668.	30.8	731
3	Ionic-Liquid-Based CO₂ Capture Systems: Structure, Interaction and Process. Chemical Reviews, 2017, 117, 9625-9673.	47.7	696
4	Review of recent advances in carbon dioxide separation and capture. RSC Advances, 2013, 3, 22739.	3.6	632
5	Multiscale Studies on Ionic Liquids. Chemical Reviews, 2017, 117, 6636-6695.	47.7	584
6	Ionic liquid-based green processes for energy production. Chemical Society Reviews, 2014, 43, 7838-7869.	38.1	399
7	Hydroxyl-functionalized ionic liquid: a novel efficient catalyst for chemical fixation of CO2 to cyclic carbonate. Tetrahedron Letters, 2008, 49, 3588-3591.	1.4	374
8	Activating Câ€Coordinated Iron of Iron Hexacyanoferrate for Zn Hybridâ€Ion Batteries with 10 000â€Cycle Lifespan and Superior Rate Capability. Advanced Materials, 2019, 31, e1901521.	21.0	363
9	Active chemisorption sites in functionalized ionic liquids for carbon capture. Chemical Society Reviews, 2016, 45, 4307-4339.	38.1	356
10	Chitosan functionalized ionic liquid as a recyclable biopolymer-supported catalyst for cycloaddition of CO2. Green Chemistry, 2012, 14, 654.	9.0	314
11	A Flexible Ceramic/Polymer Hybrid Solid Electrolyte for Solidâ€State Lithium Metal Batteries. Advanced Materials, 2020, 32, e2000399.	21.0	292
12	A pyrolysis-free path toward superiorly catalytic nitrogen-coordinated single atom. Science Advances, 2019, 5, eaaw2322.	10.3	290
13	Achieving Both High Voltage and High Capacity in Aqueous Zincâ€Ion Battery for Record High Energy Density. Advanced Functional Materials, 2019, 29, 1906142.	14.9	285
14	Cascade utilization of lignocellulosic biomass to high-value products. Green Chemistry, 2019, 21, 3499-3535.	9.0	273
15	A Mn-N3 single-atom catalyst embedded in graphitic carbon nitride for efficient CO2 electroreduction. Nature Communications, 2020, 11, 4341.	12.8	257
16	Hydrogen Bonds: A Structural Insight into Ionic Liquids. Chemistry - A European Journal, 2012, 18, 2748-2761.	3.3	254
17	Understanding the hydrogen bonds in ionic liquids and their roles in properties and reactions. Chemical Communications, 2016, 52, 6744-6764.	4.1	234
18	A Wholly Degradable, Rechargeable Znâ€“Ti₃C₂ MXene Capacitor with Superior Anti-Self-Discharge Function. ACS Nano, 2019, 13, 8275-8283.	14.6	224

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19	Urea-derived graphitic carbon nitride as an efficient heterogeneous catalyst for CO2 conversion into cyclic carbonates. Catalysis Science and Technology, 2014, 4, 1556.	4.1	222
20	Nano-wire networks of sulfurâ€“polypyrrole composite cathode materials for rechargeable lithium batteries. Electrochemistry Communications, 2008, 10, 1819-1822.	4.7	217
21	Determination of Physical Properties for the Binary System of 1-Ethyl-3-methylimidazolium Tetrafluoroborate + H2O. Journal of Chemical & Engineering Data, 2004, 49, 760-764.	1.9	215
22	Insight into the Cosolvent Effect of Cellulose Dissolution in Imidazolium-Based Ionic Liquid Systems. Journal of Physical Chemistry B, 2013, 117, 9042-9049.	2.6	193
23	Towards a molecular understanding of cellulose dissolution in ionic liquids: anion/cation effect, synergistic mechanism and physicochemical aspects. Chemical Science, 2018, 9, 4027-4043.	7.4	189
24	Recent progress in electrochemical synthesis of ammonia from nitrogen: strategies to improve the catalytic activity and selectivity. Energy and Environmental Science, 2021, 14, 672-687.	30.8	188
25	Preparation and enhanced electrochemical properties of nano-sulfur/poly(pyrrole-co-aniline) cathode material for lithium/sulfur batteries. Electrochimica Acta, 2010, 55, 4632-4636.	5.2	185
26	In Situ Charge Exfoliated Soluble Covalent Organic Framework Directly Used for Znâ€“Air Flow Battery. ACS Nano, 2019, 13, 878-884.	14.6	182
