

MarÃ-a JosÃ© Cocero

List of Publications by Year in descending order

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208
papers

9,122
citations

31902

53
h-index

60497

81
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212
all docs

212
docs citations

212
times ranked

7495
citing authors

#	ARTICLE	IF	CITATIONS
1	Supercritical water oxidation: A technical review. <i>AIChE Journal</i> , 2006, 52, 3933-3951.	1.8	349
2	Encapsulation and co-precipitation processes with supercritical fluids: Fundamentals and applications. <i>Journal of Supercritical Fluids</i> , 2009, 47, 546-555.	1.6	333
3	Micronization processes with supercritical fluids: Fundamentals and mechanisms. <i>Advanced Drug Delivery Reviews</i> , 2008, 60, 339-350.	6.6	264
4	Chemical recycling of carbon fibre reinforced composites in nearcritical and supercritical water. <i>Composites Part A: Applied Science and Manufacturing</i> , 2008, 39, 454-461.	3.8	247
5	Chemical recycling of carbon fibre composites using alcohols under subcritical and supercritical conditions. <i>Journal of Supercritical Fluids</i> , 2008, 46, 83-92.	1.6	214
6	Assisted extraction of rosemary antioxidants with green solvents. <i>Journal of Food Engineering</i> , 2012, 109, 98-103.	2.7	201
7	New trends for design towards sustainability in chemical engineering: Green engineering. <i>Chemical Engineering Journal</i> , 2007, 133, 7-30.	6.6	176
8	Understanding biomass fractionation in subcritical & supercritical water. <i>Journal of Supercritical Fluids</i> , 2018, 133, 550-565.	1.6	174
9	Numerical modeling of jet hydrodynamics, mass transfer, and crystallization kinetics in the supercritical antisolvent (SAS) process. <i>Journal of Supercritical Fluids</i> , 2004, 32, 203-219.	1.6	133
10	Supercritical anti solvent precipitation of lycopene. <i>Journal of Supercritical Fluids</i> , 2006, 36, 225-235.	1.6	120
11	Supercritical water oxidation process under energetically self-sufficient operation. <i>Journal of Supercritical Fluids</i> , 2002, 24, 37-46.	1.6	109
12	Formulation of lavender essential oil with biopolymers by PGSS for application as biocide in ecological agriculture. <i>Journal of Supercritical Fluids</i> , 2010, 54, 369-377.	1.6	103
13	Precipitation and encapsulation of rosemary antioxidants by supercritical antisolvent process. <i>Journal of Food Engineering</i> , 2012, 109, 9-15.	2.7	103
14	Carotenoid processing with supercritical fluids. <i>Journal of Food Engineering</i> , 2009, 93, 255-265.	2.7	101
15	Co-precipitation of carotenoids and bio-polymers with the supercritical anti-solvent process. <i>Journal of Supercritical Fluids</i> , 2007, 41, 138-147.	1.6	99
16	Chemical recycling of polycarbonate in a semi-continuous lab-plant. A green route with methanol and methanol-water mixtures. <i>Green Chemistry</i> , 2005, 7, 380.	4.6	98
17	Formulation of Î²-carotene by precipitation from pressurized ethyl acetate-on-water emulsions for application as natural colorant. <i>Food Hydrocolloids</i> , 2012, 26, 17-27.	5.6	95
18	Kinetic analysis of cellulose depolymerization reactions in near critical water. <i>Journal of Supercritical Fluids</i> , 2013, 75, 48-57.	1.6	91

