Kuan Huang

List of Publications by Year in Descending Order

101 papers	3,701 citations	38 h-index	57 g-index
107 ext. papers	4,613 ext. citations	7.1 avg, IF	6.12 L-index

#	Paper	IF	Citations
101	Improving conversion of methyl palmitate to diesel-like fuel through catalytic deoxygenation with B2O3-modified ZrO2. *Fuel Processing Technology*, **2022**, 226, 107091	7.2	3
100	Densities and viscosities of, and solubilities of acidic gases (SO2 and H2S) in natural deep eutectic solvents. *Journal of Chemical Thermodynamics*, **2022**, 167, 106713	2.9	3
99	Trialkylmethylammonium molybdate ionic liquids as novel oil-soluble precursors of dispersed metal catalysts for slurry-phase hydrocracking of heavy oils. *Chemical Engineering Science*, **2022**, 253, 117516	4.4	1
98	Tunable ionic liquids as oil-soluble precursors of dispersed catalysts for suspended-bed hydrocracking of heavy residues. *Fuel*, **2021**, 313, 122664	7.1	4
97	Commercial anion exchange resin modified with azolates for remarkable separation of SO2 from CO2. *Fuel*, **2021**, 310, 122468	7.1	0
96	Slurry-Phase Hydrocracking of a Decalin/Phenanthrene Mixture by MoS2/SiO2-ZrO2 Bifunctional Catalysts. *Industrial & Engineering Chemistry Research*, **2021**, 60, 230-242	3.9	6
95	Enhancing the activity of MoS2/SiO2-Al2O3 bifunctional catalysts for suspended-bed hydrocracking of heavy oils by doping with Zr atoms. *Chinese Journal of Chemical Engineering*, **2021**, 39, 126-126	3.2	18
94	Interactions of an Imine Polymer with Nanoporous Silica and Carbon in Hybrid Adsorbents for Carbon Capture. *Langmuir*, **2021**, 37, 4622-4631	4	1
93	Graphene-based mesoporous frameworks with ultrahigh nitrogen contents for highly efficient and selective sulfur dioxide capture. *Chemical Engineering Journal*, **2021**, 412, 128677	14.7	7
92	Designing Low-Viscosity Deep Eutectic Solvents with Multiple Weak-Acidic Groups for Ammonia Separation. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 7352-7360	8.3	35
91	Highly efficient, selective and reversible capture of sulfur dioxide by methylated-polyethylenimine supported on graphitic carbon nitride. *Chemical Engineering Journal*, **2021**, 409, 127378	14.7	14
90	Physical Properties and NH3 Solubilities of Deep Eutectic Solvents Formed by Choline Chloride and Glycols. *Fluid Phase Equilibria*, **2021**, 529, 112871	2.5	2
89	Developing porous organic polymers as precursors of nitrogen-decorated micro-mesoporous carbons for efficient capture and conversion of carbon dioxide. *Journal of Materials Science*, **2021**, 56, 9315-9329	4.3	4
88	New deep eutectic solvents formed by 1-ethyl-3-methylimidazolium chloride and dicyandiamide: Physiochemical properties and SO2 absorption performance. *Journal of the Taiwan Institute of Chemical Engineers*, **2021**, 119, 45-51	5.3	4
87	Facilely synthesized mesoporous polymer for dispersion of amino acid ionic liquid and effective capture of carbon dioxide from anthropogenic source. *Journal of the Taiwan Institute of Chemical Engineers*, **2021**, 125, 115-121	5.3	4
86	Deep eutectic solvents with multiple weak acid sites for highly efficient, reversible and selective absorption of ammonia. *Separation and Purification Technology*, **2021**, 269, 118791	8.3	12
85	Dispersing aminopolycarboxylate ionic liquids in mesoporous organic polymer for highly efficient and improved carbon capture from dilute source. *Journal of Molecular Liquids*, **2021**, 338, 116653	6	2

84	Highly efficient and selective separation of ammonia by deep eutectic solvents through cooperative acid-base and strong hydrogen-bond interaction. *Journal of Molecular Liquids*, **2021**, 337, 116463	6	25
