

Richard L Smith Jr

List of Publications by Year in descending order

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270
papers

12,283
citations

22132

59
h-index

32815

100
g-index

278
all docs

278
docs citations

278
times ranked

10694
citing authors

#	ARTICLE	IF	CITATIONS
1	Catalytic dehydration of fructose into 5-hydroxymethylfurfural by ion-exchange resin in mixed-aqueous system by microwave heating. <i>Green Chemistry</i> , 2008, 10, 799.	4.6	340
2	Reaction chemistry and phase behavior of lignin in high-temperature and supercritical water. <i>Bioresource Technology</i> , 2008, 99, 3424-3430.	4.8	333
3	Ultrasound-enhanced conversion of biomass to biofuels. <i>Progress in Energy and Combustion Science</i> , 2014, 41, 56-93.	15.8	319
4	Efficient process for conversion of fructose to 5-hydroxymethylfurfural with ionic liquids. <i>Green Chemistry</i> , 2009, 11, 1327.	4.6	275
5	Replacement of CH ₄ in the hydrate by use of liquid CO ₂ . <i>Energy Conversion and Management</i> , 2005, 46, 1680-1691.	4.4	271
6	Isothermal vapor-liquid equilibrium data for binary systems at high pressures: carbon dioxide-methanol, carbon dioxide-ethanol, carbon dioxide-1-propanol, methane-ethanol, methane-1-propanol, ethane-ethanol, and ethane-1-propanol systems. <i>Journal of Chemical & Engineering Data</i> , 1990, 35, 63-66.	1.0	263
7	Chemical Reactions of C1 Compounds in Near-Critical and Supercritical Water. <i>Chemical Reviews</i> , 2004, 104, 5803-5822.	23.0	262
8	Principles of green chemistry: PRODUCTIVELY. <i>Green Chemistry</i> , 2005, 7, 761.	4.6	260
9	Catalytical conversion of fructose and glucose into 5-hydroxymethylfurfural in hot compressed water by microwave heating. <i>Catalysis Communications</i> , 2008, 9, 2244-2249.	1.6	245
10	Efficient valorization of biomass to biofuels with bifunctional solid catalytic materials. <i>Progress in Energy and Combustion Science</i> , 2016, 55, 98-194.	15.8	234
11	Solid acid mediated hydrolysis of biomass for producing biofuels. <i>Progress in Energy and Combustion Science</i> , 2012, 38, 672-690.	15.8	226
12	The 24 Principles of Green Engineering and Green Chemistry: "IMPROVEMENTS PRODUCTIVELY". <i>Green Chemistry</i> , 2008, 10, 268.	4.6	205
13	Methane recovery from methane hydrate using pressurized CO ₂ . <i>Fluid Phase Equilibria</i> , 2005, 228-229, 553-559.	1.4	196
14	Sulfated zirconia as a solid acid catalyst for the dehydration of fructose to 5-hydroxymethylfurfural. <i>Catalysis Communications</i> , 2009, 10, 1771-1775.	1.6	171
15	Selective Conversion of D-Fructose to 5-Hydroxymethylfurfural by Ion-Exchange Resin in Acetone/Dimethyl sulfoxide Solvent Mixtures. <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 9234-9239.	1.8	166
16	Microstructural Evolution and Magnetic Properties of NiFe ₂ O ₄ Nanocrystals Dispersed in Amorphous Silica. <i>Chemistry of Materials</i> , 2000, 12, 3705-3714.	3.2	165
17	Thermal and chemical methods for producing zinc silicate (willemite): A review. <i>Progress in Crystal Growth and Characterization of Materials</i> , 2009, 55, 98-124.	1.8	161
18	Fast Transformation of Glucose and Disaccharides into 5-Hydroxymethylfurfural by Microwave Heating in an Ionic Liquid/Catalyst System. <i>ChemSusChem</i> , 2010, 3, 1071-1077.	3.6	157

