Maaike C Kroon

List of Publications by Year
in descending order

110 papers	7,717 citations	61945 43 h-index	53190 85 g-index
115 all docs	115 docs citations	115 times ranked	5750 citing authors

#	Article	IF	Citations
1	Lowâ€Transitionâ€Temperature Mixtures (LTTMs): A New Generation of Designer Solvents. Angewandte Chemie - International Edition, 2013, 52, 3074-3085.	7.2	1,056
2	New natural and renewable low transition temperature mixtures (LTTMs): screening as solvents for lignocellulosic biomass processing. Green Chemistry, 2012, 14, 2153.	4.6	615
3	Hydrophobic deep eutectic solvents as water-immiscible extractants. Green Chemistry, 2015, 17, 4518-4521.	4.6	599
4	A Search for Natural Hydrophobic Deep Eutectic Solvents Based on Natural Components. ACS Sustainable Chemistry and Engineering, 2019, 7, 2933-2942.	3.2	310
5	Quantum chemical aided prediction of the thermal decomposition mechanisms and temperatures of ionic liquids. Thermochimica Acta, 2007, 465, 40-47.	1.2	226
6	Ionic liquids and deep eutectic solvents for lignocellulosic biomass fractionation. Physical Chemistry Chemical Physics, 2017, 19, 2636-2665.	1.3	217
7	Removal of alkali and transition metal ions from water with hydrophobic deep eutectic solvents. Chemical Communications, 2016, 52, 11987-11990.	2.2	196
8	A new low transition temperature mixture (LTTM) formed by choline chloride+lactic acid: Characterization as solvent for CO2 capture. Fluid Phase Equilibria, 2013, 340, 77-84.	1.4	189
9	Degradation of Deep-Eutectic Solvents Based on Choline Chloride and Carboxylic Acids. ACS Sustainable Chemistry and Engineering, 2019, 7, 11521-11528.	3.2	179
10	Decomposition of ionic liquids in electrochemical processing. Green Chemistry, 2006, 8, 241-245.	4.6	168
11	Modeling of the Carbon Dioxide Solubility in Imidazolium-Based Ionic Liquids with the tPC-PSAFT Equation of State. Journal of Physical Chemistry B, 2006, 110, 9262-9269.	1.2	166
12	High-Pressure Phase Behavior of Systems with Ionic Liquids:â€‰ Part V. The Binary System Carbon Dioxide + 1-Butyl-3-methylimidazolium Tetrafluoroborate. Journal of Chemical & Engineering Data, 2005, 50, 173-176.	1.0	157
13	First-Principles Molecular Dynamics Study of a Deep Eutectic Solvent: Choline Chloride/Urea and Its Mixture with Water. Journal of Physical Chemistry B, 2018, 122, 1245-1254.	1.2	136
14	Carbon Dioxide Solubilities in Decanoic Acid-Based Hydrophobic Deep Eutectic Solvents. Journal of Chemical & Engineering Data, 2018, 63, 913-919.	1.0	131
15	PC-SAFT Modeling of CO₂ Solubilities in Deep Eutectic Solvents. Journal of Physical Chemistry B, 2016, 120, 2300-2310.	1.2	110
16	Low Transition Temperature Mixtures as Innovative and Sustainable CO₂ Capture Solvents. Journal of Physical Chemistry B, 2014, 118, 14429-14441.	1.2	100
17	Tetraalkylammonium oleate and linoleate based ionic liquids: promising extractants for metal salts. Green Chemistry, 2013, 15, 205-209.	4.6	96
18	tPC-PSAFT Modeling of Gas Solubility in Imidazolium-Based Ionic Liquids. Journal of Physical Chemistry C, 2007, 111, 15487-15492.	1.5	93

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19	Aliphaticâ€“Aromatic Separation Using Deep Eutectic Solvents as Extracting Agents. Industrial & Engineering Chemistry Research, 2015, 54, 11404-11412.	1.8	85
