Xingbang Hu

List of Publications by Year
in descending order

114 papers	4,205 citations	81900 39 h-index	128289 60 g-index
116 all docs	116 docs citations	116 times ranked	3246 citing authors

#	Article	IF	Citations
1	Aerobic oxidation of aldehydes to acids in water with cyclic (alkyl)(amino)carbene copper under mild conditions. Chemical Communications, 2022, 58, 2132-2135.	4.1	13
2	The effect of inorganic salt on multiphase flow characteristics in a microbubble column: A focus on the ionic strength. Asia-Pacific Journal of Chemical Engineering, 2022, 17, e2720.	1.5	2
3	Highly efficient and selective H2S capture by task-specific deep eutectic solvents through chemical dual-site absorption. Separation and Purification Technology, 2022, 283, 120167.	7.9	35
4	Covalent organic frameworks anchored with frustrated Lewis pairs for hydrogenation of alkynes with H₂. Journal of Materials Chemistry A, 2022, 10, 7333-7340.	10.3	6
5	Facilitated transport separation of CO2 and H2S by supported liquid membrane based on task-specific protic ionic liquids. Green Chemical Engineering, 2022, 3, 259-266.	6.3	27
6	Unexpectedly efficient absorption of low-concentration SO2 with phase-transition mechanism using deep eutectic solvent consisting of tetraethylammonium chloride and imidazole. Separation and Purification Technology, 2022, 286, 120489.	7.9	23
7	Highly efficient absorption of HCl in deep eutectic solvents and their corresponding ethylene glycol blends. Chemical Engineering Journal, 2022, 434, 134707.	12.7	18
8	Efficient chemical fixation of CO2 to form switchable ionic liquid to synthesize benzimidazolones under mild conditions. Chemical Engineering Journal, 2022, 442, 135122.	12.7	5
9	Cyclic (alkyl)(amino)carbene-copper supported on SBA-15 as an efficient and recyclable catalyst for CO2 hydrogenation to formate. Journal of CO2 Utilization, 2022, 58, 101910.	6.8	8
10	Straightforward construction of amino-functionalized ILs@SBA-15 catalysts via mechanochemical grafting for one-pot synthesis of cyclic carbonates from aromatic olefins and CO2. Journal of CO2 Utilization, 2022, 59, 101962.	6.8	17
11	Natural deep eutectic solvent-based gels with multi-site interaction mechanism for selective membrane separation of SO2 from N2 and CO2. Chemical Engineering Journal, 2022, 438, 135626.	12.7	38
12	Reversible absorption of NF3 with high solubility in Lewis acidic ionic liquids. Chemical Engineering Journal, 2022, 440, 135902.	12.7	17
13	Fast and Efficient CO₂ Absorption in Non-aqueous Tertiary Amines Promoted by Ethylene Glycol. Energy & Fuels, 2022, 36, 4830-4836.	5.1	14
14	Recyclable polymerized Lewis acid poly-BPh(C6F5)2 catalyzed selective N-formylation and N-methylation of amines with carbon dioxide andÂphenylsilanes. Journal of CO2 Utilization, 2022, 61, 102052.	6.8	6
15	Selective and simultaneous membrane separation of CO and H2 from N2 by protic chlorocuprate ionic liquids. Renewable Energy, 2022, , .	8.9	5
16	Ionic Liquids Endowed with Novel Hybrid Anions for Supercapacitors. ACS Omega, 2022, 7, 26368-26374.	3.5	4
17	Efficient conversion of H2S into mercaptan alcohol by tertiary-amine functionalized ionic liquids. Chinese Journal of Chemical Engineering, 2022, 50, 197-204.	3.5	7
18	Tuning the composition of deep eutectic solvents consisting of tetrabutylammonium chloride and n-decanoic acid for adjustable separation of ethylene and ethane. Separation and Purification Technology, 2022, 298, 121680.	7.9	11