27	Superbase/cellulose: an environmentally benign catalyst for chemical fixation of carbon dioxide into cyclic carbonates. Green Chemistry, 2014, 16, 3071.	9.0	180
28	Deep eutectic solvents as highly active catalysts for the fast and mild glycolysis of poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 3	9.0	176
29	Degradation of poly(ethylene terephthalate) using ionic liquids. Green Chemistry, 2009, 11, 1568.	9.0	173
30	Protic ionic liquid [Bim][NTf₂] with strong hydrogen bond donating ability for highly efficient ammonia absorption. Green Chemistry, 2017, 19, 937-945.	9.0	156
31	Ionic liquid clusters: structure, formation mechanism, and effect on the behavior of ionic liquids. Physical Chemistry Chemical Physics, 2014, 16, 5893-5906.	2.8	155
32	Influence of anionic structure on the dissolution of chitosan in 1-butyl-3-methylimidazolium-based ionic liquids. Green Chemistry, 2011, 13, 3446.	9.0	154
33	First-Row Transition Metal-Containing Ionic Liquids as Highly Active Catalysts for the Glycolysis of Poly(ethylene terephthalate) (PET). ACS Sustainable Chemistry and Engineering, 2015, 3, 340-348.	6.7	151
34	Understanding Structures and Hydrogen Bonds of Ionic Liquids at the Electronic Level. Journal of Physical Chemistry B, 2012, 116, 1007-1017.	2.6	150
35	A Novel Dual Amino-Functionalized Cation-Tethered Ionic Liquid for CO₂ Capture. Industrial & Engineering Chemistry Research, 2013, 52, 5835-5841.	3.7	145
36	Safety Issues in Lithium Ion Batteries: Materials and Cell Design. Frontiers in Energy Research, 2019, 7, .	2.3	145

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37	Characterization and thermal behavior of kaolin. Journal of Thermal Analysis and Calorimetry, 2011, 105, 157-160.	3.6	142
38	Toxicity of ionic liquids: Database and prediction via quantitative structureâ€“activity relationship method. Journal of Hazardous Materials, 2014, 278, 320-329.	12.4	142
39	Heteroatom doped graphdiyne as efficient metal-free electrocatalyst for oxygen reduction reaction in alkaline medium. Journal of Materials Chemistry A, 2016, 4, 4738-4744.	10.3	139
40	Enhanced proton and electron reservoir abilities of polyoxometalate grafted on graphene for high-performance hydrogen evolution. Energy and Environmental Science, 2016, 9, 1012-1023.	30.8	138
41	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.	1.9	137
42	Ionic Liquid Droplet Microreactor for Catalysis Reactions Not at Equilibrium. Journal of the American Chemical Society, 2017, 139, 17387-17396.	13.7	130
43	Highly selective electroreduction of N₂ and CO₂ to urea over artificial frustrated Lewis pairs. Energy and Environmental Science, 2021, 14, 6605-6615.	30.8	130
44	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.	9.0	129
45	Characterization of the regenerated cellulose films in ionic liquids and rheological properties of the solutions. Materials Chemistry and Physics, 2011, 128, 220-227.	4.0	126
46	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.	9.0	121
47	Lewis Acidâ€“Base Synergistic Catalysis for Polyethylene Terephthalate Degradation by 1,3-Dimethylurea/Zn(OAc)₂ Deep Eutectic Solvent. ACS Sustainable Chemistry and Engineering, 2019, 7, 3292-3300.	6.7	121
48	Efficient absorption of ammonia with hydroxyl-functionalized ionic liquids. RSC Advances, 2015, 5, 81362-81370.	3.6	119
49	Electrodeposition in Ionic Liquids. ChemPhysChem, 2016, 17, 335-351.	2.1	117
50	Thermodynamic Modeling and Assessment of Ionic Liquid-Based CO₂ Capture Processes. Industrial & Engineering Chemistry Research, 2014, 53, 11805-11817.	3.7	112
51	Degradation of poly(ethylene terephthalate) catalyzed by metal-free choline-based ionic liquids. Green Chemistry, 2020, 22, 3122-3131.	9.0	111