20	Deep eutectic solvents for highly efficient separations in oil and gas industries. Current Opinion in Green and Sustainable Chemistry, 2017, 5, 55-60.	3.2	84
21	Low transition temperature mixtures (LTTMs) as novel entrainers in extractive distillation. Fluid Phase Equilibria, 2015, 385, 72-78.	1.4	81
22	Recovery of pure products from ionic liquids using supercritical carbon dioxide as a co-solvent in extractions or as an anti-solvent in precipitations. Green Chemistry, 2006, 8, 246-249.	4.6	78
23	Selective Extraction of Metals from Chloride Solutions with the Tetraoctylphosphonium Oleate Ionic Liquid. Industrial & Engineering Chemistry Research, 2015, 54, 5149-5158.	1.8	72
24	Solubility and Diffusivity of CO₂ in the Ionic Liquid 1-Butyl-3-methylimidazolium Tricyanomethanide within a Large Pressure Range (0.01 MPa to 10 MPa). Journal of Chemical & Engineering Data, 2015, 60, 1544-1562.	1.0	71
25	PC-SAFT modeling of CO 2 solubilities in hydrophobic deep eutectic solvents. Fluid Phase Equilibria, 2017, 448, 94-98.	1.4	70
26	Determination of the Total Vapor Pressure of Hydrophobic Deep Eutectic Solvents: Experiments and Perturbed-Chain Statistical Associating Fluid Theory Modeling. ACS Sustainable Chemistry and Engineering, 2019, 7, 4047-4057.	3.2	69
27	Enhanced CO₂ Capture in Binary Mixtures of 1-Alkyl-3-methylimidazolium Tricyanomethanide Ionic Liquids with Water. Journal of Physical Chemistry B, 2013, 117, 12234-12251.	1.2	64
28	The Curious Case of Hydrophobic Deep Eutectic Solvents: A Story on the Discovery, Design, and Applications. ACS Sustainable Chemistry and Engineering, 0, , .	3.2	63
29	Solubility of non-psychoactive cannabinoids in supercritical carbon dioxide and comparison with psychoactive cannabinoids. Journal of Supercritical Fluids, 2010, 55, 603-608.	1.6	62
30	Separation and recovery of the constituents from lignocellulosic biomass by using ionic liquids and acetic acid as co-solvents for mild hydrolysis. Chemical Engineering and Processing: Process Intensification, 2011, 50, 196-199.	1.8	62
31	Phase equilibrium measurements of structure II clathrate hydrates of hydrogen with various promoters. Fluid Phase Equilibria, 2011, 307, 6-10.	1.4	61
32	Hydrophobic eutectic mixtures as volatile fatty acid extractants. Separation and Purification Technology, 2019, 216, 147-157.	3.9	57
33	Solubility of carbon dioxide in the low-viscosity ionic liquid 1-hexyl-3-methylimidazolium tetracyanoborate. Fluid Phase Equilibria, 2012, 332, 35-39.	1.4	55
34	Solubility of Methane in the Ionic Liquid 1-Ethyl-3-methylimidazolium Tris(pentafluoroethyl)trifluorophosphate. Industrial & Engineering Chemistry Research, 2012, 51, 16709-16712.	1.8	53
35	Selective separation of furfural and hydroxymethylfurfural from an aqueous solution using a supported hydrophobic deep eutectic solvent liquid membrane. Faraday Discussions, 2017, 206, 77-92.	1.6	53
36	Natural gas purification using supported ionic liquid membrane. Journal of Membrane Science, 2015, 484, 80-86.	4.1	52

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37	Comparison of a low transition temperature mixture (LTTM) formed by lactic acid and choline chloride with choline lactate ionic liquid and the choline chloride salt: physical properties and vapourâ€“liquid equilibria of mixtures containing water and ethanol. RSC Advances, 2013, 3, 23553.	1.7	51