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19	Synthesis of Nanoscale Ce _{1-x} Fe _x O ₂ Solid Solutions via a Low-Temperature Approach. <i>Journal of the American Chemical Society</i> , 2001, 123, 11091-11092.	6.6	152
20	Acid-Catalyzed Dehydration of Fructose into 5-Hydroxymethylfurfural by Cellulose-Derived Amorphous Carbon. <i>ChemSusChem</i> , 2012, 5, 2215-2220.	3.6	152
21	Reactions of d-fructose in water at temperatures up to 400°C and pressures up to 100MPa. <i>Journal of Supercritical Fluids</i> , 2007, 42, 110-119.	1.6	149
22	Black liquor-derived porous carbons from rice straw for high-performance supercapacitors. <i>Chemical Engineering Journal</i> , 2017, 316, 770-777.	6.6	148
23	High-yield reduction of carbon dioxide into formic acid by zero-valent metal/metal oxide redox cycles. <i>Energy and Environmental Science</i> , 2011, 4, 881.	15.6	138
24	High-Pressure Densities of 1-Alkyl-3-methylimidazolium Hexafluorophosphates and 1-Alkyl-3-methylimidazolium Tetrafluoroborates at Temperatures from (313 to 473) K and at Pressures up to 200 MPa. <i>Journal of Chemical & Engineering Data</i> , 2009, 54, 22-27.	1.0	134
25	Cellulose-derived superparamagnetic carbonaceous solid acid catalyst for cellulose hydrolysis in an ionic liquid or aqueous reaction system. <i>Green Chemistry</i> , 2013, 15, 2167.	4.6	133
26	Pressure-volume-temperature (PVT) measurements of ionic liquids ([bmim][PF ₆], [bmim][BF ₄], Tj ETQqO O O rgBT /Overlo 2008, 264, 147-155.	1.4	131
27	Reaction kinetics of d-xylose in sub- and supercritical water. <i>Journal of Supercritical Fluids</i> , 2010, 55, 208-216.	1.6	129
28	Hydrolysis of cellulose over functionalized glucose-derived carbon catalyst in ionic liquid. <i>Bioresource Technology</i> , 2012, 116, 355-359.	4.8	126
29	Macro and microscopic CH ₄ -CO ₂ replacement in CH ₄ hydrate under pressurized CO ₂ . <i>AIChE Journal</i> , 2007, 53, 2715-2721.	1.8	123
30	Fatty acid production from a highly CO ₂ tolerant alga, <i>Chlorococcum littorale</i> , in the presence of inorganic carbon and nitrate. <i>Bioresource Technology</i> , 2009, 100, 5237-5242.	4.8	123
31	Efficient Catalytic Conversion of Fructose into 5-Hydroxymethylfurfural in Ionic Liquids at Room Temperature. <i>ChemSusChem</i> , 2009, 2, 944-946.	3.6	121
32	Heavy oil upgrading in the presence of high density water: Basic study. <i>Journal of Supercritical Fluids</i> , 2010, 53, 48-52.	1.6	119
33	Green chemical processes with supercritical fluids: Properties, materials, separations and energy. <i>Journal of Supercritical Fluids</i> , 2011, 60, 2-15.	1.6	110
34	Solubility, swelling degree and crystallinity of carbon dioxide-polypropylene system. <i>Journal of Supercritical Fluids</i> , 2007, 40, 452-461.	1.6	103
35	Catalytic conversion of cellulose into 5-hydroxymethylfurfural in high yields via a two-step process. <i>Cellulose</i> , 2011, 18, 1327-1333.	2.4	103
36	Review of CO ₂ -CH ₄ clathrate hydrate replacement reaction laboratory studies - Properties and kinetics. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2013, 44, 517-537.	2.7	100

