Bala Subramaniam

List of Publications by Year
in descending order

213 papers	6,994 citations	53794 45 h-index	79698 73 g-index
220 all docs	220 docs citations	220 times ranked	5630 citing authors

#	Article	IF	Citations
1	Gas-Expanded Liquids. Chemical Reviews, 2007, 107, 2666-2694.	47.7	521
2	Pharmaceutical Processing with Supercritical Carbon Dioxide. Journal of Pharmaceutical Sciences, 1997, 86, 885-890.	3.3	378
3	Reactions in supercritical fluids - a review. Industrial & Engineering Chemistry Process Design and Development, 1986, 25, 1-12.	0.6	212
4	CO2-Expanded Solvents:Â Unique and Versatile Media for Performing Homogeneous Catalytic Oxidations. Journal of the American Chemical Society, 2002, 124, 2513-2517.	13.7	180
5	Catalytic oxidations in carbon dioxide-based reaction media, including novel CO2-expanded phases. Coordination Chemistry Reviews, 2001, 219-221, 789-820.	18.8	162
6	Aqueous phase hydrogenolysis of glycerol to 1,2-propanediol without external hydrogen addition. Catalysis Today, 2010, 156, 31-37.	4.4	157
7	Cu-Based Catalysts Show Low Temperature Activity for Glycerol Conversion to Lactic Acid. ACS Catalysis, 2011, 1, 548-551.	11.2	147
8	Lattice-Matched Bimetallic CuPd-Graphene Nanocatalysts for Facile Conversion of Biomass-Derived Polyols to Chemicals. ACS Nano, 2013, 7, 1309-1316.	14.6	112
9	Catalytic Hydroprocessing of p-Cresol: Metal, Solvent and Mass-Transfer Effects. Topics in Catalysis, 2012, 55, 129-139.	2.8	109
10	Improved 1-butene/isobutane alkylation with acidic ionic liquids and tunable acid/ionic liquid mixtures. Journal of Catalysis, 2009, 268, 243-250.	6.2	107
11	Environmentally benign multiphase catalysis with dense phase carbon dioxide. Applied Catalysis B: Environmental, 2002, 37, 279-292.	20.2	100
12	Enhancing the stability of porous catalysts with supercritical reaction media. Applied Catalysis A: General, 2001, 212, 199-213.	4.3	94
13	Extended Alkylate Production Activity during Fixed-Bed Supercritical 1-Butene/Isobutane Alkylation on Solid Acid Catalysts Using Carbon Dioxide as a Diluent. Industrial & Engineering Chemistry Research, 1998, 37, 1243-1250.	3.7	93
14	Kinetic investigations of unusual solvent effects during Ru/C catalyzed hydrogenation of model oxygenates. Journal of Catalysis, 2014, 309, 174-184.	6.2	91
15	Environmental impacts of ethylene production from diverse feedstocks and energy sources. Applied Petrochemical Research, 2014, 4, 167-179.	1.3	89
16	Exceptional performance of bimetallic Pt1Cu3/TiO2 nanocatalysts for oxidation of gluconic acid and glucose with O2 to glucaric acid. Journal of Catalysis, 2015, 330, 323-329.	6.2	88
17	Optimization of Co/Mn/Br-Catalyzed Oxidation of 5-Hydroxymethylfurfural to Enhance 2,5-Furandicarboxylic Acid Yield and Minimize Substrate Burning. ACS Sustainable Chemistry and Engineering, 2016, 4, 3659-3668.	6.7	80
18	Autoxidation of Substituted Phenols Catalyzed by Cobalt Schiff Base Complexes in Supercritical Carbon Dioxide. Inorganic Chemistry, 2001, 40, 3336-3341.	4.0	78

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19	Aqueous Phase Hydrogenation of Acetic Acid and Its Promotional Effect on <i>p</i>-Cresol Hydrodeoxygenation. Energy & Fuels, 2013, 27, 487-493.	5.1	76
20	Sorbitol Hydrogenolysis over Hybrid Cu/CaO-Al₂O₃ Catalysts: Tunable Activity and Selectivity with Solid Base Incorporation. ACS Catalysis, 2015, 5, 6545-6558.	11.2	76