38	Thermodynamic properties of hydrophobic deep eutectic solvents and solubility of water and HMF in them: Measurements and PC-SAFT modeling. Fluid Phase Equilibria, 2019, 489, 75-82.	1.4	51
39	Glycerol-Based Deep Eutectic Solvents as Extractants for the Separation of MEK and Ethanol via Liquidâ€“Liquid Extraction. Journal of Chemical & Engineering Data, 2016, 61, 865-872.	1.0	48
40	Experimental determination of the LLE data of systems consisting of {hexane + benzene + deep eutectic solvent} and prediction using the Conductor-like Screening Model for Real Solvents. Journal of Chemical Thermodynamics, 2017, 104, 128-137.	1.0	48
41	Simultaneous dearomatization, desulfurization, and denitrogenation of diesel fuels using acidic deep eutectic solvents as extractive agents: A parametric study. Separation and Purification Technology, 2021, 256, 117861.	3.9	48
42	Isopropanol dehydration via extractive distillation using low transition temperature mixtures as entrainers. Journal of Chemical Thermodynamics, 2015, 85, 216-221.	1.0	46
43	Solubility of Carbon Dioxide in the Ionic Liquid 1-Ethyl-3-methylimidazolium Tris(pentafluoroethyl)trifluorophosphate. Journal of Chemical & Engineering Data, 2012, 57, 3422-3425.	1.0	45
44	Aliphatic+ethanol separation via liquidâ€“liquid extraction using low transition temperature mixtures as extracting agents. Fluid Phase Equilibria, 2015, 394, 71-82.	1.4	45
45	Equation of state modeling of the phase equilibria of ionic liquid mixtures at low and high pressure. Physical Chemistry Chemical Physics, 2008, 10, 6160.	1.3	44
46	Thermophysical Properties and Solubility of Different Sugar-Derived Molecules in Deep Eutectic Solvents. Journal of Chemical & Engineering Data, 2017, 62, 3633-3641.	1.0	44
47	Liquidâ€“liquid equilibrium data for the systems {LTTM+benzene+hexane} and {LTTM+ethyl acetate+hexane} at different temperatures and atmospheric pressure. Fluid Phase Equilibria, 2013, 360, 54-62.	1.4	43
48	Separation of Thiophene from Aliphatic Hydrocarbons Using Tetrahexylammonium-Based Deep Eutectic Solvents as Extracting Agents. Journal of Chemical & Engineering Data, 2017, 62, 2911-2919.	1.0	43
49	Oil desulfurization using deep eutectic solvents as sustainable and economical extractants via liquid-liquid extraction: Experimental and PC-SAFT predictions. Fluid Phase Equilibria, 2018, 467, 33-44.	1.4	43
50	110th Anniversary: Distribution Coefficients of Furfural and 5-Hydroxymethylfurfural in Hydrophobic Deep Eutectic Solvent + Water Systems: Experiments and Perturbed-Chain Statistical Associating Fluid Theory Predictions. Industrial & Engineering Chemistry Research, 2019, 58, 4240-4247.	1.8	42
51	Selective Paraffin Removal from Ethane/Ethylene Mixtures by Adsorption into Aluminum Methylphosphonate-Î±: A Molecular Simulation Study. Langmuir, 2009, 25, 2148-2152.	1.6	38
52	Continuous process for selective metal extraction with an ionic liquid. Chemical Engineering Research and Design, 2016, 109, 553-560.	2.7	38
53	Experimental and Molecular Modeling Evaluation of the Physicochemical Properties of Proline-Based Deep Eutectic Solvents. Journal of Physical Chemistry B, 2018, 122, 369-379.	1.2	36
54	Extraction of Thiophene, Pyridine, and Toluene from n-Decane as a Diesel Model Using Betaine-Based Natural Deep Eutectic Solvents. Journal of Chemical & Engineering Data, 2020, 65, 5443-5457.	1.0	36