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37	Cycloamination strategies for renewable N-heterocycles. <i>Green Chemistry</i> , 2020, 22, 582-611.	4.6	100
38	Characterization of the dispersion process for NiFe ₂ O ₄ nanocrystals in a silica matrix with infrared spectroscopy and electron paramagnetic resonance. <i>Journal of Molecular Structure</i> , 2001, 560, 87-93.	1.8	99
39	Eco-friendly Method for Efficient Conversion of Cellulose into Levulinic Acid in Pure Water with Cellulase-Mimetic Solid Acid Catalyst. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 2421-2427.	3.2	98
40	Solubility of Lead(II) Oxide and Copper(II) Oxide in Subcritical and Supercritical Water. <i>Journal of Chemical & Engineering Data</i> , 1999, 44, 1422-1426.	1.0	97
41	Catalytic hydrothermal gasification of cellulose and glucose. <i>International Journal of Hydrogen Energy</i> , 2008, 33, 981-990.	3.8	97
42	Depolymerization of sodium alginate under hydrothermal conditions. <i>Carbohydrate Polymers</i> , 2010, 80, 296-302.	5.1	89
43	Adsorption of 1-Butyl-3-Methylimidazolium Chloride Ionic Liquid by Functional Carbon Microspheres from Hydrothermal Carbonization of Cellulose. <i>Environmental Science & Technology</i> , 2013, 47, 2792-2798.	4.6	88
44	Water gas shift reaction kinetics under noncatalytic conditions in supercritical water. <i>Journal of Supercritical Fluids</i> , 2004, 29, 113-119.	1.6	87
45	Efficient conversion of fructose into 5-ethoxymethylfurfural with hydrogen sulfate ionic liquids as co-solvent and catalyst. <i>Chemical Engineering Journal</i> , 2017, 314, 508-514.	6.6	84
46	Direct observation of cellulose dissolution in subcritical and supercritical water over a wide range of water densities (550–1000 kg/m ³). <i>Cellulose</i> , 2005, 12, 595-606.	2.4	81
47	Synergistic conversion of glucose into 5-hydroxymethylfurfural in ionic liquid–water mixtures. <i>Bioresource Technology</i> , 2012, 109, 224-228.	4.8	80
48	Quantitative chemocatalytic production of lactic acid from glucose under anaerobic conditions at room temperature. <i>Green Chemistry</i> , 2017, 19, 76-81.	4.6	79
49	Black liquor-derived calcium-activated biochar for recovery of phosphate from aqueous solutions. <i>Bioresource Technology</i> , 2019, 294, 122198.	4.8	76
50	Dehydration of lactic acid to acrylic acid in high temperature water at high pressures. <i>Journal of Supercritical Fluids</i> , 2009, 50, 257-264.	1.6	73
51	Rapid separation of shikimic acid from Chinese star anise (<i>Illicium verum</i> Hook. f.) with hot water extraction. <i>Separation and Purification Technology</i> , 2009, 69, 102-108.	3.9	71
52	One-step preparation of carbonaceous solid acid catalysts by hydrothermal carbonization of glucose for cellulose hydrolysis. <i>Catalysis Communications</i> , 2014, 57, 50-54.	1.6	69
53	N-formyl-stabilizing quasi-catalytic species afford rapid and selective solvent-free amination of biomass-derived feedstocks. <i>Nature Communications</i> , 2019, 10, 699.	5.8	69
54	Catalytic decarboxylation of acetic acid with zirconia catalyst in supercritical water. <i>Applied Catalysis A: General</i> , 2001, 219, 149-156.	2.2	68