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19	Extraction of phytochemicals from the medicinal plant <i>Clinacanthus nutans</i> Lindau by microwave-assisted extraction and supercritical carbon dioxide extraction. <i>Industrial Crops and Products</i> , 2015, 74, 83-94.	2.5	89
20	Crystallization of β -carotene by a GAS process in batch Effect of operating conditions. <i>Journal of Supercritical Fluids</i> , 2002, 22, 237-245.	1.6	84
21	Precipitation of lutein and co-precipitation of lutein and poly-lactic acid with the supercritical anti-solvent process. <i>Chemical Engineering and Processing: Process Intensification</i> , 2008, 47, 1594-1602.	1.8	84
22	Formulation of a natural biocide based on lavandin essential oil by emulsification using modified starches. <i>Chemical Engineering and Processing: Process Intensification</i> , 2009, 48, 1121-1128.	1.8	83
23	Acid and Alkali Catalyzed Hydrothermal Liquefaction of Dairy Manure Digestate and Food Waste. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 2724-2732.	3.2	82
24	Supercritical fluid extraction of sunflower seed oil with CO ₂ -ethanol mixtures. <i>JAOCs, Journal of the American Oil Chemists' Society</i> , 1996, 73, 1573-1578.	0.8	81
25	Supercritical Water Oxidation in a Pilot Plant of Nitrogenous Compounds: 2-Propanol Mixtures in the Temperature Range 500-750 °C. <i>Industrial & Engineering Chemistry Research</i> , 2000, 39, 3707-3716.	1.8	80
26	Mathematical model of supercritical extraction applied to oil seed extraction by CO ₂ -saturated alcohol I. Desorption model. <i>Journal of Supercritical Fluids</i> , 2001, 20, 229-243.	1.6	77
27	A process for generating power from the oxidation of coal in supercritical water. <i>Fuel</i> , 2004, 83, 195-204.	3.4	76
28	The influence of the energy absorbed from microwave pretreatment on biogas production from secondary wastewater sludge. <i>Bioresource Technology</i> , 2011, 102, 10849-10854.	4.8	76
29	High glucose selectivity in pressurized water hydrolysis of cellulose using ultra-fast reactors. <i>Bioresource Technology</i> , 2013, 135, 697-703.	4.8	74
30	Thermal degradation of grape marc polyphenols. <i>Food Chemistry</i> , 2014, 159, 361-366.	4.2	74
31	Governing Chemistry of Cellulose Hydrolysis in Supercritical Water. <i>ChemSusChem</i> , 2015, 8, 1026-1033.	3.6	72
32	Simultaneous and selective recovery of cellulose and hemicellulose fractions from wheat bran by supercritical water hydrolysis. <i>Green Chemistry</i> , 2015, 17, 610-618.	4.6	72
33	Supercritical impregnation of lavandin (<i>Lavandula hybrida</i>) essential oil in modified starch. <i>Journal of Supercritical Fluids</i> , 2011, 58, 313-319.	1.6	71
34	Supercritical antisolvent precipitation from an emulsion: β -Carotene nanoparticle formation. <i>Journal of Supercritical Fluids</i> , 2009, 51, 238-247.	1.6	69
35	Analysis of the scale up of a transpiring wall reactor with a hydrothermal flame as a heat source for the supercritical water oxidation. <i>Journal of Supercritical Fluids</i> , 2011, 56, 21-32.	1.6	68
36	Characterization of rosemary essential oil for biodegradable emulsions. <i>Industrial Crops and Products</i> , 2012, 37, 137-140.	2.5	67