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55	Effect of the Type of Ammonium Salt on the Extractive Desulfurization of Fuels Using Deep Eutectic Solvents. Journal of Chemical & Engineering Data, 2018, 63, 1088-1095.	1.0	35
56	Crystallization of an organic compound from an ionic liquid using carbon dioxide as anti-solvent. Green Chemistry, 2008, 10, 333.	4.6	34
57	CO₂ Capture Efficiency, Corrosion Properties, and Ecotoxicity Evaluation of Amine Solutions Involving Newly Synthesized Ionic Liquids. Industrial & Engineering Chemistry Research, 2014, 53, 12083-12102.	1.8	34
58	Physicochemical properties of fatty acid based ionic liquids. Journal of Chemical Thermodynamics, 2016, 100, 156-164.	1.0	34
59	Combined Extractive Dearomatization, Desulfurization, and Denitrogenation of Oil Fuels Using Deep Eutectic Solvents: A Parametric Study. Industrial & Engineering Chemistry Research, 2020, 59, 11723-11733.	1.8	34
60	Carbon Dioxide Solubilities and Diffusivities in 1-Alkyl-3-methylimidazolium Tricyanomethanide Ionic Liquids: An Experimental and Modeling Study. Journal of Chemical & Engineering Data, 2016, 61, 4281-4295.	1.0	33
61	Kinetics measurements and in situ Raman spectroscopy of formation of hydrogenâ€“tetrabutylammonium bromide semi-hydrates. International Journal of Hydrogen Energy, 2012, 37, 5790-5797.	3.8	31
62	Removal of small hydrocarbons (ethane, propane, butane) from natural gas streams using the ionic liquid 1-ethyl-3 -methylimidazolium tris(pentafluoroethyl)trifluorophosphate. Journal of Supercritical Fluids, 2014, 90, 65-72.	1.6	31
63	Thermophysical properties of imidazolium tricyanomethanide ionic liquids: experiments and molecular simulation. Physical Chemistry Chemical Physics, 2016, 18, 23121-23138.	1.3	31
64	Extraction of pyridine from n-alkane mixtures using methyltriphenylphosphonium bromide-based deep eutectic solvents as extractive denitrogenation agents. Fluid Phase Equilibria, 2020, 517, 112622.	1.4	31
65	Kinetic measurements and in situ Raman spectroscopy study of the formation of TBAF semi-hydrates with hydrogen and carbon dioxide. International Journal of Hydrogen Energy, 2013, 38, 7326-7334.	3.8	30
66	High pressure phase equilibria of binary mixtures of light hydrocarbons in the ionic liquid 1-hexyl-3-methylimidazolium tetracyanoborate. Fluid Phase Equilibria, 2014, 362, 96-101.	1.4	30
67	Modeling Solubilities of Gases in the Ionic Liquid 1-Ethyl-3-methylimidazolium Tris(pentafluoroethyl)trifluorophosphate Using the Pengâ€“Robinson Equation of State. Industrial & Engineering Chemistry Research, 2014, 53, 11818-11821.	1.8	28
68	Recovery of volatile fatty acids from water using medium-chain fatty acids and a cosolvent. Chemical Engineering Science, 2017, 165, 74-80.	1.9	28
69	Correlation between Quantumchemically Calculated LUMO Energies and the Electrochemical Window of Ionic Liquids with Reduction-Resistant Anions. International Journal of Electrochemistry, 2012, 2012, 1-6.	2.4	27
70	A mechanism for solvent extraction of first row transition metals from chloride media with the ionic liquid tetraoctylammonium oleate. Dalton Transactions, 2016, 45, 9661-9668.	1.6	27
71	Removal of 2- and 3-methylthiophene from their mixtures with n-heptane using tetrahexylammonium bromide-based deep eutectic solvents as extractive desulfurization agents. Journal of Chemical Thermodynamics, 2018, 125, 172-179.	1.0	25