83	Meso-macroporous polymer densely functionalized with tertiary amine groups as effective sorbents for SO2 capture. *Chemical Engineering Journal*, **2021**, 422, 129699	14.7	9
82	1-ethyl-3-methylimidazolium chloride plus imidazole deep eutectic solvents as physical solvents for remarkable separation of H2S from CO2. *Separation and Purification Technology*, **2021**, 276, 119313	8.3	12
81	Dependence of zeolite topology on alkane diffusion inside diverse channels. *AICHE Journal*, **2020**, 66, e16269	3.6	6
80	Highly Efficient, Reversible, and Selective Absorption of SO2 in 1-Ethyl-3-methylimidazolium Chloride Plus Imidazole Deep Eutectic Solvents. *Industrial & Engineering Chemistry Research*, **2020**, 59, 13696-13705	3.9	22
79	Reversible Chemical Absorption of CO2 in Polyethylenimine Supported by Low-Viscous Tetrabutylphosphonium 2-Fluorophenolate. *Energy & Fuels*, **2020**, 34, 3493-3500	4.1	5
78	Deep Eutectic Solvents Formed by N-Methylacetamide and Heterocyclic Weak Acids for Highly Efficient and Reversible Chemical Absorption of Ammonia. *Industrial & Engineering Chemistry Research*, **2020**, 59, 2060-2067	3.9	18
77	Chemical dual-site capture of NH by unprecedentedly low-viscosity deep eutectic solvents. *Chemical Communications*, **2020**, 56, 2399-2402	5.8	46
76	Solubilities of Ammonia in Polyethylene Glycols at 298.2□353.2 K and 0□00 kPa. *Journal of Chemical & Engineering Data*, **2020**, 65, 97-105	2.8	3
75	Carbon Membranes for CO2 Separation **2020**, 215-236		
74	Solvent-free and one-pot synthesis of ultramicroporous carbons with ultrahigh nitrogen contents for sulfur dioxide capture. *Chemical Engineering Journal*, **2020**, 391, 123579	14.7	21
73	Sugar-based natural deep eutectic solvents as potential absorbents for NH3 capture at elevated temperatures and reduced pressures. *Journal of Molecular Liquids*, **2020**, 317, 113992	6	12
72	Manufacturing Acidities of Hydrogen-Bond Donors in Deep Eutectic Solvents for Effective and Reversible NH3 Capture. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 13408-13417	8.3	30
71	Densities and viscosities of, and NH3 solubilities in deep eutectic solvents composed of ethylamine hydrochloride and acetamide. *Journal of Chemical Thermodynamics*, **2019**, 139, 105883	2.9	18
70	Effective and Reversible Capture of NH3 by Ethylamine Hydrochloride Plus Glycerol Deep Eutectic Solvents. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 10552-10560	8.3	46
69	Highly Efficient CO2 Capture by Polyethylenimine Plus 1-Ethyl-3-Methylimidazolium Acetate Mixed Absorbents. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 9369-9377	8.3	25
68	Nitrogen-Decorated, Ordered Mesoporous Carbon Spheres as High-Efficient Catalysts for Selective Capture and Oxidation of H2S. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 7609-7618	8.3	50
67	Thermodynamic and molecular insights into the absorption of H2S, CO2, and CH4 in choline chloride plus urea mixtures. *AICHE Journal*, **2019**, 65, e16574	3.6	90

66	Solvothermal and template-free synthesis of N-Functionalized mesoporous polymer for amine impregnation and CO2 adsorption. *Microporous and Mesoporous Materials*, **2019**, 290, 109653	5.3	14
65	NH3 Solubilities and Physical Properties of Ethylamine Hydrochloride Plus Urea Deep Eutectic Solvents. *Journal of Chemical & Engineering Data*, **2019**, 64, 3821-3830	2.8	20
64	Rational Design of Azole-Based Deep Eutectic Solvents for Highly Efficient and Reversible Capture of Ammonia. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 14170-14179	8.3	34