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55	Efficient catalytic transfer hydrogenation of biomass-based furfural to furfuryl alcohol with recyclable Hf-phenylphosphonate nanohybrids. <i>Catalysis Today</i> , 2019, 319, 84-92.	2.2	68
56	Efficient one-pot production of 5-hydroxymethylfurfural from inulin in ionic liquids. <i>Green Chemistry</i> , 2010, 12, 1855.	4.6	66
57	Decentralized chemical processes with supercritical fluid technology for sustainable society. <i>Journal of Supercritical Fluids</i> , 2009, 47, 628-636.	1.6	64
58	Separation of cashew (<i>Anacardium occidentale</i> L.) nut shell liquid with supercritical carbon dioxide. <i>Bioresource Technology</i> , 2003, 88, 1-7.	4.8	62
59	Phase behavior and reaction of polyethylene terephthalate-water systems at pressures up to 173 MPa and temperatures up to 490°C. <i>Journal of Supercritical Fluids</i> , 1999, 15, 229-243.	1.6	61
60	Measurement and Correlation of High Pressure Densities of Ionic Liquids, 1-Ethyl-3-methylimidazolium Lactate ([emim][Lactate]), 2-Hydroxyethyl-trimethylammonium Lactate ([C ₂ H ₄ OH](CH ₃) ₃ N][Lactate]), and 1-Butyl-3-methylimidazolium Chloride ([bmim][Cl]). <i>Journal of Chemical & Engineering Data</i> , 2011, 56, 923-928.	1.0	61
61	Binary hydrogen-tetrahydrofuran clathrate hydrate formation kinetics and models. <i>AIChE Journal</i> , 2008, 54, 3007-3016.	1.8	60
62	Densities at Pressures up to 200 MPa and Atmospheric Pressure Viscosities of Ionic Liquids 1-Ethyl-3-methylimidazolium Methylphosphate, 1-Ethyl-3-methylimidazolium Diethylphosphate, 1-Butyl-3-methylimidazolium Acetate, and 1-Butyl-3-methylimidazolium Bis(trifluoromethylsulfonyl)imide. <i>Journal of Chemical & Engineering Data</i> , 2015, 60, 876-885.	1.0	59
63	Supercritical carbon dioxide (SC-CO ₂) extraction and fractionation of palm kernel oil from palm kernel as cocoa butter replacers blend. <i>Journal of Food Engineering</i> , 2006, 73, 210-216.	2.7	58
64	Supercritical carbon dioxide (SC-CO ₂) extraction of palm kernel oil from palm kernel. <i>Journal of Food Engineering</i> , 2007, 79, 1007-1014.	2.7	58
65	Preparation of Highly Active, Low Au-Loaded, Au/CeO ₂ Nanoparticle Catalysts That Promote CO Oxidation at Ambient Temperatures. <i>Journal of Physical Chemistry C</i> , 2010, 114, 793-798.	1.5	58
66	Techniques, applications and future prospects of diamond anvil cells for studying supercritical water systems. <i>Journal of Supercritical Fluids</i> , 2009, 47, 431-446.	1.6	54
67	Mg-coordinated self-assembly of MgO-doped ordered mesoporous carbons for selective recovery of phosphorus from aqueous solutions. <i>Chemical Engineering Journal</i> , 2021, 406, 126748.	6.6	54
68	Performance of a natural convection circulation system for supercritical fluids. <i>Journal of Supercritical Fluids</i> , 2005, 36, 70-80.	1.6	53
69	Measurement of High-Pressure Densities and Atmospheric Viscosities of Ionic Liquids: 1-Hexyl-3-methylimidazolium Bis(trifluoromethylsulfonyl)imide and 1-Hexyl-3-methylimidazolium Chloride. <i>Journal of Chemical & Engineering Data</i> , 2014, 59, 709-717.	1.0	52
70	Isomerization of glucose at hydrothermal condition with TiO ₂ , ZrO ₂ , CaO-doped ZrO ₂ or TiO ₂ -doped ZrO ₂ . <i>Catalysis Today</i> , 2016, 274, 67-72.	2.2	51
71	Interfacial tension between water and high pressure CO ₂ in the presence of hydrocarbon surfactants. <i>Fluid Phase Equilibria</i> , 2007, 257, 163-168.	1.4	50
72	Effects of light intensity and temperature on photoautotrophic growth of a green microalga, <i>Chlorococcum littorale</i> . <i>Biotechnology Reports (Amsterdam, Netherlands)</i> , 2015, 7, 24-29.	2.1	50