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37	Green tea encapsulation by means of high pressure antisolvent coprecipitation. Journal of Supercritical Fluids, 2011, 56, 304-311.	1.6	65
38	Antimicrobial activity of lavandin essential oil formulations against three pathogenic food-borne bacteria. Industrial Crops and Products, 2013, 42, 243-250.	2.5	65
39	Supercritical water oxidation with hydrothermal flame as internal heat source: Efficient and clean energy production from waste. Journal of Supercritical Fluids, 2015, 96, 103-113.	1.6	65
40	Microwave and ultrasound pre-treatments to enhance anthocyanins extraction from different wine lees. Food Chemistry, 2019, 272, 258-266.	4.2	65
41	Destruction of an industrial wastewater by supercritical water oxidation in a transpiring wall reactor. Journal of Hazardous Materials, 2006, 137, 965-971.	6.5	64
42	Valorization of solid wastes from essential oil industry. Journal of Food Engineering, 2011, 104, 196-201.	2.7	64
43	Experimental study of the supercritical water oxidation of recalcitrant compounds under hydrothermal flames using tubular reactors. Water Research, 2011, 45, 2485-2495.	5.3	63
44	Supercritical anti-solvent precipitation of carotenoid fraction from pink shrimp residue: Effect of operational conditions on encapsulation efficiency. Journal of Supercritical Fluids, 2012, 66, 342-349.	1.6	63
45	Pressure and temperature effect on cellulose hydrolysis in pressurized water. Chemical Engineering Journal, 2015, 276, 145-154.	6.6	61
46	Effect of the Transpiring Wall on the Behavior of a Supercritical Water Oxidation Reactor: Modeling and Experimental Results. Industrial & Engineering Chemistry Research, 2006, 45, 3438-3446.	1.8	60
47	Reaction engineering for process intensification of supercritical water biomass refining. Journal of Supercritical Fluids, 2015, 96, 21-35.	1.6	60
48	Production of stabilized sub-micrometric particles of carotenoids using supercritical fluid extraction of emulsions. Journal of Supercritical Fluids, 2012, 61, 167-174.	1.6	59
49	Enhanced Delivery of Quercetin by Encapsulation in Poloxamers by Supercritical Antisolvent Process. Industrial & Engineering Chemistry Research, 2014, 53, 4318-4327.	1.8	59
50	Experimental study of the operational parameters of a transpiring wall reactor for supercritical water oxidation. Journal of Supercritical Fluids, 2006, 39, 70-79.	1.6	58
51	The influence of Na ₂ SO ₄ on the CO ₂ solubility in water at high pressure. Fluid Phase Equilibria, 2005, 238, 220-228.	1.4	57
52	Cool wall reactor for supercritical water oxidation. Journal of Supercritical Fluids, 2004, 31, 41-55.	1.6	56
53	Synthesis of titanium oxide particles in supercritical CO ₂ : Effect of operational variables in the characteristics of the final product. Journal of Supercritical Fluids, 2007, 39, 453-461.	1.6	56
54	Liquid-Vapor Equilibrium of the Systems Butylmethylimidazolium Nitrate-CO ₂ and Hydroxypropylmethylimidazolium Nitrate-CO ₂ at High Pressure: Influence of Water on the Phase Behavior. Journal of Physical Chemistry B, 2008, 112, 13532-13541.	1.2	55

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55	Microwave pretreatment to improve extraction efficiency and polyphenol extract richness from grape pomace. Effect on antioxidant bioactivity. Food and Bioproducts Processing, 2017, 106, 162-170.	1.8	54
56	A predictive approach in modeling and simulation of heat and mass transfer during microwave heating. Application to SFME of essential oil of Lavandin Super. Chemical Engineering Science, 2012, 68, 192-201.	1.9	53
57	Ultrasound-assisted extraction of β -glucans from barley. LWT - Food Science and Technology, 2013, 50, 57-63.	2.5	53
58	Numerical modelling of hydrothermal flames. Micromixing effects over turbulent reaction rates. Journal of Supercritical Fluids, 2009, 50, 146-154.	1.6	52
59	Microwave-assisted extraction of polyphenols from Clinacanthus nutans Lindau medicinal plant: Energy perspective and kinetics modeling. Chemical Engineering and Processing: Process Intensification, 2015, 97, 66-74.	1.8	52
60	Sludge destruction by means of a hydrothermal flame. Optimization of ammonia destruction conditions. Chemical Engineering Journal, 2013, 232, 1-9.	6.6	51
61	Development of barley and yeast β -glucan aerogels for drug delivery by supercritical fluids. Journal of CO2 Utilization, 2017, 22, 262-269.	3.3	50
62	Impregnation of medicinal plant phytochemical compounds into silica and alginate aerogels. Journal of Supercritical Fluids, 2016, 116, 251-263.	1.6	49
63	Phenolic characterization of aging wine lees: Correlation with antioxidant activities. Food Chemistry, 2018, 259, 188-195.	4.2	49
64	Supercritical extraction of unsaturated products. Degradation of β -carotene in supercritical extraction processes. Journal of Supercritical Fluids, 2000, 19, 39-44.	1.6	48
65	Quantification of mixing efficiency in turbulent supercritical water hydrothermal reactors. Chemical Engineering Science, 2011, 66, 1576-1589.	1.9	48
66	Formulation of β -carotene with soybean lecithin by PGSS (Particles from Gas Saturated) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 302 Td (S	1.6	46
67	Production of Polymorphs of Ibuprofen Sodium by Supercritical Antisolvent (SAS) Precipitation. Crystal Growth and Design, 2009, 9, 2504-2511.	1.4	45
68	Supercritical water processes: Future prospects. Journal of Supercritical Fluids, 2018, 134, 124-132.	1.6	44
69	Formulation of β -carotene with poly-(μ -caprolactones) by PGSS process. Powder Technology, 2012, 217, 77-83.	2.1	43
70	A computational fluid dynamics study of supercritical antisolvent precipitation: Mixing effects on particle size. AIChE Journal, 2012, 58, 385-398.	1.8	43
71	Development of water-soluble β -carotene formulations by high-temperature, high-pressure emulsification and antisolvent precipitation. Food Hydrocolloids, 2014, 37, 14-24.	5.6	42
72	Mathematical model of supercritical CO2 adsorption on activated carbon. Journal of Supercritical Fluids, 2004, 32, 193-201.	1.6	40