72	Solubility of Cannabinol in Supercritical Carbon Dioxide. Journal of Chemical & Engineering Data, 2010, 55, 3704-3707.	1.0	24

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73	Achievement of a Homogeneous Phase in Ternary Ionic Liquid/Carbon Dioxide/Organic Systems. Industrial & Engineering Chemistry Research, 2010, 49, 3474-3478.	1.8	23
74	Extraction of benzothiazole and thiophene from their mixtures with n-heptane using tetrahexylammonium bromide-based deep eutectic solvents as extractive denitrogenation and desulfurization agents. Fluid Phase Equilibria, 2018, 477, 1-11.	1.4	23
75	Mercury Capture from Petroleum Using Deep Eutectic Solvents. Industrial & Engineering Chemistry Research, 2018, 57, 9222-9230.	1.8	22
76	Novel pressure and temperature swing processes for CO2 capture using low viscosity ionic liquids. Separation and Purification Technology, 2018, 204, 314-327.	3.9	20
77	Solubilities of ferrocene and acetylferrocene in supercritical carbon dioxide. Journal of Supercritical Fluids, 2012, 72, 320-325.	1.6	19
78	Regeneration of the ionic liquid tetraoctylammonium oleate after metal extraction. Hydrometallurgy, 2015, 158, 56-60.	1.8	19
79	Toward a Sustainable Chemical Industry: Cyclic Innovation Applied to Ionic Liquid-Based Technology. Industrial & Engineering Chemistry Research, 2008, 47, 8517-8525.	1.8	18
80	Inter-cage dynamics in structure I, II, and H fluoromethane hydrates as studied by NMR and molecular dynamics simulations. Journal of Chemical Physics, 2014, 140, 214703.	1.2	18
81	A centrifuge method to determine the solidâ€“liquid phase behavior of eutectic mixtures. Journal of Chemical Physics, 2018, 149, 224505.	1.2	17
82	High pressure solubility of methane in the ionic liquid 1-hexyl-3-methylimidazolium tricyanomethanide. Journal of Supercritical Fluids, 2017, 128, 145-148.	1.6	16
83	Liquidâ€“Liquid Equilibrium Measurements for the Extraction of Pyridine and Benzothiazole from n-Alkanes Using Deep Eutectic Solvents. Journal of Chemical & Engineering Data, 2019, 64, 4882-4890.	1.0	16
84	The ionic liquid 1-ethyl-3-methylimidazolium tris(pentafluoroethyl)trifluorophosphate as alternative extractant for BTEX separation. Fluid Phase Equilibria, 2015, 405, 17-24.	1.4	15
85	Extraction of Sodium Chloride from Water and Solubility of Water in Hydrophobic Trialkylammonium Alkanoate-Based Ionic Liquids. Journal of Chemical & Engineering Data, 2010, 55, 3391-3394.	1.0	14
86	Effect of Oxygenation on Carbon Dioxide Absorption and Thermophysical Properties of Ionic Liquids: Experiments and Modeling Using Electrolyte PC-SAFT. Industrial & Engineering Chemistry Research, 2016, 55, 8869-8882.	1.8	14
87	Process intensification by combining ionic liquids and supercritical carbon dioxide applied to the design of Levodopa production. Chemical Engineering and Processing: Process Intensification, 2009, 48, 549-553.	1.8	13
88	Modeling gas solubilities in imidazolium based ionic liquids with the [Tf 2 N] anion using the GC-EoS. Fluid Phase Equilibria, 2016, 409, 408-416.	1.4	13
89	Effect of Additives on the CO₂ Absorption in Aqueous MDEA Solutions. Industrial & Engineering Chemistry Research, 2014, 53, 20032-20035.	1.8	10
90	Sequential and in Situ Extraction of Furfural from Reaction Mixture and Effect of Extracting Agents on Furfural Degradation. Industrial & Engineering Chemistry Research, 2019, 58, 16116-16125.	1.8	10