21	Synergistic Effects of Bimetallic PtPd/TiO₂ Nanocatalysts in Oxidation of Glucose to Glucaric Acid: Structure Dependent Activity and Selectivity. Industrial & Engineering Chemistry Research, 2016, 55, 2932-2945.	3.7	73
22	Gas-expanded liquids for sustainable catalysis and novel materials: Recent advances. Coordination Chemistry Reviews, 2010, 254, 1843-1853.	18.8	72
23	Oxidation of Glycerol to Dicarboxylic Acids Using Cobalt Catalysts. ACS Catalysis, 2016, 6, 4576-4583.	11.2	68
24	In situ FTIR investigations of reverse water gas shift reaction activity at supercritical conditions. Chemical Engineering Science, 2007, 62, 5062-5069.	3.8	67
25	Kinetic Modeling of Aqueous-Phase Glycerol Hydrogenolysis in a Batch Slurry Reactor. Industrial & Engineering Chemistry Research, 2010, 49, 10826-10835.	3.7	66
26	Niobium incorporated mesoporous silicate, Nb-KIT-6: Synthesis and characterization. Microporous and Mesoporous Materials, 2014, 190, 240-247.	4.4	66
27	Homogeneous catalytic hydroformylation of 1-octene in CO2-expanded solvent media. Chemical Engineering Science, 2004, 59, 4887-4893.	3.8	63
28	Synthesis and characterization of Zirconium incorporated ultra large pore mesoporous silicate, Zrâ€“KIT-6. Microporous and Mesoporous Materials, 2013, 167, 207-212.	4.4	61
29	Synthesis and Dehydration Activity of Novel Lewis Acidic Ordered Mesoporous Silicate: Zr-KIT-6. Industrial & Engineering Chemistry Research, 2013, 52, 15481-15487.	3.7	60
30	Atom Economical Aqueous-Phase Conversion (APC) of Biopolyols to Lactic Acid, Glycols, and Linear Alcohols Using Supported Metal Catalysts. ACS Sustainable Chemistry and Engineering, 2013, 1, 1453-1462.	6.7	59
31	Mixed alcohol dehydration over BrÃ¸nsted and Lewis acidic catalysts. Applied Catalysis A: General, 2016, 510, 110-124.	4.3	59
32	Fixed-bed hydrogenation of organic compounds in supercritical carbon dioxide. Chemical Engineering Science, 2001, 56, 1363-1369.	3.8	57
33	Application of CO2-expanded solvents in heterogeneous catalysis: a case study. Applied Catalysis B: Environmental, 2004, 49, 91-98.	20.2	57
34	Intensification of catalytic olefin hydroformylation in CO2-expanded media. AICHE Journal, 2006, 52, 2575-2581.	3.6	57
35	Phase Equilibria in Carbon Dioxide Expanded Solvents:Â Experiments and Molecular Simulations. Journal of Physical Chemistry B, 2006, 110, 13195-13202.	2.6	56
36	Is the Liquid-Phase H₂O₂-Based Ethylene Oxide Process More Economical and Greener Than the Gas-Phase O₂-Based Silver-Catalyzed Process?. Industrial & Engineering Chemistry Research, 2013, 52, 18-29.	3.7	53

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37	Fischer-tropsch synthesis in near-criticaln-hexane: Pressure-tuning effects. AICHE Journal, 1998, 44, 1889-1896.	3.6	52
38	Tungsten-incorporated cage-type mesoporous silicate: W-KIT-5. Microporous and Mesoporous Materials, 2013, 175, 43-49.	4.4	52
39	Towards highly selective ethylene epoxidation catalysts using hydrogen peroxide and tungsten- or niobium-incorporated mesoporous silicate (KIT-6). Catalysis Science and Technology, 2014, 4, 4433-4439.	4.1	52
40	Vapor-phase methanol and ethanol coupling reactions on CuMgAl mixed metal oxides. Applied Catalysis A: General, 2013, 455, 234-246.	4.3	51
41	Coking and activity of porous catalysts in supercritical reaction media. AICHE Journal, 1992, 38, 1027-1037.	3.6	50
