Wenlei Xie

List of Publications by Year
in descending order

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75 papers	7,167 citations	66315 42 h-index	74108 75 g-index
75 all docs	75 docs citations	75 times ranked	4988 citing authors

#	Article	IF	Citations
1	Transesterification of soybean oil catalyzed by potassium loaded on alumina as a solid-base catalyst. Applied Catalysis A: General, 2006, 300, 67-74.	2.2	464
2	Calcined Mgâ€“Al hydrotalcites as solid base catalysts for methanolysis of soybean oil. Journal of Molecular Catalysis A, 2006, 246, 24-32.	4.8	406
3	Alumina-supported potassium iodide as a heterogeneous catalyst for biodiesel production from soybean oil. Journal of Molecular Catalysis A, 2006, 255, 1-9.	4.8	385
4	Immobilization of polyoxometalate-based sulfonated ionic liquids on UiO-66-2COOH metal-organic frameworks for biodiesel production via one-pot transesterification-esterification of acidic vegetable oils. Chemical Engineering Journal, 2019, 365, 40-50.	6.6	282
5	Immobilization of Candida rugosa lipase onto graphene oxide Fe 3 O 4 nanocomposite: Characterization and application for biodiesel production. Energy Conversion and Management, 2018, 159, 42-53.	4.4	261
6	Synthesis of Biodiesel from Soybean Oil using Heterogeneous KF/ZnO Catalyst. Catalysis Letters, 2006, 107, 53-59.	1.4	260
7	Immobilized polymeric sulfonated ionic liquid on core-shell structured Fe3O4/SiO2 composites: A magnetically recyclable catalyst for simultaneous transesterification and esterifications of low-cost oils to biodiesel. Renewable Energy, 2020, 145, 1709-1719.	4.3	242
8	Soybean oil methyl esters preparation using NaX zeolites loaded with KOH as a heterogeneous catalyst. Bioresource Technology, 2007, 98, 936-939.	4.8	225
9	Soybean oil transesterification over zinc oxide modified with alkali earth metals. Fuel Processing Technology, 2007, 88, 631-638.	3.7	220
10	Immobilized Lipase on Fe₃O₄ Nanoparticles as Biocatalyst for Biodiesel Production. Energy & Fuels, 2009, 23, 1347-1353.	2.5	213
11	Basic ionic liquid functionalized magnetically responsive Fe3O4@HKUST-1 composites used for biodiesel production. Fuel, 2018, 220, 248-256.	3.4	209
12	Enzymatic Production of Biodiesel from Soybean Oil by Using Immobilized Lipase on Fe₃O₄/Poly(styrene-methacrylic acid) Magnetic Microsphere as a Biocatalyst. Energy & Fuels, 2014, 28, 2624-2631.	2.5	185
13	Heterogeneous CaOâ€“MoO3â€“SBA-15 catalysts for biodiesel production from soybean oil. Energy Conversion and Management, 2014, 79, 34-42.	4.4	183
14	Magnetic Fe3O4/MCM-41 composite-supported sodium silicate as heterogeneous catalysts for biodiesel production. Renewable Energy, 2018, 125, 675-681.	4.3	179
15	Production of biodiesel by transesterification of soybean oil using calcium supported tin oxides as heterogeneous catalysts. Energy Conversion and Management, 2013, 76, 55-62.	4.4	175
16	Immobilized lipase on magnetic chitosan microspheres for transesterification of soybean oil. Biomass and Bioenergy, 2012, 36, 373-380.	2.9	172
17	Immobilized lipase on coreâ€“shell structured Fe3O4â€“MCM-41 nanocomposites as a magnetically recyclable biocatalyst for interesterification of soybean oil and lard. Food Chemistry, 2016, 194, 1283-1292.	4.2	171
18	Enzymatic transesterification of soybean oil by using immobilized lipase on magnetic nano-particles. Biomass and Bioenergy, 2010, 34, 890-896.	2.9	159