52	Electrolyte for lithium protection: From liquid to solid. Green Energy and Environment, 2019, 4, 360-374.	8.7	110
53	Ionic liquids/deep eutectic solvents for CO2 capture: Reviewing and evaluating. Green Energy and Environment, 2021, 6, 314-328.	8.7	108
54	Inorganic Synthesis Based on Reactions of Ionic Liquids and Deep Eutectic Solvents. Angewandte Chemie - International Edition, 2021, 60, 22148-22165.	13.8	107

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55	Synergistic Regulation of Polysulfides Conversion and Deposition by MOFâ€Derived Hierarchically Ordered Carbonaceous Composite for Highâ€Energy Lithiumâ€“Sulfur Batteries. Advanced Functional Materials, 2019, 29, 1900875.	14.9	104
56	Solubilities of ammonia in basic imidazolium ionic liquids. Fluid Phase Equilibria, 2010, 297, 34-39.	2.5	102
57	A new fragment contributionâ€corresponding states method for physicochemical properties prediction of ionic liquids. AICHE Journal, 2013, 59, 1348-1359.	3.6	102
58	Effects of Cationic Structure on Cellulose Dissolution in Ionic Liquids: A Molecular Dynamics Study. ChemPhysChem, 2012, 13, 3126-3133.	2.1	101
59	Pebax-based composite membranes with high gas transport properties enhanced by ionic liquids for CO₂ separation. RSC Advances, 2017, 7, 6422-6431.	3.6	100
60	A DFT study on lignin dissolution in imidazolium-based ionic liquids. RSC Advances, 2017, 7, 12670-12681.	3.6	100
61	Efficient transformation of CO₂ to cyclic carbonates using bifunctional protic ionic liquids under mild conditions. Green Chemistry, 2019, 21, 3456-3463.	9.0	100
62	Ionic Liquid Design and Process Simulation for Decarbonization of Shale Gas. Industrial & Engineering Chemistry Research, 2016, 55, 5931-5944.	3.7	97
63	Recent progress in theoretical and computational studies on the utilization of lignocellulosic materials. Green Chemistry, 2019, 21, 9-35.	9.0	96
64	Alcoholysis of polyethylene terephthalate to produce dioctyl terephthalate using choline chloride-based deep eutectic solvents as efficient catalysts. Green Chemistry, 2019, 21, 897-906.	9.0	95
65	Dissolving process of a cellulose bunch in ionic liquids: a molecular dynamics study. Physical Chemistry Chemical Physics, 2015, 17, 17894-17905.	2.8	92
66	Ultrafast Homogeneous Glycolysis of Waste Polyethylene Terephthalate via a Dissolution-Degradation Strategy. Industrial & Engineering Chemistry Research, 2018, 57, 16239-16245.	3.7	92
67	Isobutane/butene alkylation catalyzed by ionic liquids: a more sustainable process for clean oil production. Green Chemistry, 2017, 19, 1462-1489.	9.0	91
68	Alloy Cu3Pt nanoframes through the structure evolution in Cu-Pt nanoparticles with a core-shell construction. Scientific Reports, 2014, 4, 6414.	3.3	90
69	Hydroxyl-Functionalized Ionic Liquid Promoted CO₂ Fixation According to Electrostatic Attraction and Hydrogen Bonding Interaction. Industrial & Engineering Chemistry Research, 2014, 53, 8426-8435.	3.7	89
70	Feâ€“Zrâ€“O catalyzed base-free aerobic oxidation of 5-HMF to 2,5-FDCA as a bio-based polyester monomer. Catalysis Science and Technology, 2018, 8, 164-175.	4.1	88
71	Structure, interaction and property of aminoâ€functionalized imidazolium ILs by molecular dynamics simulation and Ab initio calculation. AICHE Journal, 2007, 53, 3210-3221.	3.6	86
72	Controlled synthesis of CdS micro/nano leaves with (0001) facets exposed: enhanced photocatalytic activity toward hydrogen evolution. Journal of Materials Chemistry, 2012, 22, 23815.	6.7	83

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73	Novel Ether-Functionalized Pyridinium Chloride Ionic Liquids for Efficient SO₂ Capture. Industrial & Engineering Chemistry Research, 2014, 53, 16832-16839.	3.7	83