42	Direct incorporation of tungsten into ultra-large-pore three-dimensional mesoporous silicate framework: W-KIT-6. Journal of Porous Materials, 2012, 19, 961-968.	2.6	50
43	Comparative Economic and Environmental Assessments of H₂O₂-based and Tertiary Butyl Hydroperoxide-based Propylene Oxide Technologies. ACS Sustainable Chemistry and Engineering, 2013, 1, 268-277.	6.7	49
44	Synthesis, Characterization, and Epoxidation Activity of Tungsten-Incorporated SBA-16 (W-SBA-16). Industrial & Engineering Chemistry Research, 2014, 53, 18833-18839.	3.7	49
45	Continuous homogeneous hydroformylation with bulky rhodium catalyst complexes retained by nano-filtration membranes. Applied Catalysis A: General, 2011, 393, 294-301.	4.3	47
46	Liquid phase oxidation of p-xylene to terephthalic acid at medium-high temperatures: multiple benefits of CO2-expanded liquids. Green Chemistry, 2010, 12, 260.	9.0	46
47	Mechanistic insights for enhancing activity and stability of Nb-incorporated silicates for selective ethylene epoxidation. Journal of Catalysis, 2016, 336, 75-84.	6.2	44
48	Ultravioletâ€“Visible Spectroscopy and Temperature-Programmed Techniques as Tools for Structural Characterization of Cu in CuMgAlOxMixed Metal Oxides. Journal of Physical Chemistry C, 2012, 116, 18207-18221.	3.1	43
49	Anisotropic growth of PtFe nanoclusters induced by lattice-mismatch: Efficient catalysts for oxidation of biopolyols to carboxylic acid derivatives. Journal of Catalysis, 2016, 337, 272-283.	6.2	43
50	A spray reactor concept for catalytic oxidation of p-xylene to produce high-purity terephthalic acid. Chemical Engineering Science, 2013, 104, 93-102.	3.8	42
51	Supercritical fluids and gas-expanded liquids as tunable media for multiphase catalytic reactions. Chemical Engineering Science, 2014, 115, 3-18.	3.8	40
52	Novel zirconium containing cage type silicate (Zr-KIT-5): An efficient Friedelâ€“Crafts alkylation catalyst. Chemical Engineering Journal, 2015, 278, 113-121.	12.7	40
53	Kinetics of homogeneous 5â€hydroxymethylfurfural oxidation to 2,5â€furandicarboxylic acid with Co/Mn/Br catalyst. AICHE Journal, 2017, 63, 162-171.	3.6	39
54	Autoxidation of 2,6-di-tert-butylphenol with cobalt Schiff base catalysts by oxygen in CO2-expanded liquids. Green Chemistry, 2004, 6, 387.	9.0	38

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55	Gas-Expanded Liquids: Fundamentals and Applications. ACS Symposium Series, 2009, , 3-37.	0.5	38
56	Toward a CO2-free ethylene oxide process: Homogeneous ethylene oxide in gas-expanded liquids. Chemical Engineering Science, 2010, 65, 128-134.	3.8	38
57	Zirconium-Incorporated Mesoporous Silicates Show Remarkable Lignin Depolymerization Activity. ACS Sustainable Chemistry and Engineering, 2017, 5, 7155-7164.	6.7	38
58	Homogeneous Catalytic Epoxidation of Organic Substrates in CO2-Expanded Solvents in the Presence of Water-Soluble Oxidants and Catalysts. Industrial & Engineering Chemistry Research, 2003, 42, 6505-6510.	3.7	36
59	Economic and Environmental Impact Analyses of Catalytic Olefin Hydroformylation in CO₂-Expanded Liquid (CXL) Media. Industrial & Engineering Chemistry Research, 2007, 46, 8687-8692.	3.7	36
60	A greener, pressure intensified propylene epoxidation process with facile product separation. Chemical Engineering Science, 2007, 62, 7282-7289.	3.8	36