63	Design of Efficient, Hierarchical Porous Polymers Endowed with Tunable Structural Base Sites for Direct Catalytic Elimination of COS and HS. *ACS Applied Materials & Interfaces*, **2019**, 11, 29950-29959	9.5	38
62	Simultaneous activation and N-doping of hydrothermal carbons by NaNH2: An effective approach to CO2 adsorbents. *Journal of CO2 Utilization*, **2019**, 33, 405-412	7.6	15
61	Effective Capture of Carbon Dioxide by Tetraethylenepentamine Assisted with 1-Ethyl-3-methylimidazolium Acetate: Experimental and Thermodynamic Analysis. *Energy & Fuels*, **2019**, 33, 11399-11407	4.1	1
60	Ultralow Loading Cobalt-Based Nanocatalyst for Benign and Efficient Aerobic Oxidation of Allylic Alcohols and Biobased Olefins. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 1901-1908	8.3	7
59	Chitosan-derived mesoporous carbon with ultrahigh pore volume for amine impregnation and highly efficient CO2 capture. *Chemical Engineering Journal*, **2019**, 359, 1159-1165	14.7	102
58	Phenol-Based Ternary Deep Eutectic Solvents for Highly Efficient and Reversible Absorption of NH3. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 3258-3266	8.3	67
57	Solubilities of ammonia in choline chloride plus urea at (298.2□353.2) K and (0□100) kPa. *Journal of Chemical Thermodynamics*, **2019**, 129, 5-11	2.9	46
56	Synthesis of Porous Sulfonamide Polymers by Capturing Atmospheric Sulfur Dioxide. *ChemSusChem* , **2018**, 11, 1751-1755	8.3	6
55	Highly Efficient Indirect Hydration of Olefins to Alcohols Using Superacidic Polyoxometalate-Based Ionic Hybrids Catalysts. *Industrial & Engineering Chemistry Research*, **2018**, 57, 6654-6663	3.9	15
54	Protic ionic liquid as excellent shuttle of MDEA for fast capture of CO2. *AICHE Journal*, **2018**, 64, 209-219	3.6	16
53	Graphitic Carbon Nitride Functionalized with Polyethylenimine for Highly Effective Capture of Carbon Dioxide. *Industrial & Engineering Chemistry Research*, **2018**, 57, 11031-11038	3.9	16
52	Synthesis of Porous Polymeric Catalysts for the Conversion of Carbon Dioxide. *ACS Catalysis*, **2018**, 8, 9079-9102	13.1	135
51	Co-N-C catalysts synthesized by pyrolysis of Co-based deep eutectic solvents for aerobic oxidation of alcohols. *New Journal of Chemistry*, **2018**, 42, 15871-15878	3.6	9
50	Promoted adsorption of CO2 on amine-impregnated adsorbents by functionalized ionic liquids. *AICHE Journal*, **2018**, 64, 3671-3680	3.6	71
49	Hydrophobic Solid Acids and Their Catalytic Applications in Green and Sustainable Chemistry. *ACS Catalysis*, **2018**, 8, 372-391	13.1	138

48	Interfacial Engineering of Supported Liquid Membranes by Vapor Cross-Linking for Enhanced Separation of Carbon Dioxide. *ChemSusChem*, **2018**, 11, 185-192	8.3	6
47	Open and Hierarchical Carbon Framework with Ultralarge Pore Volume for Efficient Capture of Carbon Dioxide. *ACS Applied Materials & Interfaces*, **2018**, 10, 36961-36968	9.5	41
46	ROMP for Metal-Organic Frameworks: An Efficient Technique toward Robust and High-Separation Performance Membranes. *ACS Applied Materials & Interfaces*, **2018**, 10, 34640-34645	9.5	29
45	Chemical solvent in chemical solvent: A class of hybrid materials for effective capture of CO2. *AICHE Journal*, **2018**, 64, 632-639	3.6	130
44	Aminopolymer functionalization of boron nitride nanosheets for highly efficient capture of carbon dioxide. *Journal of Materials Chemistry A*, **2017**, 5, 16241-16248	13	45
43	Effect of metal oxides modification on CO2 adsorption performance over mesoporous carbon. *Microporous and Mesoporous Materials*, **2017**, 249, 34-41	5.3	33
42	Ionic liquid□formulated hybrid solvents for CO2 capture. *Current Opinion in Green and Sustainable Chemistry*, **2017**, 5, 67-73	7.9	35