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19	Selective Oxidation of Cyclohexene with H2O2 Catalyzed by Resin Supported Peroxo Phosphotungstic Acid Under Mild Conditions. Catalysis Letters, 2021, 151, 147-152.	2.6	12
20	The efficient catalytic microsystem with halogen-free catalyst for the intensification on CO2 cycloaddition. Applied Catalysis B: Environmental, 2021, 283, 119629.	20.2	15
21	Task-specific ionic liquids as absorbents and catalysts for efficient capture and conversion of H2S into value-added mercaptan acids. Chemical Engineering Journal, 2021, 408, 127866.	12.7	72
22	Highly-selective separation of CO2 from N2 or CH4 in task-specific ionic liquid membranes: Facilitated transport and salting-out effect. Separation and Purification Technology, 2021, 254, 117621.	7.9	36
23	The efficient conversion of H₂S into mercaptan alcohols mediated in protic ionic liquids under mild conditions. Green Chemistry, 2021, 23, 7969-7975.	9.0	43
24	Reductive amination of ketones/aldehydes with amines using BH3N(C2H5)3 as a reductant. Chemical Communications, 2021, 57, 8588-8591.	4.1	10
25	An efficient method to prepare aryl acetates by the carbonylation of aryl methyl ethers or phenols. New Journal of Chemistry, 2021, 45, 2683-2687.	2.8	3
26	Effective hydrogenation of CO₂ to formate catalyzed by ionic liquid modified acetate-Cu. Green Chemistry, 2021, 23, 951-956.	9.0	14
27	Base-assisted transfer hydrogenation of CO2 to formate with ammonia borane in water under mild conditions. International Journal of Hydrogen Energy, 2021, 46, 15716-15723.	7.1	11
28	Controlling the Lewis Acidity and Polymerizing Effectively Prevent Frustrated Lewis Pairs from Deactivation in the Hydrogenation of Terminal Alkynes. Organic Letters, 2021, 23, 3685-3690.	4.6	12
29	Selective membrane separation of CO2 using novel epichlorohydrin-amine-based crosslinked protic ionic liquids: Crosslinking mechanism and enhanced salting-out effect. Journal of CO2 Utilization, 2021, 46, 101473.	6.8	18
30	Low viscosity superbase protic ionic liquids for the highly efficient simultaneous removal of H2S and CO2 from CH4. Separation and Purification Technology, 2021, 263, 118417.	7.9	57
31	Thermal Dehydrogenation and Hydrolysis of BH₃NH₃ Catalyzed by Cyclic (Alkyl)(amino)carbene Iridium Complexes under Mild Conditions. Organometallics, 2021, 40, 2643-2650.	2.3	8
32	Catalyst-free hierarchical reduction of CO2 with BH3N(C2H5)3 for selective N-methylation and N-formylation of amines. Journal of CO2 Utilization, 2021, 50, 101590.	6.8	10
33	Supported Ionic Liquid Gel Membranes Enhanced by Ionization Modification for Sodium Metal Batteries. ACS Sustainable Chemistry and Engineering, 2021, 9, 12100-12108.	6.7	9
34	Utilization of a Methoxy Group in Lignin to Prepare Amides by the Carbonylation of Amines. ACS Sustainable Chemistry and Engineering, 2021, 9, 11667-11673.	6.7	4
35	CO2 capturing and in situ conversion at mild condition: Efficient synthesis of methyl phenyl carbonate. Journal of Environmental Chemical Engineering, 2021, 9, 105862.	6.7	9
36	Metal-free catalysis for the one-pot synthesis of organic carbamates from amines, CO2, and alcohol at mild conditions. Chemical Engineering Journal, 2021, 425, 131452.	12.7	16

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37	Task-specific deep eutectic solvents for the highly efficient and selective separation of H2S. Separation and Purification Technology, 2021, 276, 119357.	7.9	48