61	Liquid CO₂ as a Safe and Benign Solvent for the Ozonolysis of Fatty Acid Methyl Esters. ACS Sustainable Chemistry and Engineering, 2015, 3, 3307-3314.	6.7	36
62	Continuous acylation of anisole by acetic anhydride in mesoporous solid acid catalysts: Reaction media effects on catalyst deactivation. Journal of Catalysis, 2007, 245, 184-190.	6.2	35
63	Multiphase Catalytic Hydrogenolysis/Hydrodeoxygenation Processes for Chemicals from Renewable Feedstocks: Kinetics, Mechanism, and Reaction Engineering. Industrial & Engineering Chemistry Research, 2013, 52, 15226-15243.	3.7	35
64	Highly selective homogeneous ethylene epoxidation in gas (ethylene)â€expanded liquid: Transport and kinetic studies. AICHE Journal, 2013, 59, 180-187.	3.6	34
65	Advancing the Use of Sustainability Metrics in <i>ACS Sustainable Chemistry & Engineering</i>. ACS Sustainable Chemistry and Engineering, 2018, 6, 1-1.	6.7	34
66	Shaping Effective Practices for Incorporating Sustainability Assessment in Manuscripts Submitted to <i>ACS Sustainable Chemistry & Engineering</i>: Catalysis and Catalytic Processes. ACS Sustainable Chemistry and Engineering, 2021, 9, 4936-4940.	6.7	34
67	Nanoparticulate Metal Complexes Prepared with Compressed Carbon Dioxide:â€‰ Correlation of Particle Morphology with Precursor Structure. Journal of the American Chemical Society, 2005, 127, 9698-9699.	13.7	33
68	Genesis of Strong BrÃ¸nsted Acid Sites in WZr-KIT-6 Catalysts and Enhancement of Ethanol Dehydration Activity. ACS Catalysis, 2018, 8, 4848-4859.	11.2	33
69	1-hexene isomerization on a Pt/Î³-Al2O3 catalyst: The dramatic effects of feed peroxides on catalyst activity. Chemical Engineering Science, 1996, 51, 2369-2377.	3.8	32
70	Catalytic conversion of CO2 and shale gas-derived substrates into saturated carbonates and derivatives: Catalyst design, performances and reaction mechanism. Journal of CO2 Utilization, 2019, 34, 115-148.	6.8	32
71	Dense Gas Antisolvent Precipitation:Â A Comparative Investigation of the GAS and PCA Techniques. Industrial & Engineering Chemistry Research, 2005, 44, 1502-1509.	3.7	31
72	Thermal Cracking and Catalytic Hydrocracking of a Colombian Vacuum Residue and Its Maltenes and Asphaltenes Fractions in Toluene. Energy & Fuels, 2017, 31, 3868-3877.	5.1	31

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73	Intriguing Catalyst (CaO) Pretreatment Effects and Mechanistic Insights during Propylene Carbonate Transesterification with Methanol. ACS Sustainable Chemistry and Engineering, 2017, 5, 4718-4729.	6.7	31
74	Transesterification of Propylene Carbonate with Methanol Using Feâ€“Mn Double Metal Cyanide Catalyst. ACS Sustainable Chemistry and Engineering, 2019, 7, 5698-5710.	6.7	31
75	Valorization of Grass Lignins: Swift and Selective Recovery of Pendant Aromatic Groups with Ozone. ACS Sustainable Chemistry and Engineering, 2018, 6, 71-76.	6.7	30
76	Solubilities of CO and H₂ in Neat and CO₂-Expanded Hydroformylation Reaction Mixtures Containing 1-Octene and Nonanal up to 353.15 K and 9 MPa. Journal of Chemical & Engineering Data, 2009, 54, 1633-1642.	1.9	28
77	Graphene oxide stabilized Cu2O for shape selective nanocatalysis. Journal of Materials Chemistry A, 2014, 2, 7147.	10.3	28
78	Kinetics on a supported catalyst at supercritical, nondeactivating conditions. AICHE Journal, 1999, 45, 1559-1565.	3.6	27
79	Vaporâ˘'Liquid Mass Transfer during Gas Antisolvent Recrystallization:Â Modeling and Experiments. Industrial & Engineering Chemistry Research, 2003, 42, 2171-2182.	3.7	26