74	Ionic liquids tailored amine aqueous solution for pre-combustion CO2 capture: Role of imidazolium-based ionic liquids. Applied Energy, 2015, 154, 771-780.	10.1	83
75	Highly Selective Capture of CO₂ by Ether-Functionalized Pyridinium Ionic Liquids with Low Viscosity. Energy & Fuels, 2015, 29, 6039-6048.	5.1	82
76	Reversible Hydrophobicâ€“Hydrophilic Transition of Ionic Liquids Driven by Carbon Dioxide. Angewandte Chemie - International Edition, 2015, 54, 7265-7269.	13.8	81
77	Functionalized ionic liquid membranes for CO₂ separation. Chemical Communications, 2018, 54, 12671-12685.	4.1	81
78	Direct conversion of shrimp shells to O-acylated chitin with antibacterial and anti-tumor effects by natural deep eutectic solvents. Green Chemistry, 2019, 21, 87-98.	9.0	81
79	Why Only Ionic Liquids with Unsaturated Heterocyclic Cations Can Dissolve Cellulose: A Simulation Study. ACS Sustainable Chemistry and Engineering, 2017, 5, 3417-3428.	6.7	80
80	Ionic liquids tailored and confined by one-step assembly with mesoporous silica for boosting the catalytic conversion of CO₂ into cyclic carbonates. Green Chemistry, 2018, 20, 3232-3241.	9.0	80
81	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.	3.2	78
82	Effects of anionic structure on the dissolution of cellulose in ionic liquids revealed by molecular simulation. Carbohydrate Polymers, 2013, 94, 723-730.	10.2	77
83	Boron-doped melamine-derived carbon nitrides tailored by ionic liquids for catalytic conversion of CO₂ into cyclic carbonates. Green Chemistry, 2017, 19, 2957-2965.	9.0	77
84	Solid polymer electrolyte with in-situ generated fast Li+ conducting network enable high voltage and dendrite-free lithium metal battery. Energy Storage Materials, 2022, 44, 93-103.	18.0	77
85	Highly Efficient Electrocatalytic CO₂ Reduction to C₂₊ Products on a Poly(ionic liquid)â€Based Cu⁰â€“Cu^I Tandem Catalyst. Angewandte Chemie - International Edition, 2022, 61, .	13.8	77
86	Ionic liquids for absorption and separation of gases: An extensive database and a systematic screening method. AICHE Journal, 2017, 63, 1353-1367.	3.6	76
87	Polyoxometalate-mediated green synthesis of a 2D silver nanonet/graphene nanohybrid as a synergistic catalyst for the oxygen reduction reaction. Journal of Materials Chemistry A, 2013, 1, 11961.	10.3	75
88	Facile synthesis of Fe₃O₄nanorod decorated reduced graphene oxide (RGO) for supercapacitor application. RSC Advances, 2016, 6, 107057-107064.	3.6	75
89	Effect of hydrogen bond of hydroxyl-functionalized ammonium ionic liquids on cycloaddition of CO2. Tetrahedron Letters, 2015, 56, 1416-1419.	1.4	74
90	A general green strategy for fabricating metal nanoparticles/polyoxometalate/graphene tri-component nanohybrids: enhanced electrocatalytic properties. Journal of Materials Chemistry, 2012, 22, 3319.	6.7	73

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91	Three-dimensional hierarchical pompon-like Co₃O₄ porous spheres for high-performance lithium-ion batteries. Journal of Materials Chemistry A, 2014, 2, 13801-13804.	10.3	73
92	Hostâ€“guest molecular interaction promoted urea electrosynthesis over a precisely designed conductive metalâ€“organic framework. Energy and Environmental Science, 2022, 15, 2084-2095.	30.8	73
93	An ionic liquid extraction process for the separation of indole from wash oil. Green Chemistry, 2015, 17, 3783-3790.	9.0	70
94	Temperature-Controlled Reactionâ€“Separation for Conversion of CO₂ to Carbonates with Functional Ionic Liquids Catalyst. ACS Sustainable Chemistry and Engineering, 2017, 5, 3081-3086.	6.7	69