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73	Direct observation of polyvinylchloride degradation in water at temperatures up to 500°C and at pressures up to 700 MPa. <i>Journal of Applied Polymer Science</i> , 2007, 106, 1075-1086.	1.3	47
74	Blending of supercritical carbon dioxide (SC-CO ₂) extracted palm kernel oil fractions and palm oil to obtain cocoa butter replacers. <i>Journal of Food Engineering</i> , 2007, 78, 1397-1409.	2.7	47
75	Phase Equilibrium Measurements of Hydrogen-Tetrahydrofuran and Hydrogen-Cyclopentane Binary Clathrate Hydrate Systems. <i>Journal of Chemical & Engineering Data</i> , 2010, 55, 2214-2218.	1.0	47
76	Removal of hydrophilic ionic liquids from aqueous solutions by adsorption onto high surface area oxygenated carbonaceous material. <i>Chemical Engineering Journal</i> , 2014, 256, 407-414.	6.6	47
77	Perfect recycle and mechanistic role of hydrogen sulfate ionic liquids as additive in ethanol for efficient conversion of carbohydrates into 5-ethoxymethylfurfural. <i>Chemical Engineering Journal</i> , 2017, 323, 287-294.	6.6	47
78	Continuous supercritical hydrothermal synthesis of dispersible zero-valent copper nanoparticles for ink applications in printed electronics. <i>Journal of Supercritical Fluids</i> , 2014, 86, 33-40.	1.6	45
79	Porous carbonaceous materials from hydrothermal carbonization and KOH activation of corn stover for highly efficient CO ₂ capture. <i>Chemical Engineering Communications</i> , 2018, 205, 423-431.	1.5	44
80	Phase behavior and reaction of polyethylene in supercritical water at pressures up to 2.6 GPa and temperatures up to 670°C. <i>Journal of Supercritical Fluids</i> , 2000, 16, 207-216.	1.6	43
81	Formation mechanism and luminescence appearance of Mn-doped zinc silicate particles synthesized in supercritical water. <i>Journal of Solid State Chemistry</i> , 2008, 181, 1307-1313.	1.4	42
82	Methodology for Replacing Dipolar Aprotic Solvents Used in API Processing with Safe Hydrogen-Bond Donor and Acceptor Solvent-Pair Mixtures. <i>Organic Process Research and Development</i> , 2017, 21, 114-124.	1.3	42
83	Critical assessment of reaction pathways for conversion of agricultural waste biomass into formic acid. <i>Green Chemistry</i> , 2021, 23, 1536-1561.	4.6	42
84	Dissolution of mechanically milled chitin in high temperature water. <i>Carbohydrate Polymers</i> , 2014, 106, 172-178.	5.1	41
85	Replacement of Hazardous Chemicals Used in Engineering Plastics with Safe and Renewable Hydrogen-Bond Donor and Acceptor Solvent-Pair Mixtures. <i>ACS Sustainable Chemistry and Engineering</i> , 2015, 3, 1881-1889.	3.2	41
86	High-Performance Supercapacitor Electrode Materials from Chitosan via Hydrothermal Carbonization and Potassium Hydroxide Activation. <i>Energy Technology</i> , 2017, 5, 452-460.	1.8	41
87	Mechanistic role of protonated polar additives in ethanol for selective transformation of biomass-related compounds. <i>Applied Catalysis B: Environmental</i> , 2020, 264, 118509.	10.8	40
88	Carotenoid production from <i>Chlorococcum littorale</i> in photoautotrophic cultures with downstream supercritical fluid processing. <i>Journal of Separation Science</i> , 2009, 32, 2327-2335.	1.3	39
89	Nutrient recovery from municipal sludge for microalgae cultivation with two-step hydrothermal liquefaction. <i>Algal Research</i> , 2016, 18, 61-68.	2.4	39
90	Volumetric behavior of ethyl acetate, ethyl octanoate, ethyl laurate, ethyl linoleate, and fish oil ethyl esters in the presence of supercritical CO ₂ . <i>Journal of Supercritical Fluids</i> , 1998, 13, 29-36.	1.6	38