80	Isobutane/butenealkylation on microporous and mesoporous solid acid catalysts: probing the pore transport effects with liquid and near critical reaction media. Green Chemistry, 2009, 11, 102-108.	9.0	26
81	Comparative Study of Nb-Incorporated Cubic Mesoporous Silicates as Epoxidation Catalysts. Industrial & Engineering Chemistry Research, 2015, 54, 4236-4242.	3.7	26
82	On-Line Gas Chromatographic Analysis of Fischerâ˘'Tropsch Synthesis Products Formed in a Supercritical Reaction Medium. Industrial & Engineering Chemistry Research, 1997, 36, 4413-4420.	3.7	25
83	Prediction of phase equilibria and transport properties in carbon-dioxide expanded solvents by molecular simulation. Molecular Simulation, 2007, 33, 861-869.	2.0	25
84	Exploiting Neoteric Solvents for Sustainable Catalysis and Reaction Engineering: Opportunities and Challenges. Industrial & Engineering Chemistry Research, 2010, 49, 10218-10229.	3.7	25
85	Dual Function Lewis Acid Catalyzed Depolymerization of Industrial Corn Stover Lignin into Stable Monomeric Phenols. ACS Sustainable Chemistry and Engineering, 2019, 7, 1362-1371.	6.7	25
86	Enhanced Acid-Catalyzed Lignin Depolymerization in a Continuous Reactor with Stable Activity. ACS Sustainable Chemistry and Engineering, 2020, 8, 4096-4106.	6.7	25
87	Terephthalic Acid Production via Greener Spray Process: Comparative Economic and Environmental Impact Assessments with Mid-Century Process. ACS Sustainable Chemistry and Engineering, 2014, 2, 823-835.	6.7	24
88	Quantitative Sustainability Analysis: A Powerful Tool to Develop Resource-Efficient Catalytic Technologies. ACS Sustainable Chemistry and Engineering, 2016, 4, 5859-5865.	6.7	24
89	Kinetic Modeling of Sorbitol Hydrogenolysis over Bimetallic RuRe/C Catalyst. ACS Sustainable Chemistry and Engineering, 2016, 4, 6037-6047.	6.7	24
90	Lattice distortion induced electronic coupling results in exceptional enhancement in the activity of bimetallic PtMn nanocatalysts. Applied Catalysis A: General, 2017, 534, 46-57.	4.3	24

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91	Phase Transformed PtFe Nanocomposites Show Enhanced Catalytic Performances in Oxidation of Glycerol to Tartronic Acid. Industrial & Engineering Chemistry Research, 2017, 56, 13157-13164.	3.7	24
92	Pressure-Tuning the Effective Diffusivity of Near-critical Reaction Mixtures in Mesoporous Catalysts. Industrial & Engineering Chemistry Research, 2003, 42, 2639-2643.	3.7	23
93	Enhanced hydroformylation by carbon dioxideâ€expanded media with soluble Rh complexes in nanofiltration membrane reactors. AIChE Journal, 2013, 59, 4287-4296.	3.6	23
94	Importance of Long-Range Noncovalent Interactions in the Regioselectivity of Rhodium-Xantphos-Catalyzed Hydroformylation. Organometallics, 2015, 34, 1062-1073.	2.3	23
95	Kinetic modeling of Pt/C catalyzed aqueous phase glycerol conversion with <i>in situ</i> formed hydrogen. AIChE Journal, 2016, 62, 1162-1173.	3.6	23
96	Expectations for Manuscripts Contributing to the Field of Solvents in <i>ACS Sustainable Chemistry & Engineering</i>. ACS Sustainable Chemistry and Engineering, 2020, 8, 14627-14629.	6.7	23
97	Advancing the Use of Sustainability Metrics. ACS Sustainable Chemistry and Engineering, 2015, 3, 2359-2360.	6.7	22