38	CO2 hydrogenation to formate catalyzed by highly stable and recyclable carbene-iridium under mild condition. Journal of CO2 Utilization, 2021, 54, 101769.	6.8	12
39	B(C₆F₅)₃â€Catalyzed Tandem Friedelâ€Crafts and Câˆ’H/Câˆ’O Coupling Reactions of Dialkylanilines. Chemistry - an Asian Journal, 2020, 15, 3082-3086.	3.3	6
40	Efficient methanol carbonylation to methyl acetate catalyzed by a cyclic(alkyl)(amino)carbene iridium complex. Catalysis Science and Technology, 2020, 10, 6045-6049.	4.1	6
41	Efficient conversion of CO₂ into cyclic carbonates at room temperature catalyzed by Al-salen and imidazolium hydrogen carbonate ionic liquids. Green Chemistry, 2020, 22, 4509-4515.	9.0	67
42	Highly selective absorption separation of H₂S and CO₂ from CH₄ by novel azoleâ€based protic ionic liquids. AICHE Journal, 2020, 66, e16936.	3.6	105
43	Catalyst-free selective <i>N</i>-formylation and <i>N</i>-methylation of amines using CO₂ as a sustainable C1 source. Green Chemistry, 2020, 22, 1134-1138.	9.0	51
44	Imidazolium hydrogen carbonate ionic liquids: Versatile organocatalysts for chemical conversion of CO2 into valuable chemicals. Journal of CO2 Utilization, 2020, 39, 101155.	6.8	26
45	Experimental and theoretical study on the cyclic(alkyl)(amino)carbene-copper catalyzed Friedelâ€“Crafts reaction of <i>N</i>,<i>N</i>-dialkylanilines with styrenes. Organic and Biomolecular Chemistry, 2020, 18, 4272-4275.	2.8	9
46	Supported Ionic Liquid Membranes with Dual-Site Interaction Mechanism for Efficient Separation of CO₂. ACS Sustainable Chemistry and Engineering, 2019, 7, 10792-10799.	6.7	54
47	The influence of axial ligands on the catalytic activity and enantioselectivity of salenâ€Mn complexes in the asymmetric epoxidation. Journal of Physical Organic Chemistry, 2019, 32, e3972.	1.9	5
48	Metal-free imidazolium hydrogen carbonate ionic liquids as bifunctional catalysts for the one-pot synthesis of cyclic carbonates from olefins and CO₂. Green Chemistry, 2019, 21, 3834-3838.	9.0	67
49	Self-enhancement of CO reversible absorption accompanied by phase transition in protic chlorocuprate ionic liquids for effective CO separation from N₂. Chemical Communications, 2019, 55, 3390-3393.	4.1	29
50	Hydrogenation of CO₂ to Formate with H₂: Transition Metal Free Catalyst Based on a Lewis Pair. Angewandte Chemie, 2019, 131, 732-736.	2.0	15
51	Hydrogenation of CO₂ to Formate with H₂: Transition Metal Free Catalyst Based on a Lewis Pair. Angewandte Chemie - International Edition, 2019, 58, 722-726.	13.8	66
52	Multisite activation of epoxides by recyclable CaI 2 / N -methyldiethanolamine catalyst for CO 2 fixation: A facile access to cyclic carbonates under mild conditions. Molecular Catalysis, 2018, 450, 87-94.	2.0	23
53	Protic ionic liquid as excellent shuttle of MDEA for fast capture of CO₂. AICHE Journal, 2018, 64, 209-219.	3.6	26
54	Hydrogenation of CO 2 to Formate with H 2 : Transition Metal Free Catalyst Based on a Lewis Pair. Angewandte Chemie, 2018, 131, 649.	2.0	0

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55	Tandem copper hydrideâ€“Lewis pair catalysed reduction of carbon dioxide into formate with dihydrogen. Nature Catalysis, 2018, 1, 743-747.	34.4	88
56	Friedel-Crafts Reaction of N,N-Dimethylaniline with Alkenes Catalyzed by Cyclic Diaminocarbene-Gold(I) Complex. Scientific Reports, 2018, 8, 11449.	3.3	9