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19	Covalent immobilization of lipase onto aminopropyl-functionalized hydroxyapatite-encapsulated-Î³-Fe2O3 nanoparticles: A magnetic biocatalyst for interesterification of soybean oil. Food Chemistry, 2017, 227, 397-403.	4.2	151
20	Grafting copolymerization of dual acidic ionic liquid on core-shell structured magnetic silica: A magnetically recyclable BrÃ¶nsted acid catalyst for biodiesel production by one-pot transformation of low-quality oils. Fuel, 2021, 283, 118893.	3.4	133
21	Synthesis of cationic starch with a high degree of substitution in an ionic liquid. Carbohydrate Polymers, 2010, 80, 1172-1177.	5.1	125
22	Lipase immobilized on ionic liquid-functionalized magnetic silica composites as a magnetic biocatalyst for production of trans -free plastic fats. Food Chemistry, 2018, 257, 15-22.	4.2	122
23	Silica-Supported Tin Oxides as Heterogeneous Acid Catalysts for Transesterification of Soybean Oil with Methanol. Industrial & Engineering Chemistry Research, 2012, 51, 225-231.	1.8	109
24	Exact solution for mean first-passage time on a pseudofractal scale-free web. Physical Review E, 2009, 79, 021127.	0.8	108
25	Guanidine post-functionalized crystalline ZIF-90 frameworks as a promising recyclable catalyst for the production of biodiesel via soybean oil transesterification. Energy Conversion and Management, 2019, 198, 111922.	4.4	101
26	Sustainable biodiesel production from low-quantity oils utilizing H6PV3MoW8O40 supported on magnetic Fe3O4/ZIF-8 composites. Renewable Energy, 2021, 168, 927-937.	4.3	100
27	Catalytic Properties of Lithium-Doped ZnO Catalysts Used for Biodiesel Preparations. Industrial & Engineering Chemistry Research, 2007, 46, 7942-7949.	1.8	91
28	Standard random walks and trapping on the Koch network with scale-free behavior and small-world effect. Physical Review E, 2009, 79, 061113.	0.8	88
29	Basic Ionic Liquid Supported on Mesoporous SBA-15 Silica as an Efficient Heterogeneous Catalyst for Biodiesel Production. Industrial & Engineering Chemistry Research, 2015, 54, 1505-1512.	1.8	86
30	Biodiesel production by transesterification using tetraalkylammonium hydroxides immobilized onto SBA-15 as a solid catalyst. Chemical Engineering Journal, 2014, 239, 60-67.	6.6	77
31	Fabrication of immobilized Candida rugosa lipase on magnetic Fe3O4-poly(glycidyl) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 267 T production of biodiesel. Renewable Energy, 2020, 158, 474-486.	4.3	76
32	Novel solid base catalyst for biodiesel production: Mesoporous SBA-15 silica immobilized with 1,3-dicyclohexyl-2-octylguanidine. Renewable Energy, 2015, 80, 230-237.	4.3	74
33	Biodiesel production using biguanide-functionalized hydroxyapatite-encapsulated-Î³-Fe2O3 nanoparticles. Fuel, 2017, 210, 83-90.	3.4	71
34	Biodiesel production from soybean oil transesterification using tin oxide-supported WO3 catalysts. Fuel Processing Technology, 2013, 109, 150-155.	3.7	68
35	Synthesis of high fatty acid starch esters with 1â€butylâ€3â€methylimidazolium chloride as a reaction medium. Starch/Staerke, 2011, 63, 190-197.	1.1	58
36	Synthesis of starch esters in ionic liquids. Journal of Applied Polymer Science, 2010, 116, 218-224.	1.3	57