98	Liquid-Phase Oxidation of Toluene andp-toluic Acid under Mild Conditions:Â Synergistic Effects of Cobalt, Zirconium, Ketones, and Carbon Dioxide. Industrial & Engineering Chemistry Research, 2008, 47, 546-552.	3.7	21
99	Oxidation of Glucose Using Mono- and Bimetallic Catalysts under Base-Free Conditions. Organic Process Research and Development, 2018, 22, 1653-1662.	2.7	21
100	Facile Styrene Epoxidation with H2O2 over Novel Niobium Containing Cage Type Mesoporous Silicate, Nb-KIT-5. Topics in Catalysis, 2015, 58, 314-324.	2.8	20
101	Insights into pressure tunable reaction rates for electrochemical reduction of CO₂ in organic electrolytes. Green Chemistry, 2020, 22, 2434-2442.	9.0	20
102	The Power of the United Nations Sustainable Development Goals in Sustainable Chemistry and Engineering Research. ACS Sustainable Chemistry and Engineering, 2021, 9, 8015-8017.	6.7	20
103	Continous-mixture kinetics of coke formation from olefinic oligomers. AIChE Journal, 1995, 41, 317-323.	3.6	19
104	Enhanced metathesis of ethylene and 2-butene on tungsten incorporated ordered mesoporous silicates. Applied Catalysis A: General, 2016, 528, 142-149.	4.3	19
105	Intensified Electrocatalytic CO₂ Conversion in Pressureâ€Tunable CO₂â€Expanded Electrolytes. ChemSusChem, 2019, 12, 3761-3768.	6.8	19
106	Mass transfer effects during homogeneous 1-octene hydroformylation in CO2-expanded solvent: Modeling and experiments. Chemical Engineering Science, 2007, 62, 4967-4975.	3.8	18
107	Development of a Greener Hydroformylation Process Guided by Quantitative Sustainability Assessments. ACS Sustainable Chemistry and Engineering, 2014, 2, 2748-2757.	6.7	18
108	Highly dispersed molybdenum containing mesoporous silicate (Mo-TUD-1) for olefin metathesis. Catalysis Today, 2020, 343, 215-225.	4.4	18

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109	Correlation between Active Center Structure and Enhanced Dioxygen Binding in Co(salen) Nanoparticles: Characterization by In Situ Infrared, Raman, and X-ray Absorption Spectroscopies. Journal of Physical Chemistry C, 2008, 112, 12272-12281.	3.1	17
110	Kinetic Investigations ofp-Xylene Oxidation to Terephthalic Acid with a Co/Mn/Br Catalyst in a Homogeneous Liquid Phase. Industrial & Engineering Chemistry Research, 2014, 53, 9017-9026.	3.7	17
111	Synthesis of molybdenum-incorporated mesoporous silicates by evaporation-induced self-assembly: Insights into surface oxide species and corresponding olefin metathesis activity. Microporous and Mesoporous Materials, 2017, 245, 118-125.	4.4	17
112	Liquid-Phase Oxidation of Ethylene Glycol on Pt and Ptâ€"Fe Catalysts for the Production of Glycolic Acid: Remarkable Bimetallic Effect and Reaction Mechanism. Industrial & Engineering Chemistry Research, 2019, 58, 18561-18568.	3.7	17
113	Exothermic oxidations in supercritical CO2: effects of pressure-tunable heat capacity on adiabatic temperature rise and parametric sensitivity. Chemical Engineering Science, 2003, 58, 1897-1901.	3.8	16
114	Immobilized metal complexes in porous hosts: catalytic oxidation of substituted phenols in CO2 media. Green Chemistry, 2006, 8, 972.	9.0	16
115	Particle Fluidization with Supercritical Carbon Dioxide:Â Experiments and Theory. Industrial & Engineering Chemistry Research, 2007, 46, 3153-3156.	3.7	16
116	Intrinsic Kinetics of Ethanol Dehydration Over Lewis Acidic Ordered Mesoporous Silicate, Zr-KIT-6. Topics in Catalysis, 2014, 57, 1407-1411.	2.8	16