95	Formation of Câ€“C bonds for the production of bio-alkanes under mild conditions. Green Chemistry, 2014, 16, 3589-3595.	9.0	68
96	Efficient ionic liquid-based platform for multi-enzymatic conversion of carbon dioxide to methanol. Green Chemistry, 2018, 20, 4339-4348.	9.0	68
97	Highly Efficient Photothermal Conversion and Water Transport during Solar Evaporation Enabled by Amorphous Hollow Multishelled Nanocomposites. Advanced Materials, 2022, 34, e2107400.	21.0	68
98	A Novel cathode material based on polyaniline used for lithium/sulfur secondary battery. Synthetic Metals, 2010, 160, 2041-2044.	3.9	67
99	Highly Efficient Dissolution of Wool Keratin by Dimethylphosphate Ionic Liquids. ACS Sustainable Chemistry and Engineering, 2015, 3, 2925-2932.	6.7	66
100	Conversion of lignin model compounds under mild conditions in pseudo-homogeneous systems. Green Chemistry, 2016, 18, 2341-2352.	9.0	66
101	A novel Li4Ti5O12-based high-performance lithium-ion electrode at elevated temperature. Journal of Materials Chemistry A, 2015, 3, 4938-4944.	10.3	65
102	Solubilities of CO2, CH4, H2, CO and N2 in choline chloride/urea. Green Energy and Environment, 2016, 1, 195-200.	8.7	65
103	Tuning the Hydrophilicity and Hydrophobicity of the Respective Cation and Anion: Reversible Phase Transfer of Ionic Liquids. Angewandte Chemie - International Edition, 2016, 55, 7934-7938.	13.8	65
104	Spider-Web-Inspired Nanocomposite-Modified Separator: Structural and Chemical Cooperativity Inhibiting the Shuttle Effect in Liâ€“S Batteries. ACS Nano, 2019, 13, 1563-1573.	14.6	65
105	Sustainable Advanced Fenton-like Catalysts Based on Mussel-Inspired Magnetic Cellulose Nanocomposites to Effectively Remove Organic Dyes and Antibiotics. ACS Applied Materials & Interfaces, 2020, 12, 51952-51959.	8.0	64
106	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.	9.6	63
107	DBN-based ionic liquids with high capability for the dissolution of wool keratin. RSC Advances, 2017, 7, 1981-1988.	3.6	62
108	Improving SO₂ capture by tuning functional groups on the cation of pyridinium-based ionic liquids. RSC Advances, 2015, 5, 2470-2478.	3.6	61

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109	Conversion of biomass derived valerolactone into high octane number gasoline with an ionic liquid. Green Chemistry, 2015, 17, 1065-1070.	9.0	60
110	Highly Active Ni-Based Catalyst Derived from Double Hydroxides Precursor for Low Temperature CO₂ Methanation. Industrial & Engineering Chemistry Research, 2018, 57, 9102-9111.	3.7	60
111	High CO2 absorption capacity of metal-based ionic liquids: A molecular dynamics study. Green Energy and Environment, 2021, 6, 253-260.	8.7	60
112	Catalytic Methanation of Carbon Dioxide by Active Oxygen Material Ce_xZr_{1â^'x}O₂ Supported Niï£¿Co Bimetallic Nanocatalysts. AICHE Journal, 2013, 59, 2567-2576.	3.6	59
113	Highly Efficient Oxidation of 5â€Hydroxymethylfurfural to 2,5â€Furandicarboxylic Acid with Heteropoly Acids and Ionic Liquids. ChemSusChem, 2019, 12, 2715-2724.	6.8	58
114	1,3-Dimethylimidazolium-2-carboxylate: a zwitterionic salt for the efficient synthesis of vicinal diols from cyclic carbonates. Green Chemistry, 2014, 16, 3297.	9.0	57
115	Improved Catalytic Lifetime of H₂SO₄ for Isobutane Alkylation with Trace Amount of Ionic Liquids Buffer. Industrial & Engineering Chemistry Research, 2015, 54, 1464-1469.	3.7	57
116	Extractive desulfurization of fuel using N-butylpyridinium-based ionic liquids. RSC Advances, 2015, 5, 30234-30238.	3.6	57
117	Catalysts, kinetics and process optimization for the synthesis of methyl acrylate over Csâ€“P/Î³-Al₂O₃. Catalysis Science and Technology, 2016, 6, 6417-6430.	4.1	57