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91	Phase behavior of the ternary 1-hexyl-3-methylimidazolium tetrafluoroborate+carbon dioxide+methanol system. Fluid Phase Equilibria, 2010, 294, 84-88.	1.4	8
92	Editorial: Molecular Modeling and Simulation in JCED. Journal of Chemical & Engineering Data, 2016, 61, 1-2.	1.0	7
93	Modeling the complex phase behavior of methane, ethane and propane in an ionic liquid up to 11MPa â€“ A comparison between the PR EoS and the GC EoS. Journal of Supercritical Fluids, 2015, 101, 63-71.	1.6	6
94	Bubble point pressures of binary system of methanol and methyl propionate. Fluid Phase Equilibria, 2016, 417, 166-170.	1.4	6
95	ACS Virtual Issue on Deep Eutectic Solvents. Journal of Chemical & Engineering Data, 2017, 62, 1927-1928.	1.0	6
96	Effect of Carbon Dioxide Addition on the Phase Behavior of Epoxidation Reaction Mixtures in Ionic Liquids. Journal of Chemical & Engineering Data, 2013, 58, 1597-1601.	1.0	5
97	Selective removal of sodium from alkali-metal solutions with tetraoctylammonium monensin. Desalination, 2016, 399, 124-127.	4.0	5
98	Applying electrohydrodynamic atomization to enhance mass transfer of metal salts from an aqueous phase towards ionic liquids. Journal of Electrostatics, 2016, 80, 1-7.	1.0	5
99	Mutual Solubilities of Cyclohexane and Water in Aqueous Methyldiethanolamine /Cyclohexane Liquidâ€“Liquid Equilibria. Journal of Chemical & Engineering Data, 2018, 63, 1123-1131.	1.0	4
100	Highlighting 10 Years of NIST Cooperation and Service to the Thermophysical Properties Data Community. Journal of Chemical & Engineering Data, 2019, 64, 4191-4192.	1.0	4
101	Experimental Determination of the Solubilities of CO₂ and CH₄ in Diethyl Methylphosphonate. Journal of Chemical & Engineering Data, 2011, 56, 2960-2963.	1.0	3
102	High pressure phase equilibria of the ternary system 1-butyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide+carbon dioxide+ferrocene. Journal of Supercritical Fluids, 2012, 69, 8-12.	1.6	3
103	Phase Behavior of the Ternary System Acetylferrocene, The Ionic Liquid 1-Butyl-3-methylimidazolium Bis(trifluoromethylsulfonyl)imide, and Carbon Dioxide To Be Applied in Friedelâ€“Crafts Acylation Reactions. Journal of Chemical & Engineering Data, 2013, 58, 951-955.	1.0	3
104	Design and test of a new high pressure phase equilibrium apparatus for highly corrosive mixtures of importance for natural gas. Journal of Natural Gas Science and Engineering, 2015, 27, 661-665.	2.1	3
105	Vaporâ€“Liquid Equilibria of Binary and Ternary Mixtures of Acetaldehyde with Versatic 9 and Veova 9. Journal of Chemical & Engineering Data, 2016, 61, 2114-2119.	1.0	3
106	Vanadium-catalyzed epoxidation reaction of cinnamyl alcohol in ionic liquids. Green Processing and Synthesis, 2012, 1, .	1.3	2
107	Development of a multipleâ€hole die for the production of single large blocks of lowâ€density polystyrene using carbon dioxide as a blowing agent. Polymer Engineering and Science, 2011, 51, 2328-2334.	1.5	1
108	Festschrift Honoring Cor J. Peters. Journal of Chemical & Engineering Data, 2018, 63, 859-859.	1.0	1

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109	Peer Review Appreciation at JCED. Journal of Chemical & Engineering Data, 2018, 63, 3169-3169.	1.0	1
110	Introducing JCEDâ€™s Latin America Special Issue. Journal of Chemical & Engineering Data, 2019, 64, 1859-1859.	1.0	1