41	Solvent-Free Self-Assembly to the Synthesis of Nitrogen-Doped Ordered Mesoporous Polymers for Highly Selective Capture and Conversion of CO. *Advanced Materials*, **2017**, 29, 1700445	24	135
40	Highly Efficient Carbon Monoxide Capture by Carbanion-Functionalized Ionic Liquids through C-Site Interactions. *Angewandte Chemie*, **2017**, 129, 6947-6951	3.6	22
39	R□ktitelbild: Highly Efficient Carbon Monoxide Capture by Carbanion-Functionalized Ionic Liquids through C-Site Interactions (Angew. Chem. 24/2017). *Angewandte Chemie*, **2017**, 129, 7108-7108	3.6	
38	Highly Efficient Carbon Monoxide Capture by Carbanion-Functionalized Ionic Liquids through C-Site Interactions. *Angewandte Chemie - International Edition*, **2017**, 56, 6843-6847	16.4	63
37	Facilely synthesized meso-macroporous polymer as support of poly(ethyleneimine) for highly efficient and selective capture of CO2. *Chemical Engineering Journal*, **2017**, 314, 466-476	14.7	63
36	Selective separation of H2S and CO2 from CH4 by supported ionic liquid membranes. *Journal of Membrane Science*, **2017**, 543, 282-287	9.6	50
35	Aqueous and Template-Free Synthesis of Meso-Macroporous Polymers for Highly Selective Capture and Conversion of Carbon Dioxide. *ChemSusChem*, **2017**, 10, 4144-4149	8.3	24
34	Highly efficient and selective absorption of H2S in phenolic ionic liquids: A cooperative result of anionic strong basicity and cationic hydrogen-bond donation. *Chemical Engineering Science*, **2017**, 173, 253-263	4.4	76
33	Pyridine-Functionalized and Metallized Meso-Macroporous Polymers for Highly Selective Capture and Catalytic Conversion of CO2 into Cyclic Carbonates. *Industrial & Engineering Chemistry Research*, **2017**, 56, 15008-15016	3.9	27
32	Solubilities of Carbon Dioxide in 1-Ethyl-3-methylimidazolium Thiocyanate, 1-Ethyl-3-methylimidazolium Dicyanamide, and 1-Ethyl-3-methylimidazolium Tricyanomethanide at (298.2 to 373.2) K and (0 to 300.0) kPa. *Journal of Chemical & Engineering Data*, **2017**, 62, 4108-4116	2.8	12
31	Absorption of H2S and CO2 in Aqueous Solutions of Tertiary-Amine Functionalized Protic Ionic Liquids. *Energy & Fuels*, **2017**, 31, 14060-14069	4.1	17

30	Remarkably efficient hydrolysis of cinnamaldehyde to natural benzaldehyde in amino acid ionic liquids. *Korean Journal of Chemical Engineering*, **2016**, 33, 3374-3380	2.8	4
29	Ordered Mesoporous Polymers for Biomass Conversions and Cross-Coupling Reactions. *ChemSusChem*, **2016**, 9, 2496-504	8.3	24
28	Solvothermal synthesis of hierarchically nanoporous organic polymers with tunable nitrogen functionality for highly selective capture of CO2. *Journal of Materials Chemistry A*, **2016**, 4, 13063-13070	13	69
27	Amine Functionalization of Microsized and Nanosized Mesoporous Carbons for Carbon Dioxide Capture. *Industrial & Engineering Chemistry Research*, **2016**, 55, 7355-7361	3.9	24
26	Multi-Molar Absorption of CO2 by the Activation of Carboxylate Groups in Amino Acid Ionic Liquids. *Angewandte Chemie*, **2016**, 128, 7282-7286	3.6	35
25	The ionic liquid-mediated Claus reaction: a highly efficient capture and conversion of hydrogen sulfide. *Green Chemistry*, **2016**, 18, 1859-1863	10	40
24	Multi-Molar Absorption of CO2 by the Activation of Carboxylate Groups in Amino Acid Ionic Liquids. *Angewandte Chemie - International Edition*, **2016**, 55, 7166-70	16.4	212
23	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	77
22	Effect of alkalinity on absorption capacity and selectivity of SO2 and H2S over CO2: Substituted benzoate-based ionic liquids as the study platform. *Chemical Engineering Journal*, **2016**, 297, 265-276	14.7	50