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73	Computational fluid dynamics simulation of a transpiring wall reactor for supercritical water oxidation. <i>Chemical Engineering Journal</i> , 2010, 158, 431-440.	6.6	40
74	Supercritical carbon dioxide fractionation of Lavandin essential oil: Experiments and modeling. <i>Journal of Supercritical Fluids</i> , 2008, 45, 181-188.	1.6	39
75	Production of new hybrid systems for drug delivery by PGSS (Particles from Gas Saturated Solutions) process. <i>Journal of Supercritical Fluids</i> , 2013, 81, 226-235.	1.6	39
76	Experimental study of hydrothermal flames initiation using different static mixer configurations. <i>Journal of Supercritical Fluids</i> , 2009, 50, 240-249.	1.6	38
77	Hydrolysis of cellulose in supercritical water: reagent concentration as a selectivity factor. <i>Cellulose</i> , 2015, 22, 2231-2243.	2.4	38
78	Supercritical water oxidation for energy production by hydrothermal flame as internal heat source. Experimental results and energetic study. <i>Energy</i> , 2015, 90, 1584-1594.	4.5	38
79	Pretreatment Processes of Biomass for Biorefineries: Current Status and Prospects. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2019, 10, 289-310.	3.3	38
80	Aromatics from lignin through ultrafast reactions in water. <i>Green Chemistry</i> , 2019, 21, 1351-1360.	4.6	38
81	Modeling of a Transpiring Wall Reactor for the Supercritical Water Oxidation Using Simple Flow Patterns: A Comparison to Experimental Results. <i>Industrial & Engineering Chemistry Research</i> , 2005, 44, 3835-3845.	1.8	37
82	Quantitative Raman determination of hydrogen peroxide using the solvent as internal standard: Online application in the direct synthesis of hydrogen peroxide. <i>Chemical Engineering Journal</i> , 2011, 166, 1061-1065.	6.6	37
83	Spray Drying Formulation of Polyphenols-Rich Grape Marc Extract: Evaluation of Operating Conditions and Different Natural Carriers. <i>Food and Bioprocess Technology</i> , 2016, 9, 2046-2058.	2.6	37
84	Effect of synthesis conditions on photocatalytic activity of TiO ₂ powders synthesized in supercritical CO ₂ . <i>Journal of Supercritical Fluids</i> , 2009, 49, 233-238.	1.6	36
85	Pressurized hot water extraction of Î²-glucans from waxy barley. <i>Journal of Supercritical Fluids</i> , 2013, 73, 120-125.	1.6	36
86	Polyphenol-Rich Extracts Obtained from Winemaking Waste Streams as Natural Ingredients with Cosmeceutical Potential. <i>Antioxidants</i> , 2019, 8, 355.	2.2	36
87	Oxidative stability of sunflower oil extracted with supercritical carbon dioxide. <i>JAOCS, Journal of the American Oil Chemists' Society</i> , 1994, 71, 1251-1254.	0.8	35
88	Modeling steam distillation of essential oils: Application to lavandin super oil. <i>AIChE Journal</i> , 2008, 54, 909-917.	1.8	35
89	Co-oxidation of ammonia and isopropanol in supercritical water in a tubular reactor. <i>Chemical Engineering Research and Design</i> , 2014, 92, 2568-2574.	2.7	35
90	Production of water soluble quercetin formulations by pressurized ethyl acetate-in-water emulsion technique using natural origin surfactants. <i>Food Hydrocolloids</i> , 2015, 51, 295-304.	5.6	35