57	Low-viscous diamino protic ionic liquids with fluorine-substituted phenolic anions for improving CO2 reversible capture. Journal of Molecular Liquids, 2018, 268, 617-624.	4.9	29
58	Unexpectedly efficient SO₂ capture and conversion to sulfur in novel imidazole-based deep eutectic solvents. Chemical Communications, 2018, 54, 8964-8967.	4.1	77
59	Efficient SO₂ Capture and Fixation to Cyclic Sulfites by Dual Ether-Functionalized Protic Ionic Liquids without Any Additives. ACS Sustainable Chemistry and Engineering, 2018, 6, 10886-10895.	6.7	60
60	Direct Synthesis of Dimethyl Carbonate from Carbon Dioxide and Methanol at Room Temperature Using Imidazolium Hydrogen Carbonate Ionic Liquid as a Recyclable Catalyst and Dehydrant. ChemSusChem, 2017, 10, 2046-2052.	6.8	83
61	Catalyst-free N-formylation of amines using BH₃NH₃ and CO₂ under mild conditions. Chemical Communications, 2017, 53, 8046-8049.	4.1	66
62	Supported protic-ionic-liquid membranes with facilitated transport mechanism for the selective separation of CO2. Journal of Membrane Science, 2017, 527, 60-67.	8.2	59
63	Concentrated aqueous solutions of protic ionic liquids as effective CO2 absorbents with high absorption capacities. Journal of Molecular Liquids, 2017, 243, 169-177.	4.9	18
64	Selective separation of H2S and CO2 from CH4 by supported ionic liquid membranes. Journal of Membrane Science, 2017, 543, 282-287.	8.2	71
65	Absorption of H₂S and CO₂ in Aqueous Solutions of Tertiary-Amine Functionalized Protic Ionic Liquids. Energy & Fuels, 2017, 31, 14060-14069.	5.1	27
66	Oxidation of olefins using molecular oxygen catalyzed by a part per million level of recyclable copper catalyst under mild conditions. Green Chemistry, 2017, 19, 675-681.	9.0	21
67	Binary BrÃ¸nsted Acidic Ionic Liquids (BBAILs) as the Reactive Extraction Intensified Catalysts for the Esterification of Acetic Acid and <i>n</i>-Butanol. Journal of Chemical Engineering of Japan, 2017, 50, 632-640.	0.6	2
68	Hydrophobic protic ionic liquids tethered with tertiary amine group for highly efficient and selective absorption of H₂S from CO₂. AIChE Journal, 2016, 62, 4480-4490.	3.6	102
69	Roomâ€Temperature Hydration of Alkynes Catalyzed by Different Carbene Gold Complexes and their Precursors. ChemCatChem, 2016, 8, 262-267.	3.7	21
70	Room temperature hydroamination of alkynes with anilines catalyzed by anti-Bredt di(amino)carbene gold(i) complexes. New Journal of Chemistry, 2016, 40, 5993-5996.	2.8	17
71	Cyano-Containing Protic Ionic Liquids for Highly Selective Absorption of SO₂ from CO₂: Experimental Study and Theoretical Analysis. Industrial & Engineering Chemistry Research, 2016, 55, 11012-11021.	3.7	45
72	The ionic liquid-mediated Claus reaction: a highly efficient capture and conversion of hydrogen sulfide. Green Chemistry, 2016, 18, 1859-1863.	9.0	58

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73	Airâ€Stable (CAAC)CuCl and (CAAC)CuBH₄ Complexes as Catalysts for the Hydrolytic Dehydrogenation of BH₃NH₃. Angewandte Chemie - International Edition, 2015, 54, 6008-6011.	13.8	95
74	Low-viscous fluorine-substituted phenolic ionic liquids with high performance for capture of CO2. Chemical Engineering Journal, 2015, 274, 30-38.	12.7	73
75	Structure and asymmetric epoxidation reactivity of chiral Mn(<scp>iii</scp>) salen catalysts modified by different axial anions. RSC Advances, 2015, 5, 80772-80778.	3.6	5
76	Hydration of alkynes at room temperature catalyzed by gold(<scp>i</scp>) isocyanide compounds. Green Chemistry, 2015, 17, 532-537.	9.0	79
