Jiayu Xin

List of Publications by Year
in descending order

53 papers	2,538 citations	218677 26 h-index	189892 50 g-index
56 all docs	56 docs citations	56 times ranked	2985 citing authors

#	Article	IF	Citations
1	Machine Learning Screening of Efficient Ionic Liquids for Targeted Cleavage of the Î²â€“Oâ€“4 Bond of Lignin. Journal of Physical Chemistry B, 2022, 126, 3693-3704.	2.6	6
2	Baseâ€free synthesis of bioâ€derived 2,5â€furandicarboxylic acid using SBAâ€15â€‰supported heteropoly acids in ionic liquids. ChemistrySelect, 2022, 7, .	1.5	0
3	Removal of trace amount impurities in glycolytic monomer of polyethylene terephthalate by recrystallization. Journal of Environmental Chemical Engineering, 2021, 9, 106277.	6.7	19
4	Progress in the catalytic glycolysis of polyethylene terephthalate. Journal of Environmental Management, 2021, 296, 113267.	7.8	79
5	Metal-free and mild photo-thermal synergism in ionic liquids for lignin C_{Î±}â€“C_{Î²} bond cleavage to provide aldehydes. Green Chemistry, 2021, 23, 5524-5534.	9.0	15
6	Ethylenediamine Enhances Ionic Liquid Pretreatment Performance at High Solid Loading. ACS Sustainable Chemistry and Engineering, 2020, 8, 13007-13018.	6.7	27
7	Weak Bonds Joint Effects Catalyze the Cleavage of Strong Câˆ’C Bond of Ligninâ€Inspired Compounds and Lignin in Air by Ionic Liquids. ChemSusChem, 2020, 13, 5945-5953.	6.8	7
8	A renewable co-solvent promoting the selective removal of lignin by increasing the total number of hydrogen bonds. Green Chemistry, 2020, 22, 6393-6403.	9.0	18
9	Adsorption Thermodynamics and Kinetics of Resin for Metal Impurities in Bis(2-hydroxyethyl) Terephthalate. Polymers, 2020, 12, 2866.	4.5	9
10	Selective Deoxygenation of Lignin-Derived Phenols and Dimeric Ethers with Protic Ionic Liquids. Industrial & Engineering Chemistry Research, 2020, 59, 4864-4871.	3.7	8
11	Degradation of poly(ethylene terephthalate) catalyzed by metal-free choline-based ionic liquids. Green Chemistry, 2020, 22, 3122-3131.	9.0	111
12	Metalâ€Free Photochemical Degradation of Ligninâ€Derived Aryl Ethers and Lignin by Autologous Radicals through Ionic Liquid Induction. ChemSusChem, 2019, 12, 4005-4013.	6.8	37
13	Efficient hydrodeoxygenation of lignin-derived phenols and dimeric ethers with synergistic [Bmim]PF₆-Ru/SBA-15 catalysis under acid free conditions. Green Chemistry, 2019, 21, 597-605.	9.0	41
14	Theoretical Study on the Conversion Mechanism of Biobased 2,5-Dimethylfuran and Acrylic Acid into Aromatics Catalyzed by BrÃ¸nsted Acid Ionic Liquids. Industrial & Engineering Chemistry Research, 2019, 58, 11111-11120.	3.7	12
15	High Aluminum Content Beta Zeolite as an Active Lewis Acid Catalyst for Î³-Valerolactone Decarboxylation. Industrial & Engineering Chemistry Research, 2019, 58, 11841-11848.	3.7	12
16	Highly Efficient Oxidation of 5â€Hydroxymethylfurfural to 2,5â€Furandicarboxylic Acid with Heteropoly Acids and Ionic Liquids. ChemSusChem, 2019, 12, 2715-2724.	6.8	58
17	Catalytic synthesis of renewable hydrocarbons via hydrodeoxygenation of angelica lactone di/trimers. Fuel, 2018, 221, 311-319.	6.4	3
18	Direct conversion of cellulose to sorbitol via an enhanced pretreatment with ionic liquids. Journal of Chemical Technology and Biotechnology, 2018, 93, 2617-2624.	3.2	15