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91	Thermodynamics of binary mixtures containing organic carbonates. <i>Fluid Phase Equilibria</i> , 1991, 68, 151-161.	1.4	34
92	Supercritical Water Oxidation (SCWO) for Poly(ethylene terephthalate) (PET) Industry Effluents. <i>Industrial & Engineering Chemistry Research</i> , 2000, 39, 4652-4657.	1.8	34
93	Separation of enantiomers by diastereomeric salt formation and precipitation in supercritical carbon dioxide. <i>Journal of Supercritical Fluids</i> , 2007, 40, 67-73.	1.6	34
94	Prediction of vapour-liquid and liquid-liquid equilibria and of enthalpies of mixing in linear carbonates + n-alkane or + cyclohexane mixtures using DISQUAC. <i>Fluid Phase Equilibria</i> , 1991, 64, 1-11.	1.4	33
95	Scale-up for a process of supercritical extraction with adsorption of solute onto active carbon. Application to soil remediation. <i>Journal of Supercritical Fluids</i> , 2002, 24, 123-135.	1.6	33
96	Application of a group contribution equation of state for the thermodynamic modeling of the binary systems CO ₂ -1-butyl-3-methyl imidazolium nitrate and CO ₂ -1-hydroxy-1-propyl-3-methyl imidazolium nitrate. <i>Journal of Supercritical Fluids</i> , 2009, 50, 112-117.	1.6	33
97	Transformation of glucose into added value compounds in a hydrothermal reaction media. <i>Journal of Supercritical Fluids</i> , 2015, 98, 204-210.	1.6	33
98	Energetic approach of biomass hydrolysis in supercritical water. <i>Bioresource Technology</i> , 2015, 179, 136-143.	4.8	33
99	Two-parameter model for mass transfer processes between solid matrixes and supercritical fluids: Analytical solution. <i>Journal of Supercritical Fluids</i> , 2007, 41, 257-266.	1.6	32
100	Determination of Phase Equilibrium (Solid-Liquid-Gas) in Poly-(μ -caprolactone)-Carbon Dioxide Systems. <i>Journal of Chemical & Engineering Data</i> , 2010, 55, 2781-2785.	1.0	32
101	Experimental study of hydrothermal flames formation using a tubular injector in a refrigerated reaction chamber. Influence of the operational and geometrical parameters. <i>Journal of Supercritical Fluids</i> , 2011, 59, 140-148.	1.6	32
102	Mathematical modeling of the mass transfer from aqueous solutions in a supercritical fluid during particle formation. <i>Journal of Supercritical Fluids</i> , 2007, 41, 126-137.	1.6	31
103	Influence of the enzyme concentration on the phase behaviour for developing a homogeneous enzymatic reaction in ionic liquid-CO ₂ media. <i>Green Chemistry</i> , 2008, 10, 1049.	4.6	31
104	Experimental Performance and Modeling of a New Cooled-Wall Reactor for the Supercritical Water Oxidation. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 6262-6272.	1.8	31
105	Mathematical modeling of the fractionation of liquids with supercritical CO ₂ in a countercurrent packed column. <i>Journal of Supercritical Fluids</i> , 2007, 39, 304-314.	1.6	30
106	Direct synthesis of hydrogen peroxide in methanol and water using scCO ₂ and N ₂ as diluents. <i>Green Chemistry</i> , 2010, 12, 282-289.	4.6	30
107	Production of stabilized quercetin aqueous suspensions by supercritical fluid extraction of emulsions. <i>Journal of Supercritical Fluids</i> , 2015, 100, 34-45.	1.6	30
108	Encapsulation of resveratrol on lecithin and β -glucans to enhance its action against <i>Botrytis cinerea</i> . <i>Journal of Food Engineering</i> , 2015, 165, 13-21.	2.7	30