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37	Baâ€“ZnO catalysts for soybean oil transesterification. Catalysis Letters, 2007, 117, 159-165.	1.4	54
38	Random walks on the Apollonian network with a single trap. Europhysics Letters, 2009, 86, 10006.	0.7	52
39	Enzymatic Production of Biodiesel Using Immobilized Lipase on Core-Shell Structured Fe3O4@MIL-100(Fe) Composites. Catalysts, 2019, 9, 850.	1.6	52
40	Detoxification of Aflatoxin B1 by magnetic graphene composite adsorbents from contaminated oils. Journal of Hazardous Materials, 2020, 381, 120915.	6.5	52
41	Synthesis of heterogenized polyoxometalate-based ionic liquids with BrÃ¶nsted-Lewis acid sites: A magnetically recyclable catalyst for biodiesel production from low-quality oils. Journal of Industrial and Engineering Chemistry, 2020, 87, 162-172.	2.9	51
42	Transesterification of soybean oil over WO3 supported on AlPO4 as a solid acid catalyst. Bioresource Technology, 2012, 119, 60-65.	4.8	48
43	Biodiesel Production from Acidic Oils Using Polyoxometalate-Based Sulfonated Ionic Liquids Functionalized Metalâ€“Organic Frameworks. Catalysis Letters, 2019, 149, 2916-2929.	1.4	43
44	Transesterification of Soybean Oil to Biodiesel with Zn/I2 Catalyst. Catalysis Letters, 2006, 107, 25-30.	1.4	42
45	Distinct scalings for mean first-passage time of random walks on scale-free networks with the same degree sequence. Physical Review E, 2009, 80, 061111.	0.8	41
46	Phosphorylation of Corn Starch in an Ionic Liquid. Starch/Staerke, 2009, 61, 702-708.	1.1	41
47	Removal of aflatoxin B1 from contaminated peanut oils using magnetic attapulgite. Food Chemistry, 2021, 339, 128072.	4.2	41
48	Hydroxyl content and refractive index determinations on transesterified soybean oil. JAOCS, Journal of the American Oil Chemists' Society, 2006, 83, 869-872.	0.8	39
49	Propylsulfonic and arenesulfonic functionalized SBA-15 silica as an efficient and reusable catalyst for the acidolysis of soybean oil with medium-chain fatty acids. Food Chemistry, 2016, 211, 74-82.	4.2	39
50	Silica-bonded N-propyl sulfamic acid used as a heterogeneous catalyst for transesterification of soybean oil with methanol. Bioresource Technology, 2011, 102, 9818-9822.	4.8	33
51	Biguanide-functionalized mesoporous SBA-15 silica as an efficient solid catalyst for interesterification of vegetable oils. Food Chemistry, 2016, 197, 92-99.	4.2	31
52	Anomalous behavior of trapping on a fractal scale-free network. Europhysics Letters, 2009, 88, 10001.	0.7	30
53	Molybdenum and zirconium oxides supported on KIT-6 silica: A recyclable composite catalyst for oneâ€“pot biodiesel production from simulated low-quality oils. Renewable Energy, 2022, 187, 907-922.	4.3	30
54	Cs2.5H0.5PW12O40 Encapsulated in Metalâ€“Organic Framework UiO-66 as Heterogeneous Catalysts for Acidolysis of Soybean Oil. Catalysis Letters, 2017, 147, 2772-2782.	1.4	29