117	Kinetic modeling of carboxylation of propylene oxide to propylene carbonate using ion-exchange resin catalyst in a semi-batch slurry reactor. Chemical Engineering Science, 2017, 168, 189-203.	3.8	16
118	Kinetic Study of CaO-Catalyzed Transesterification of Cyclic Carbonates with Methanol. Industrial & Engineering Chemistry Research, 2018, 57, 14977-14987.	3.7	16
119	Metal-Incorporated Mesoporous Silicates: Tunable Catalytic Properties and Applications. Molecules, 2018, 23, 263.	3.8	16
120	Shaping Effective Practices for Incorporating Sustainability Assessment in Manuscripts Submitted to <i>ACS Sustainable Chemistry & Engineering</i>: An Initiative by the Editors. ACS Sustainable Chemistry and Engineering, 2021, 9, 3977-3978.	6.7	16
121	Guaiacol Hydrodeoxygenation and Hydrogenation over Bimetallic Pt-M (Nb, W, Zr)/KIT-6 Catalysts with Tunable Acidity. ACS Sustainable Chemistry and Engineering, 2022, 10, 4831-4838.	6.7	16
122	Enhanced Isooctane Yields for 1-Butene/Isobutane Alkylation on SiO2-supported NafionÂ®Â®Â® Nafion is a registered trademark of I.E. du Pont de Nemours & Co. in Supercritical Carbon Dioxide. Studies in Surface Science and Catalysis, 2001, 139, 221-228.	1.5	15
123	Intensified ozonolysis of lignins in a spray reactor: insights into product yields and lignin structure. Reaction Chemistry and Engineering, 2019, 4, 1421-1430.	3.7	15
124	Economic and Environmental Impact Analyses of Solid Acid Catalyzed Isoparaffin/Olefin Alkylation in Supercritical Carbon Dioxide. Industrial & Engineering Chemistry Research, 2008, 47, 9072-9080.	3.7	14
125	Evaporation-induced self-assembly of mesoporous zirconium silicates with tunable acidity and facile catalytic dehydration activity. Microporous and Mesoporous Materials, 2016, 223, 46-52.	4.4	14
126	Strategies to Passivate BrÃ¸nsted Acidity in Nb-TUD-1 Enhance Hydrogen Peroxide Utilization and Reduce Metal Leaching during Ethylene Epoxidation. Industrial & Engineering Chemistry Research, 2017, 56, 1999-2007.	3.7	14

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127	Aqueous-Phase Glycerol Catalysis and Kinetics with in Situ Hydrogen Formation. ACS Sustainable Chemistry and Engineering, 2019, 7, 11323-11333.	6.7	14
128	Expectations for Manuscripts on Catalysis in <i>ACS Sustainable Chemistry & Engineering</i>. ACS Sustainable Chemistry and Engineering, 2020, 8, 4995-4996.	6.7	14
129	Sustainable catalytic reaction engineering with gas-expanded liquids. Current Opinion in Chemical Engineering, 2012, 1, 336-341.	7.8	13
130	Prediction of multicomponent phase behavior of CO2-expanded liquids using CEoS/GE models and comparison with experimental data. Journal of Supercritical Fluids, 2012, 67, 41-52.	3.2	13
131	Effects of tunable acidity and basicity of Nbâ€KITâ€6 catalysts on ethanol conversion: Experiments and kinetic modeling. AIChE Journal, 2017, 63, 2888-2899.	3.6	13
132	Intensified and safe ozonolysis of fatty acid methyl esters in liquid CO₂ in a continuous reactor. AIChE Journal, 2017, 63, 2819-2826.	3.6	13
133	Novel tungsten-incorporated mesoporous silicates synthesized via evaporation-induced self-assembly: Enhanced metathesis performance. Journal of Catalysis, 2017, 350, 182-188.	6.2	13
134	Remarkable epoxidation activity of neat and carbonized niobium silicates prepared by evaporation-induced self-assembly. Microporous and Mesoporous Materials, 2018, 261, 158-163.	4.4	13