118	Nucleosome-inspired nanocarrier obtains encapsulation efficiency enhancement and side effects reduction in chemotherapy by using fullerenol assembled with doxorubicin. Biomaterials, 2018, 167, 205-215.	11.4	57
119	The Effect of Concentration of Lithium Salt on the Structural and Transport Properties of Ionic Liquid-Based Electrolytes. Frontiers in Chemistry, 2019, 7, 945.	3.6	56
120	Study on Extraction Asphaltenes from Direct Coal Liquefaction Residue with Ionic Liquids. Industrial & Engineering Chemistry Research, 2011, 50, 10278-10282.	3.7	55
121	Synthesis of Methyl Methacrylate by Aldol Condensation of Methyl Propionate with Formaldehyde Over Acidâ€“Base Bifunctional Catalysts. Catalysis Letters, 2013, 143, 829-838.	2.6	55
122	Ionic liquid functionalized electrospun gel polymer electrolyte for use in a high-performance lithium metal battery. Journal of Materials Chemistry A, 2018, 6, 18479-18487.	10.3	55
123	Fabrication of Multilayered Molecularly Imprinted Membrane for Selective Recognition and Separation of Artemisinin. ACS Sustainable Chemistry and Engineering, 2019, 7, 3127-3137.	6.7	55
124	Anion-Based pH Responsive Ionic Liquids: Design, Synthesis, and Reversible Self-Assembling Structural Changes in Aqueous Solution. Langmuir, 2014, 30, 3971-3978.	3.5	54
125	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.	6.7	54
126	Selective Extraction of Lithium from Spent Lithium Batteries by Functional Ionic Liquid. ACS Sustainable Chemistry and Engineering, 2021, 9, 7022-7029.	6.7	54

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127	Gasâ€“liquid massâ€transfer properties in CO₂ absorption system with ionic liquids. AICHE Journal, 2014, 60, 2929-2939.	3.6	53
128	A new class of ion-ion interaction: Z-bond. Science China Chemistry, 2015, 58, 495-500.	8.2	53
129	Hydrogen-Bonding Interactions in Pyridinium-Based Ionic Liquids and Dimethyl Sulfoxide Binary Systems: A Combined Experimental and Computational Study. ACS Omega, 2018, 3, 1823-1833.	3.5	53
130	A promising method for electrodeposition of aluminium on stainless steel in ionic liquid. AICHE Journal, 2009, 55, 783-796.	3.6	52
131	Densities and Viscosities of Binary Mixtures Containing 1,3-Dimethylimidazolium Dimethylphosphate and Alcohols. Journal of Chemical & Engineering Data, 2014, 59, 2377-2388.	1.9	52
132	One-Step Conversion of Biomass-Derived Furanics into Aromatics by BrÃ¸nsted Acid Ionic Liquids at Room Temperature. ACS Sustainable Chemistry and Engineering, 2018, 6, 2541-2551.	6.7	52
133	Screening of Ionic Liquids for Keratin Dissolution by Means of COSMO-RS and Experimental Verification. ACS Sustainable Chemistry and Engineering, 2018, 6, 17314-17322.	6.7	52
134	Polymeric ionic liquids tailored by different chain groups for the efficient conversion of CO₂ into cyclic carbonates. Green Chemistry, 2019, 21, 2352-2361.	9.0	52
135	Sequential drug release via chemical diffusion and physical barriers enabled by hollow multishelled structures. Nature Communications, 2020, 11, 4450.	12.8	52
136	Influence of Microstructure and Interaction on Viscosity of Ionic Liquids. Industrial & Engineering Chemistry Research, 2015, 54, 3505-3514.	3.7	51
137	PebaxÂ®/TSIL blend thin film composite membranes for CO2 separation. Science China Chemistry, 2016, 59, 538-546.	8.2	51
138	Tailoring Molecular Weight of Bioderived Polycarbonates via Bifunctional Ionic Liquids Catalysts under Metal-Free Conditions. ACS Sustainable Chemistry and Engineering, 2018, 6, 2684-2693.	6.7	51
139	Encapsulation of multiple enzymes in a metalâ€“organic framework with enhanced electro-enzymatic reduction of CO₂ to methanol. Green Chemistry, 2021, 23, 2362-2371.	9.0	51
140	ZnBr₂-Based Choline Chloride Ionic Liquid for Efficient Fixation of CO₂to Cyclic Carbonate. Synthetic Communications, 2012, 42, 2564-2573.	2.1	50