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109	Economic Analysis of an Integrated Annatto Seeds-Sugarcane Biorefinery Using Supercritical CO ₂ Extraction as a First Step. <i>Materials</i> , 2016, 9, 494.	1.3	30
110	Numerical analysis of high-pressure fluid jets: Application to RTD prediction in supercritical reactors. <i>Journal of Supercritical Fluids</i> , 2009, 49, 249-255.	1.6	29
111	Supercritical fluidized bed modeling. <i>Journal of Supercritical Fluids</i> , 2009, 50, 54-60.	1.6	29
112	Production of water-soluble β -carotene micellar formulations by novel emulsion techniques. <i>Chemical Engineering and Processing: Process Intensification</i> , 2013, 74, 90-96.	1.8	29
113	Supercritical antisolvent precipitation of polyphenols from grape marc extract. <i>Journal of Supercritical Fluids</i> , 2016, 118, 54-63.	1.6	29
114	Understanding bottom-up continuous hydrothermal synthesis of nanoparticles using empirical measurement and computational simulation. <i>Nano Research</i> , 2016, 9, 3377-3387.	5.8	29
115	Production of saccharides from sugar beet pulp by ultrafast hydrolysis in supercritical water. <i>Journal of Cleaner Production</i> , 2018, 204, 888-895.	4.6	29
116	Storage stability and simulated gastrointestinal release of spray dried grape marc phenolics. <i>Food and Bioproducts Processing</i> , 2018, 112, 96-107.	1.8	29
117	Particle diameter prediction in supercritical nanoparticle synthesis using three-dimensional CFD simulations. Validation for anatase titanium dioxide production. <i>Chemical Engineering Science</i> , 2009, 64, 3051-3059.	1.9	28
118	Teaching advanced equations of state in applied thermodynamics courses using open source programs. <i>Education for Chemical Engineers</i> , 2011, 6, e114-e121.	2.8	28
119	Ionic Liquid as Reaction Media for the Production of Cellulose-Derived Polymers from Cellulosic Biomass. <i>ChemEngineering</i> , 2017, 1, 10.	1.0	28
120	Hydrothermal fractionation of grape seeds in subcritical water to produce oil extract, sugars and lignin. <i>Catalysis Today</i> , 2015, 257, 160-168.	2.2	27
121	Chemical composition and extraction kinetics of Holm oak (<i>Quercus ilex</i>) hemicelluloses using subcritical water. <i>Journal of Supercritical Fluids</i> , 2017, 129, 56-62.	1.6	27
122	Encapsulation of Lavandin Essential Oil in Poly(ϵ -caprolactones) by PGSS Process. <i>Chemical Engineering and Technology</i> , 2013, 36, 1187-1192.	0.9	26
123	Fixed-bed extraction of β -glucan from cereals by means of pressurized hot water. <i>Journal of Supercritical Fluids</i> , 2013, 82, 122-128.	1.6	26
124	Co-precipitation of anthocyanins of the extract obtained from blackberry residues by pressurized antisolvent process. <i>Journal of Supercritical Fluids</i> , 2018, 137, 81-92.	1.6	26
125	Supercritical CO ₂ encapsulation of bioactive molecules in carboxylate based MOFs. <i>Journal of CO₂ Utilization</i> , 2019, 30, 38-47.	3.3	26
126	β -Glucan recovery from <i>Ganoderma lucidum</i> by means of pressurized hot water and supercritical CO ₂ . <i>Food and Bioproducts Processing</i> , 2016, 98, 21-28.	1.8	24