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91	Production of organic acids from alginate in high temperature water. <i>Journal of Supercritical Fluids</i> , 2012, 65, 39-44.	1.6	38
92	Dissolution and recovery of cellulose from 1-butyl-3-methylimidazolium chloride in presence of water. <i>Carbohydrate Polymers</i> , 2013, 92, 651-658.	5.1	38
93	Analysis of the Cybotactic Region of Two Renewable Lactone-Water Mixed-Solvent Systems that Exhibit Synergistic Kamlet-Taft Basicity. <i>Journal of Physical Chemistry B</i> , 2016, 120, 4467-4481.	1.2	38
94	Synthesis of ethyl levulinate over amino-sulfonated functional carbon materials. <i>Renewable Energy</i> , 2020, 157, 951-958.	4.3	38
95	Destruction of deca-chlorobiphenyl in supercritical water under oxidizing conditions with and without Na ₂ CO ₃ . <i>Journal of Supercritical Fluids</i> , 2005, 33, 247-258.	1.6	37
96	Separation of palm kernel oil from palm kernel with supercritical carbon dioxide using pressure swing technique. <i>Journal of Food Engineering</i> , 2007, 81, 419-428.	2.7	37
97	Analysis of the density effect on partial oxidation of methane in supercritical water. <i>Journal of Supercritical Fluids</i> , 2004, 28, 69-77.	1.6	34
98	Measurement and correlation of infinite dilution partition coefficients of aromatic compounds in the ionic liquid 1-butyl-3-methyl-imidazolium hexafluorophosphate ([bmim][PF ₆])-CO ₂ system at temperatures from 313 to 353K and at pressures up to 16MPa. <i>Journal of Supercritical Fluids</i> , 2008, 43, 430-437.	1.6	34
99	Pressure profile separation of phenolic liquid compounds from cashew (<i>Anacardium occidentale</i>) shell with supercritical carbon dioxide and aspects of its phase equilibria. <i>Journal of Supercritical Fluids</i> , 2009, 48, 203-210.	1.6	34
100	Mechanism of Glucose Conversion into 5-Ethoxymethylfurfural in Ethanol with Hydrogen Sulfate Ionic Liquid Additives and a Lewis Acid Catalyst. <i>Energy & Fuels</i> , 2018, 32, 8411-8419.	2.5	33
101	Microencapsulation of red palm oil as an oil-in-water emulsion with supercritical carbon dioxide solution-enhanced dispersion. <i>Journal of Food Engineering</i> , 2018, 222, 100-109.	2.7	32
102	Direct one-pot synthesis of ordered mesoporous carbons from lignin with metal coordinated self-assembly. <i>Green Chemistry</i> , 2021, 23, 8632-8642.	4.6	32
103	Direct observation of channel-tee mixing of high-temperature and high-pressure water. <i>Journal of Supercritical Fluids</i> , 2007, 43, 222-227.	1.6	31
104	Effect of inorganic carbon on photoautotrophic growth of microalga <i>Chlorococcum littorale</i> . <i>Biotechnology Progress</i> , 2009, 25, 492-498.	1.3	31
105	Simple modification of the temperature dependence of the Sanchez-Lacombe equation of state. <i>Fluid Phase Equilibria</i> , 2010, 297, 205-209.	1.4	31
106	Adsorption equilibria of rhodium acetylacetonate with MCM-41, MSU-H, and HMS silica substrates in supercritical carbon dioxide for preparing catalytic mesoporous materials. <i>Journal of Supercritical Fluids</i> , 2017, 120, 240-248.	1.6	31
107	Measurement of static dielectric constants of supercritical fluid solvents and cosolvents: Carbon dioxide and argon, carbon dioxide, and methanol at 323 K and pressures to 25 MPa. <i>Journal of Supercritical Fluids</i> , 1990, 3, 162-168.	1.6	30
108	Spectroscopic Analysis of Binary Mixed-Solvent-Polyimide Precursor Systems with the Preferential Solvation Model for Determining Solute-Centric Kamlet-Taft Solvatochromic Parameters. <i>Journal of Physical Chemistry B</i> , 2015, 119, 14738-14749.	1.2	30

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109	Nutrient recycle from defatted microalgae (<i>Aurantiochytrium</i>) with hydrothermal treatment for microalgae cultivation. <i>Bioresource Technology</i> , 2017, 228, 186-192.	4.8	30
110	Ferromagnetic Lignin-Derived Ordered Mesoporous Carbon for Catalytic Hydrogenation of Furfural to Furfuryl Alcohol. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 18157-18166.	3.2	30
111	Measurements of vapor-liquid equilibrium in both binary carbon dioxide-ethanol and ternary carbon dioxide-ethanol-water systems with a newly developed flow-type apparatus. <i>Fluid Phase Equilibria</i> , 2015, 405, 96-100.	1.4	29
112	Antioxidation Properties and Surface Interactions of Polyvinylpyrrolidone-Capped Zerovalent Copper Nanoparticles Synthesized in Supercritical Water. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 1627-1634.	4.0	28
113	Solvent Polarity of Cyclic Ketone (Cyclopentanone, Cyclohexanone): Alcohol (Methanol, Ethanol) Renewable Mixed-Solvent Systems for Applications in Pharmaceutical and Chemical Processing. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 7331-7344.	1.8	28
114	Effects of nitrate and oxygen on photoautotrophic lipid production from <i>Chlorococcum littorale</i> . <i>Bioresource Technology</i> , 2011, 102, 3286-3292.	4.8	27
115	Phase formation of Mn-doped zinc silicate in water at high-temperatures and high-pressures. <i>Journal of Supercritical Fluids</i> , 2007, 43, 214-221.	1.6	26
116	Hydrothermal separation of lignin from bark of Japanese cedar. <i>Journal of Supercritical Fluids</i> , 2018, 133, 696-703.	1.6	26
117	Hydrogen gas-free processes for single-step preparation of transition-metal bifunctional catalysts and one-pot β -valerolactone synthesis in supercritical CO ₂ -ionic liquid systems. <i>Journal of Supercritical Fluids</i> , 2019, 147, 263-270.	1.6	26
118	Destruction of Decachlorobiphenyl Using Supercritical Water Oxidation. <i>Energy & Fuels</i> , 2004, 18, 1257-1265.	2.5	25
119	Measurement of pure hydrogen and pure carbon dioxide adsorption equilibria for THF clathrate hydrate and tetra-n-butyl ammonium bromide semi-clathrate hydrate. <i>Fluid Phase Equilibria</i> , 2013, 357, 80-85.	1.4	25
120	Preparation and magnetization of hematite nanocrystals with amorphous iron oxide layers by hydrothermal conditions. <i>Materials Research Bulletin</i> , 2002, 37, 949-955.	2.7	24
121	Formation of β - and γ -phase Mn-doped zinc silicate in supercritical water and its luminescence properties at Si/(Zn+Mn) ratios from 0.25 to 1.25. <i>Journal of Crystal Growth</i> , 2008, 310, 4185-4189.	0.7	24
122	Measurement and modeling of CO ₂ solubility in [bmim]Cl and [bmim][Tf ₂ N] mixed-ionic liquids for design of versatile reaction solvents. <i>Journal of Supercritical Fluids</i> , 2018, 132, 42-50.	1.6	24
123	Control of methanol oxidation by ionic behavior in supercritical water. <i>Chemical Communications</i> , 2001, , 2270-2271.	2.2	23
124	Formation of zinc silicate in supercritical water followed with in situ synchrotron radiation X-ray diffraction. <i>Journal of Supercritical Fluids</i> , 2009, 49, 351-355.	1.6	23
125	A Digital Variable-Angle Rolling-Ball Viscometer for Measurement of Viscosity, Density, and Bubble-Point Pressure of CO ₂ and Organic Liquid Mixtures. <i>International Journal of Thermophysics</i> , 2010, 31, 1896-1903.	1.0	23
126	The 13 Principles of Green Chemistry and Engineering for a Greener Africa. <i>Green Chemistry</i> , 2011, 13, 1059.	4.6	23