141	Ionic liquid enhanced alkylation of iso-butane and 1-butene. Catalysis Today, 2013, 200, 30-35.	4.4	50
142	Highly bonded T-Nb2O5/rGO nanohybrids for 4 V quasi-solid state asymmetric supercapacitors with improved electrochemical performance. Nano Research, 2018, 11, 4673-4685.	10.4	50
143	Selective catalytic tailoring of the H unit in herbaceous lignin for methyl p-hydroxycinnamate production over metal-based ionic liquids. Green Chemistry, 2018, 20, 3743-3752.	9.0	50
144	Gold nanoparticles supported on Ceâ€“Zr oxides for the oxidative esterification of aldehydes to esters. Catalysis Science and Technology, 2015, 5, 3682-3692.	4.1	49

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145	Trace Water as Prominent Factor to Induce Peptide Selfâ€Assembly: Dynamic Evolution and Governing Interactions in Ionic Liquids. Small, 2017, 13, 1702175.	10.0	49
146	Selective aerobic oxidative cleavage of lignin C C bonds over novel hierarchical Ce-Cu/MFI nanosheets. Applied Catalysis B: Environmental, 2020, 279, 119343.	20.2	49
147	Protic vs aprotic ionic liquid for CO2 fixation: A simulation study. Green Energy and Environment, 2020, 5, 183-194.	8.7	49
148	Isobutane alkylation using acidic ionic liquid catalysts. Catalysis Communications, 2012, 26, 68-71.	3.3	48
149	Effect of small amount of water on the dynamics properties and microstructures of ionic liquids. AICHE Journal, 2017, 63, 2248-2256.	3.6	48
150	High Oxygen Reduction Reaction Performances of Cathode Materials Combining Polyoxometalates, Coordination Complexes, and Carboneous Supports. ACS Applied Materials & Interfaces, 2017, 9, 38486-38498.	8.0	48
151	Molecular dynamics simulation of desulfurization by ionic liquids. AICHE Journal, 2010, 56, 2983-2996.	3.6	47
152	CL-20 hosted in graphene foam as a high energy material with low sensitivity. RSC Advances, 2015, 5, 98925-98928.	3.6	47
153	Ether-functionalized ionic liquid based composite membranes for carbon dioxide separation. RSC Advances, 2016, 6, 45184-45192.	3.6	47
154	Hierarchically porous covalent organic frameworks assembled in ionic liquids for highly effective catalysis of Câ€“C coupling reactions. Green Chemistry, 2020, 22, 2605-2612.	9.0	47
155	Construction of a PPIL@COF coreâ€“shell composite with enhanced catalytic activity for CO₂ conversion. Green Chemistry, 2021, 23, 2411-2419.	9.0	47
156	Effect of Small Amount of Water on CO₂ Bubble Behavior in Ionic Liquid Systems. Industrial & Engineering Chemistry Research, 2014, 53, 428-439.	3.7	46
157	One-Pot Synthesis of 2,5-Furandicarboxylic Acid from Fructose in Ionic Liquids. Industrial & Engineering Chemistry Research, 2018, 57, 1851-1858.	3.7	46
158	12-Tungstophosphoric acid niched in Zr-based metal-organic framework: a stable and efficient catalyst for Friedel-Crafts acylation. Science China Chemistry, 2018, 61, 402-411.	8.2	46
159	Hollow spherical carbonized polypyrrole/sulfur composite cathode materials for lithium/sulfur cells with long cycle life. Journal of Power Sources, 2014, 248, 337-342.	7.8	44
160	Molecular Insights into the Regulatable Interfacial Property and Flow Behavior of Confined Ionic Liquids in Graphene Nanochannels. Small, 2019, 15, e1804508.	10.0	44
161	Predicting H₂S solubility in ionic liquids by the quantitative structureâ€“property relationship method using S_{Ïƒ-profile} molecular descriptors. RSC Advances, 2016, 6, 70405-70413.	3.6	43
162	Hypergolic fuels based on water-stable borohydride cluster anions with ultralow ignition delay times. Journal of Materials Chemistry A, 2017, 5, 13341-13346.	10.3	43

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