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127	Supercritical CO ₂ impregnation of Radiata pine with organic fungicides. <i>Journal of Supercritical Fluids</i> , 2007, 40, 462-469.	1.6	23
128	Modelling residence time distribution in chemical reactors: A novel generalised n-laminar model. <i>Journal of Supercritical Fluids</i> , 2007, 41, 82-91.	1.6	23
129	Direct synthesis of H ₂ O ₂ in methanol at low pressures over Pd/C catalyst: Semi-continuous process. <i>Applied Catalysis A: General</i> , 2010, 386, 28-33.	2.2	23
130	Estimation of lower flammability limits in high-pressure systems. Application to the direct synthesis of hydrogen peroxide using supercritical and near-critical CO ₂ and air as diluents. <i>Journal of Supercritical Fluids</i> , 2011, 56, 33-40.	1.6	23
131	Steric and inductive effects in binary mixtures of organic carbonates with aromatic hydrocarbons or tetrachloromethane. <i>Fluid Phase Equilibria</i> , 1991, 69, 81-89.	1.4	22
132	Kinetic model for isopropanol oxidation in supercritical water in hydrothermal flame regime and analysis. <i>Journal of Supercritical Fluids</i> , 2013, 76, 41-47.	1.6	22
133	Influence of water concentration in the viscosities and densities of cellulose dissolving ionic liquids. Correlation of viscosity data. <i>Journal of Chemical Thermodynamics</i> , 2015, 91, 8-16.	1.0	22
134	Measurement and estimation of aromatic plant dielectric properties. Application to low moisture rosemary. <i>Industrial Crops and Products</i> , 2011, 33, 697-703.	2.5	21
135	CFD-Aspen Plus interconnection method. Improving thermodynamic modeling in computational fluid dynamic simulations. <i>Computers and Chemical Engineering</i> , 2018, 113, 152-161.	2.0	21
136	Modelling of the phase behaviour for the direct synthesis of dimethyl carbonate from CO ₂ and methanol at supercritical or near critical conditions. <i>Journal of Chemical Thermodynamics</i> , 2007, 39, 536-549.	1.0	20
137	Energy recovery from effluents of supercritical water oxidation reactors. <i>Journal of Supercritical Fluids</i> , 2015, 104, 1-9.	1.6	20
138	Hydrothermal fractionation of woody biomass: Lignin effect on sugars recovery. <i>Bioresource Technology</i> , 2015, 191, 124-132.	4.8	20
139	RESS process in coating applications in a high pressure fluidized bed environment: Bottom and top spray experiments. <i>Chemical Engineering Journal</i> , 2008, 144, 531-539.	6.6	19
140	Decomposition reaction of H ₂ O ₂ over Pd/C catalyst in an aqueous medium at high pressure: Detailed kinetic study and modelling. <i>Journal of Supercritical Fluids</i> , 2011, 57, 227-235.	1.6	19
141	Crystallization of Caffeine by Supercritical Antisolvent (SAS) Process: Analysis of Process Parameters and Control of Polymorphism. <i>Crystal Growth and Design</i> , 2012, 12, 1943-1951.	1.4	19
142	Selective transformation of fructose and high fructose content biomass into lactic acid in supercritical water. <i>Catalysis Today</i> , 2015, 255, 80-86.	2.2	19
143	Development of multicore hybrid particles for drug delivery through the precipitation of CO ₂ saturated emulsions. <i>International Journal of Pharmaceutics</i> , 2015, 478, 9-18.	2.6	19
144	Quercetin loaded particles production by means of supercritical fluid extraction of emulsions: Process scale-up study and thermo-economic evaluation. <i>Food and Bioproducts Processing</i> , 2017, 103, 27-38.	1.8	19

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145	Nonstationary model of the semicontinuous depolymerization of polycarbonate. <i>AIChE Journal</i> , 2006, 52, 4186-4199.	1.8	18
146	Application of the Anderkoâ€Pitzer EoS to the calculation of thermodynamical properties of systems involved in the supercritical water oxidation process. <i>Journal of Supercritical Fluids</i> , 2007, 42, 27-35.	1.6	18
147	Uncatalysed wet oxidation of d-glucose with hydrogen peroxide and its combination with hydrothermal electrolysis. <i>Carbohydrate Research</i> , 2012, 349, 33-38.	1.1	18
148	Dielectric properties of grape marc: Effect of temperature, moisture content and sample preparation method. <i>Journal of Food Engineering</i> , 2013, 119, 33-39.	2.7	18
149	Melting point depression effect with CO ₂ in high melting temperature cellulose dissolving ionic liquids. Modeling with group contribution equation of state. <i>Journal of Supercritical Fluids</i> , 2016, 107, 590-604.	1.6	18
150	Measurement and correlation of the dielectric properties of a grape pomace extraction media. Effect of temperature and composition. <i>Journal of Food Engineering</i> , 2017, 197, 98-106.	2.7	18
151	Simulation of the supercritical CO ₂ extraction from natural matrices in packed bed columns: User-friendly simulator tool using Excel. <i>Journal of Supercritical Fluids</i> , 2016, 116, 198-208.	1.6	17
152	Scaling up the production of sugars from agricultural biomass by ultrafast hydrolysis in supercritical water. <i>Journal of Supercritical Fluids</i> , 2019, 143, 242-250.	1.6	17
153	Residence time distribution studies of high pressure fluidized bed of microparticles. <i>Journal of Supercritical Fluids</i> , 2008, 44, 433-440.	1.6	16
154	Behavior of an organic solvent drop during the supercritical extraction of emulsions. <i>AIChE Journal</i> , 2010, 56, 1184-1195.	1.8	16
155	Numerical study of the influence of geometrical and operational parameters in the behavior of a hydrothermal flame in vessel reactors. <i>Chemical Engineering Science</i> , 2014, 112, 47-55.	1.9	16
156	Titanium dioxide nanoparticle coating in fluidized bed via supercritical anti-solvent process (SAS). <i>Chemical Engineering Journal</i> , 2015, 279, 425-432.	6.6	16
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