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19	Base-free preparation of low molecular weight chitin from crab shell. Carbohydrate Polymers, 2018, 190, 148-155.	10.2	39
20	One-step preparation of an antibacterial chitin/Zn composite from shrimp shells using urea-Zn(OAc)₂Â·2H₂O aqueous solution. Green Chemistry, 2018, 20, 2212-2217.	9.0	24
21	One-Pot Synthesis of 2,5-Furandicarboxylic Acid from Fructose in Ionic Liquids. Industrial & Engineering Chemistry Research, 2018, 57, 1851-1858.	3.7	46
22	One-Step Conversion of Biomass-Derived Furanics into Aromatics by BrÃ¸nsted Acid Ionic Liquids at Room Temperature. ACS Sustainable Chemistry and Engineering, 2018, 6, 2541-2551.	6.7	52
23	Separation and characterization of cellulose I material from corn straw by low-cost polyhydric protic ionic liquids. Cellulose, 2018, 25, 3241-3254.	4.9	30
24	Feâ€“Zrâ€“O catalyzed base-free aerobic oxidation of 5-HMF to 2,5-FDCA as a bio-based polyester monomer. Catalysis Science and Technology, 2018, 8, 164-175.	4.1	88
25	Ultrafast Homogeneous Glycolysis of Waste Polyethylene Terephthalate via a Dissolution-Degradation Strategy. Industrial & Engineering Chemistry Research, 2018, 57, 16239-16245.	3.7	92
26	Facile Synthesis of Cellulose/ZnO Aerogel with Uniform and Tunable Nanoparticles Based on Ionic Liquid and Polyhydric Alcohol. ACS Sustainable Chemistry and Engineering, 2018, 6, 16248-16254.	6.7	14
27	A Simple and Mild Approach for the Synthesis of <i>p</i>â€Xylene from Bioâ€Based 2,5â€Dimethyfuran by Using Metal Triflates. ChemSusChem, 2017, 10, 2394-2401.	6.8	40
28	Production of Bioâ€Based Gasoline by Nobleâ€Metalâ€Catalyzed Hydrodeoxygenation of Î±â€Angelica Lactone Derived Di/Trimers. ChemistrySelect, 2017, 2, 4219-4225.	1.5	14
29	Base-free conversion of 5-hydroxymethylfurfural to 2,5-furandicarboxylic acid in ionic liquids. Chemical Engineering Journal, 2017, 323, 473-482.	12.7	76
30	Conversion of bis(2-hydroxyethylene terephthalate) into 1,4-cyclohexanedimethanol by selective hydrogenation using RuPtSn/Al₂O₃. RSC Advances, 2016, 6, 48737-48744.	3.6	13
31	Ionic liquids and supercritical carbon dioxide: green and alternative reaction media for chemical processes. Reviews in Chemical Engineering, 2016, 32, 587-609.	4.4	24
32	Sub/supercritical carbon dioxide induced phase switching for the reaction and separation in ILs/methanol. Green Energy and Environment, 2016, 1, 144-148.	8.7	13
33	Using Sub/Supercritical CO₂ as â€œPhase Separation Switchâ€• for the Efficient Production of 5-Hydroxymethylfurfural from Fructose in an Ionic Liquid/Organic Biphasic System. ACS Sustainable Chemistry and Engineering, 2016, 4, 557-563.	6.7	40
34	Conversion of lignin model compounds under mild conditions in pseudo-homogeneous systems. Green Chemistry, 2016, 18, 2341-2352.	9.0	66
35	Hydrodeoxygenation of angelica lactone dimers and trimers over silica-alumina supported nickel catalyst. Renewable Energy, 2016, 86, 943-948.	8.9	15
36	Preparation of 1,4-cyclohexanedimethanol by selective hydrogenation of a waste PET monomer bis(2-hydroxyethylene terephthalate). RSC Advances, 2015, 5, 485-492.	3.6	14

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37	Conversion of biomass derived valerolactone into high octane number gasoline with an ionic liquid. Green Chemistry, 2015, 17, 1065-1070.	9.0	60
38	An effective twoâ€step ionic liquids method for cornstalk pretreatment. Journal of Chemical Technology and Biotechnology, 2015, 90, 2057-2065.	3.2	6
39	Application of solid acid catalyst derived from low value biomass for a cheaper biodiesel production. Journal of Chemical Technology and Biotechnology, 2014, 89, 1898-1909.	3.2	31
40	Dimethyl carbonate mediated production of biodiesel at different reaction temperatures. Renewable Energy, 2014, 68, 581-587.	8.9	41
41	Ionic liquid-based green processes for energy production. Chemical Society Reviews, 2014, 43, 7838-7869.	38.1	399
42	Effective conversion of non-edible oil with high free fatty acid into biodiesel by sulphonated carbon catalyst. Applied Energy, 2014, 114, 819-826.	10.1	186
43	Efficient Conversion of Î±-Angelica Lactone into Î³-Valerolactone with Ionic Liquids at Room Temperature. ACS Sustainable Chemistry and Engineering, 2014, 2, 902-909.	6.7	31
44	Formation of Câ€“C bonds for the production of bio-alkanes under mild conditions. Green Chemistry, 2014, 16, 3589-3595.	9.0	68
45	Superbase/cellulose: an environmentally benign catalyst for chemical fixation of carbon dioxide into cyclic carbonates. Green Chemistry, 2014, 16, 3071.	9.0	180
46	Effects of cations and anions of ionic liquids on the production of 5-hydroxymethylfurfural from fructose. Chemical Communications, 2012, 48, 4103.	4.1	84
47	Test methods for the determination of biodiesel stability. Biofuels, 2010, 1, 275-289.	2.4	11
48	Method for Improving Oxidation Stability of Biodiesel. Green Energy and Technology, 2010, , 171-175.	0.6	1
49	Improvement of the oxidation stability of biodiesel as prepared by supercritical methanol method with lignin. European Journal of Lipid Science and Technology, 2009, 111, 835-842.	1.5	8
50	Kinetics on the oxidation of biodiesel stabilized with antioxidant. Fuel, 2009, 88, 282-286.	6.4	130
51	Effect of CO2/N2 addition to supercritical methanol on reactivities and fuel qualities in biodiesel production. Fuel, 2009, 88, 1329-1332.	6.4	45
52	Oxidation stability of biodiesel fuel as prepared by supercritical methanol. Fuel, 2008, 87, 1807-1813.	6.4	78
53	A techno-economic analysis of bio-gasoline production from corn stover via catalytic conversion. Clean Technologies and Environmental Policy, 0, , 1.	4.1	1