77	A water-soluble palladium-salen catalyst modified by pyridinium salt showing higher reactivity and recoverability for Heck coupling reaction. Journal of Molecular Catalysis A, 2015, 396, 55-60.	4.8	16
78	Amino Acid Modified Macroreticular Anion Exchange Resins for CO₂ Adsorption. Journal of Chemical Engineering of Japan, 2015, 48, 268-275.	0.6	5
79	Improvement the Activity and Selectivity of Fenton System in the Oxidation of Alcohols. Journal of Catalysts, 2014, 2014, 1-6.	0.5	4
80	Dual Lewis Base Functionalization of Ionic Liquids for Highly Efficient and Selective Capture of H₂S. ChemPlusChem, 2014, 79, 241-249.	2.8	62
81	Comparative Study of the Solubilities of SO₂ in Five Low Volatile Organic Solvents (Sulfolane, Ethylene Glycol, Propylene Carbonate, <i>N</i>-Methylimidazole, and) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 417 Td	2.9	67
82	Protic ionic liquids for the selective absorption of H₂S from CO₂: Thermodynamic analysis. AIChE Journal, 2014, 60, 4232-4240.	3.6	123
83	Facilitated separation of CO2 and SO2 through supported liquid membranes using carboxylate-based ionic liquids. Journal of Membrane Science, 2014, 471, 227-236.	8.2	91
84	Gold-Catalyzed Hydroarylation of Alkenes with Dialkylanilines. Journal of the American Chemical Society, 2014, 136, 13594-13597.	13.7	139
85	Experimental study and thermodynamical modelling of the solubilities of SO 2 , H 2 S and CO 2 in N-dodecylimidazole and 1,1â€²-[oxybis(2,1-ethanediyloxy-2,1-ethanediyl)]bis(imidazole): An evaluation of their potential application in the separation of acidic gases. Fluid Phase Equilibria, 2014, 378, 21-33.	2.5	22
86	SO2 absorption in acid salt ionic liquids/sulfolane binary mixtures: Experimental study and thermodynamic analysis. Chemical Engineering Journal, 2014, 237, 478-486.	12.7	121
87	The Effect of Nano Confinement on the Câ€"H Activation and its Corresponding Structure-Activity Relationship. Scientific Reports, 2014, 4, 7225.	3.3	13
88	Dicarboxylic acid salts as task-specific ionic liquids for reversible absorption of SO2 with a low enthalpy change. RSC Advances, 2013, 3, 16264.	3.6	64
89	Absorption of SO2 in aqueous solutions of mixed hydroxylammonium dicarboxylate ionic liquids. Chemical Engineering Journal, 2013, 215-216, 36-44.	12.7	92
90	Thermodynamic validation of 1â€alkylâ€3â€methylimidazolium carboxylates as taskâ€specific ionic liquids for H₂S absorption. AIChE Journal, 2013, 59, 2227-2235.	3.6	135

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91	Impact of Î±-d-glucose pentaacetate on the selective separation of CO2 and SO2 in supported ionic liquid membranes. Green Chemistry, 2012, 14, 1440.	9.0	27
92	CO oxidation on metal-free nitrogen-doped carbon nanotubes and the related structureâ€“reactivity relationships. Journal of Materials Chemistry, 2012, 22, 15198.	6.7	47
93	Density functional theory study on nitrogen-doped carbon nanotubes with and without oxygen adsorption: the influence of length and diameter. New Journal of Chemistry, 2011, 35, 2601.	2.8	21
94	Structureâ€“Reactivity Relationships of Metalloporphyrin Modified by Ionic Liquid and Its Analogue. Journal of Physical Chemistry C, 2011, 115, 23913-23921.	3.1	21
95	Kinetics for the Esterification Reaction of <i>n</i>-Butanol with Acetic Acid Catalyzed by Noncorrosive BrÃ¸nsted Acidic Ionic Liquids. Industrial & Engineering Chemistry Research, 2011, 50, 1989-1996.	3.7	73