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55	Biodiesel Preparation from Soybean Oil by Using a Heterogeneous CaxMg2â^'xO2 Catalyst. Catalysis Letters, 2012, 142, 352-359.	1.4	28
56	Homogenous carboxymethylation of starch using 1-butyl-3-methylimidazolium chloride ionic liquid medium as a solvent. Carbohydrate Polymers, 2011, 85, 792-797.	5.1	27
57	Impact of degree heterogeneity on the behavior of trapping in Koch networks. Chaos, 2010, 20, 043112.	1.0	24
58	Fe3O4-poly(AGE-DVB-GMA) composites immobilized with guanidine as a magnetically recyclable catalyst for enhanced biodiesel production. Renewable Energy, 2021, 174, 758-768.	4.3	24
59	Immobilization of tetramethylguanidine on mesoporous SBA-15 silica: A heterogeneous basic catalyst for transesterification of soybean oil. Bioresource Technology, 2013, 139, 388-392.	4.8	22
60	Production of medium-chain structured lipids using dual acidic ionic liquids supported on Fe3O4@SiO2 composites as magnetically recyclable catalysts. LWT - Food Science and Technology, 2018, 93, 71-78.	2.5	22
61	Fatty Acid Methyl Ester Synthesis over Fe³⁺â€Vanadyl Phosphate Catalysts. JAOCS, Journal of the American Oil Chemists' Society, 2008, 85, 655.	0.8	20
62	Heterogeneous Interesterification of Triacylglycerols Catalyzed by Using Potassium-Doped Alumina as a Solid Catalyst. Journal of Agricultural and Food Chemistry, 2014, 62, 10414-10421.	2.4	18
63	Heterogeneous H6PV3MoW8O40/AC-Ag catalyst for biodiesel production: Preparation, characterization and catalytic performance. Fuel, 2022, 316, 123352.	3.4	18
64	Aminopropylsilica as an environmentally friendly and reusable catalyst for biodiesel production from soybean oil. Fuel, 2013, 103, 1106-1110.	3.4	17
65	Interesterification of Soybean Oil and Lard Blends Catalyzed by SBA-15-pr-NR₃OH as a Heterogeneous Base Catalyst. Journal of Agricultural and Food Chemistry, 2013, 61, 3373-3381.	2.4	16
66	Production of Structured Lipids Containing Medium-Chain Fatty Acids by Soybean Oil Acidolysis Using SBA-15-pr-NH₂â€“HPW Catalyst in a Heterogeneous Manner. Organic Process Research and Development, 2016, 20, 637-645.	1.3	16
67	Phenylsulfonic acid functionalized mesoporous SBA-15 silica: A heterogeneous catalyst for removal of free fatty acids in vegetable oil. Fuel Processing Technology, 2014, 119, 98-104.	3.7	15
68	Enzymatic Interesterification of Soybean Oil and Methyl Stearate Blends Using Lipase Immobilized on Magnetic Fe3O4/SBA-15 Composites as a Biocatalyst. Journal of Oleo Science, 2014, 63, 1027-1034.	0.6	11
69	Interesterification of Soybean Oil and Methyl Stearate Catalyzed by Guanidineâ€Functionalized SBAâ€15 Silica. JAOCS, Journal of the American Oil Chemists' Society, 2015, 92, 915-925.	0.8	10
70	Biodiesel Production from Low-Quality Oils Using Heterogeneous Cesium Salts of Vanadium-Substituted Polyoxometalate Acid Catalyst. Catalysts, 2020, 10, 1060.	1.6	10
71	Impact of surfactant type, pH and antioxidants on the oxidation of methyl linoleate in micellar solutions. Food Research International, 2007, 40, 1270-1275.	2.9	9
72	ANTIOXIDANT ACTIVITIES OF VITAMINS E AND C IN A NOVEL LIPOSOME SYSTEM. Journal of Food Biochemistry, 2008, 32, 766-781.	1.2	8

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73	Preparation of Low Calorie Structured Lipids Catalyzed by 1,5,7-Triazabicyclo[4.4.0]dec-5-ene(TBD)-functionalized Mesoporous SBA-15 Silica in a Heterogeneous Manner. Journal of Agricultural and Food Chemistry, 2014, 62, 3348-3355.	2.4	8
74	Polymeric Acidic Ionic Liquidâ€Functionalized SBAâ€15 as a Solid Catalyst for Production of Lowâ€Calorie Structured Lipids. JAOCS, Journal of the American Oil Chemists' Society, 2018, 95, 1549-1559.	0.8	6
75	Mesoporous SBA-15 Silica-supported Diisopropylguanidine: an Efficient Solid Catalyst for Interesterification of Soybean Oil with Methyl Octanoate or Methyl Decanoate. Journal of Oleo Science, 2016, 65, 803-813.	0.6	4