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127	Viscosity reduction of cellulose + 1-butyl-3-methylimidazolium acetate in the presence of CO ₂ . <i>Cellulose</i> , 2013, 20, 1353-1367.	2.4	23
128	Continuous synthesis of Zn ₂ SiO ₄ :Mn ²⁺ fine particles in supercritical water at temperatures of 400–500 °C and pressures of 30–35 MPa. <i>Journal of Supercritical Fluids</i> , 2010, 54, 266-271.	1.6	21
129	Decomposition kinetics and recycle of binary hydrogen + tetrahydrofuran clathrate hydrate. <i>AICHE Journal</i> , 2011, 57, 265-272.	1.8	21
130	Reaction of d-glucose in water at high temperatures (410 °C) and pressures (180 MPa) for the production of dyes and nano-particles. <i>Journal of Supercritical Fluids</i> , 2011, 56, 41-47.	1.6	21
131	Strategies for using hydrogen-bond donor/acceptor solvent pairs in developing green chemical processes with supercritical fluids. <i>Journal of Supercritical Fluids</i> , 2018, 141, 182-197.	1.6	21
132	Hydrogen and carbon dioxide adsorption with tetra-n-butyl ammonium semi-clathrate hydrates for gas separations. <i>AICHE Journal</i> , 2015, 61, 992-1003.	1.8	20
133	High pressure densities for mixed ionic liquids having different functionalities: 1-butyl-3-methylimidazolium chloride and 1-butyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide. <i>Journal of Chemical Thermodynamics</i> , 2017, 108, 7-17.	1.0	20
134	Controlled Conversion of Proteins into High-Molecular-Weight Peptides without Additives with High-Temperature Water and Fast Heating Rates. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 7709-7715.	3.2	20
135	Perfluorocarboxylic acid counter ion enhanced extraction of aqueous alkali metal ions with supercritical carbon dioxide. <i>Analyst</i> , 1999, 124, 1507-1511.	1.7	19
136	Coaxial probe and apparatus for measuring the dielectric spectra of high pressure liquids and supercritical fluid mixtures. <i>Review of Scientific Instruments</i> , 2000, 71, 4226.	0.6	19
137	Properties and phase equilibria of fluid mixtures as the basis for developing green chemical processes. <i>Fluid Phase Equilibria</i> , 2011, 302, 65-73.	1.4	19
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