21	Significantly increasing porosity of mesoporous carbon by NaNH2 activation for enhanced CO2 adsorption. *Microporous and Mesoporous Materials*, **2016**, 230, 100-108	5.3	34
20	One-step synthesis of nitrogen-doped graphene-like meso-macroporous carbons as highly efficient and selective adsorbents for CO2 capture. *Journal of Materials Chemistry A*, **2016**, 4, 14567-14571	13	53
19	Tuning the acidity of sulfonic functionalized ionic liquids for highly efficient and selective synthesis of terpene esters. *Journal of Industrial and Engineering Chemistry*, **2016**, 41, 122-129	6.3	20
18	Low-viscous fluorine-substituted phenolic ionic liquids with high performance for capture of CO2. *Chemical Engineering Journal*, **2015**, 274, 30-38	14.7	57
17	An efficient low-temperature route to nitrogen-doping and activation of mesoporous carbons for CO2 capture. *Chemical Communications*, **2015**, 51, 17261-4	5.8	44
16	Ionic liquid electrolytes for aluminium secondary battery: Influence of organic solvents. *Journal of Electroanalytical Chemistry*, **2015**, 757, 167-175	4.1	38
15	Sigmoid Correlations for Gas Solubility and Enthalpy Change of Chemical Absorption of CO2. *Industrial & Engineering Chemistry Research*, **2015**, 54, 10126-10133	3.9	21
14	Amino Acid Modified Macroreticular Anion Exchange Resins for CO2 Adsorption. *Journal of Chemical Engineering of Japan*, **2015**, 48, 268-275	0.8	4
13	Comparative Study of the Solubilities of SO2 in Five Low Volatile Organic Solvents (Sulfolane, Ethylene Glycol, Propylene Carbonate, N-Methylimidazole, and N-Methylpyrrolidone). *Journal of Chemical & Engineering Data*, **2014**, 59, 1202-1212	2.8	55

12	Systematic Study on the General Preparation of Ionic Liquids with High Purity via Hydroxide Intermediates. *Industrial & Engineering Chemistry Research*, **2014**, 53, 6871-6880	3.9	6
11	Protic ionic liquids for the selective absorption of H2S from CO2: Thermodynamic analysis. *AICHE Journal*, **2014**, 60, 4232-4240	3.6	93
10	Facilitated separation of CO2 and SO2 through supported liquid membranes using carboxylate-based ionic liquids. *Journal of Membrane Science*, **2014**, 471, 227-236	9.6	74
9	Experimental study and thermodynamical modelling of the solubilities of SO 2 , H 2 S and CO 2 in N-dodecylimidazole and 1,1?-[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	18
8	SO2 absorption in acid salt ionic liquids/sulfolane binary mixtures: Experimental study and thermodynamic analysis. *Chemical Engineering Journal*, **2014**, 237, 478-486	14.7	102
7	Dual Lewis Base Functionalization of Ionic Liquids for Highly Efficient and Selective Capture of H S. *ChemPlusChem*, **2014**, 79, 241-249	2.8	47
6	Dicarboxylic acid salts as task-specific ionic liquids for reversible absorption of SO2 with a low enthalpy change. *RSC Advances*, **2013**, 3, 16264	3.7	54
5	Absorption of SO2 in aqueous solutions of mixed hydroxylammonium dicarboxylate ionic liquids. *Chemical Engineering Journal*, **2013**, 215-216, 36-44	14.7	77
4	Absorption of CO2 in amino acid ionic liquid (AAIL) activated MDEA solutions. *International Journal of Greenhouse Gas Control*, **2013**, 19, 379-386	4.2	53
3	Thermodynamic validation of 1-alkyl-3-methylimidazolium carboxylates as task-specific ionic liquids for H2S absorption. *AICHE Journal*, **2013**, 59, 2227-2235	3.6	111
2	Impact of D-glucose pentaacetate on the selective separation of CO2 and SO2 in supported ionic liquid membranes. *Green Chemistry*, **2012**, 14, 1440	10	22
1	Noncorrosive ionic liquids composed of [HSO4] as esterification catalysts. *Chemical Engineering Journal*, **2011**, 171, 1333-1339	14.7	56