135	Correlation of Active Site Precursors and Olefin Metathesis Activity in W-Incorporated Silicates. ACS Catalysis, 2018, 8, 10437-10445.	11.2	13
136	Homogeneous catalytic hydroformylation of propylene in propane-expanded solvent media. Chemical Engineering Science, 2018, 187, 148-156.	3.8	12
137	Reaction Engineering Studies of the Epoxidation of Fatty Acid Methyl Esters with Venturello Complex. Industrial & Engineering Chemistry Research, 2019, 58, 2514-2523.	3.7	12
138	Developing Studentsâ€™ Understanding of Industrially Relevant Economic and Life Cycle Assessments. Journal of Chemical Education, 2017, 94, 1798-1801.	2.3	11
139	Organic Electrosynthesis in CO₂-eXpanded Electrolytes: Enabling Selective Acetophenone Carboxylation to Atrolatic Acid. ACS Sustainable Chemistry and Engineering, 2021, 9, 10431-10436.	6.7	11
140	The Catalytic Efficacy of Co(salen)(AL) in O2 Oxidation Reactions in CO2-Expanded Solvent Media: Axial Ligand Dependence and Substrate Selectivity. Catalysis Letters, 2008, 123, 46-50.	2.6	10
141	Supercritical Deoxygenation of a Model Bio-Oil Oxygenate. Industrial & Engineering Chemistry Research, 2010, 49, 10852-10858.	3.7	10
142	A fluidized-bed coating technology using near-critical carbon dioxide as fluidizing and drying medium. Journal of Supercritical Fluids, 2012, 66, 315-320.	3.2	10
143	Nanostructured Metal Catalysts for Selective Hydrogenation and Oxidation of Cellulosic Biomass to Chemicals. Chemical Record, 2019, 19, 1952-1994.	5.8	10
144	Butadiene hydroformylation to adipaldehyde with Rh-based catalysts: Insights into ligand effects. Molecular Catalysis, 2020, 484, 110721.	2.0	10

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145	Continuous Hydroformylation with Phosphine-Functionalized Polydimethylsiloxane Rhodium Complexes as Nanofilterable Homogeneous Catalysts. Industrial & Engineering Chemistry Research, 2015, 54, 10656-10660.	3.7	9
146	Continuous Process for the Production of Taurine from Monoethanolamine. Industrial & Engineering Chemistry Research, 2020, 59, 13007-13015.	3.7	9
147	Enhanced Olefin Metathesis Performance of Tungsten and Niobium Incorporated Bimetallic Silicates: Evidence of Synergistic Effects. ChemCatChem, 2020, 12, 2004-2013.	3.7	9
148	Expectations for Papers on Sustainable Materials in <i>ACS Sustainable Chemistry & Engineering</i>. ACS Sustainable Chemistry and Engineering, 2020, 8, 1703-1704.	6.7	9
149	Paclitaxel Nanoparticles: Production Using Compressed CO₂ as Antisolvent: Characterization and Animal Model Studies. ACS Symposium Series, 2006, , 262-277.	0.5	8
150	Nitric Oxide Disproportionation at Mild Temperatures by a Nanoparticulate Cobalt(II) Complex. Chemistry of Materials, 2008, 20, 5939-5941.	6.7	8
151	Four Years of ACS Sustainable Chemistry & Engineering: Reflections and New Developments. ACS Sustainable Chemistry and Engineering, 2017, 5, 1-2.	6.7	8
152	Enhancing Molecular Electrocatalysis of CO₂ Reduction with Pressureâ€Tunable CO₂â€Expanded Electrolytes. ChemSusChem, 2020, 13, 6338-6345.	6.8	8
153	Nearâ€stoichiometric O₂ binding on metal centers in Co(salen) nanoparticles. AIChE Journal, 2009, 55, 1040-1045.	3.6	7
154	Perspectives on exploiting near-critical fluids for energy-efficient catalytic conversion of emerging feedstocks. Journal of Supercritical Fluids, 2015, 96, 96-102.	3.2	7
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