96	Approaching and Bond Breaking Energies in the Câˆ'H Activation and Their Application in Catalyst Design. Journal of Physical Chemistry A, 2011, 115, 904-910.	2.5	14
97	Correlation Analysis of the Substituent Electronic Effects on the Allylic H-Abstraction in Cyclohexene by Phthalimide-<i>N</i>-oxyl Radicals: a DFT Study. Journal of Physical Chemistry B, 2010, 114, 4862-4869.	2.6	40
98	Adsorption and Activation of O₂ on Nitrogen-Doped Carbon Nanotubes. Journal of Physical Chemistry C, 2010, 114, 9603-9607.	3.1	164
99	Theoretical study on the structureâ€“reactivity relationships of acetylacetoneâ€“Fe catalyst modified by ionic compound in Câ€“H activation reaction. Journal of Catalysis, 2010, 272, 320-332.	6.2	33
100	Copper-salen catalysts modified by ionic compounds for the oxidation of cyclohexene by oxygen. Journal of Molecular Catalysis A, 2010, 327, 25-31.	4.8	30
101	An environmentally benign catalytic oxidation of cholesteryl acetate with molecular oxygen by using N-hydroxyphthalimide. Green Chemistry, 2009, 11, 2013.	9.0	29
102	Acetylacetoneâ€“Fe catalyst modified by imidazole ionic compound and its application in aerobic oxidation of Î²-isophorone. Catalysis Communications, 2009, 10, 1908-1912.	3.3	34
103	Iron chloride supported on pyridine-modified mesoporous silica: an efficient and reusable catalyst for the allylic oxidation of olefins with molecular oxygen. Green Chemistry, 2008, 10, 827.	9.0	41
104	A mild and efficient oxidation of 2,3,6-trimethylphenol to trimethyl-1,4-benzoquinone in ionic liquids. Catalysis Communications, 2008, 9, 1979-1981.	3.3	23
105	Two Unexpected Roles of Water: Assisting and Preventing Functions in the Oxidation of Methane and Methanol Catalyzed by Porphyrinâˆ'Fe and Porphyrinâˆ'SHâˆ'Fe. Journal of Physical Chemistry B, 2008, 112, 10684-10688.	2.6	13
106	Tautomerism of Uracil and 5-Bromouracil in a Microcosmic Environment with Water and Metal Ions. What Roles Do Metal Ions Play?. Journal of Physical Chemistry B, 2007, 111, 9347-9354.	2.6	22
107	All-Metal Aromatic Complexes Show High Reactivity in the Oxidation Reaction of Methane and Some Hydrocarbons. Journal of Physical Chemistry A, 2007, 111, 8352-8356.	2.5	8
108	The Reactivity of All-Metal Aromatic Complexes:Â A Theoretical Investigation on the Methane Activation Reaction. Journal of Physical Chemistry B, 2006, 110, 14046-14049.	2.6	12

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109	Reaction Mechanism of Uracil Bromination by HBrO:Â A New Way To Generate the Enolâˆ’Keto Form of 5-Bromouracil. Journal of Physical Chemistry A, 2006, 110, 11188-11193.	2.5	5
110	Exploring a new kind of aromatic hydrogen bond: hydrogen bonding to all-metal aromatic species. New Journal of Chemistry, 2005, 29, 1295.	2.8	8
111	Systematic Study of the Tautomerism of Uracil Induced by Proton Transfer. Exploration of Water Stabilization and Mutagenicity. Journal of Physical Chemistry B, 2005, 109, 5935-5944.	2.6	63
112	Theoretical Study of the Proton Transfer of Uracil and (Water)n(n= 0âˆ’4):Â Water Stabilization and Mutagenicity for Uracil. Journal of Physical Chemistry B, 2004, 108, 12999-13007.	2.6	72
113	Proton Transfer of Formamide +nH2O (n= 0âˆ’3):Â Protective and Assistant Effect of the Water Molecule. Journal of Physical Chemistry A, 2004, 108, 10219-10224.	2.5	30
114	Mutagenic Mechanism of the A-T to G-C Transition Induced by 5-Bromouracil:Â An ab Initio Studyâ€. Biochemistry, 2004, 43, 6361-6369.	2.5	46