Joseph J Bozell

List of Publications by Year
in descending order

46 papers	6,177 citations	361413 20 h-index	243625 44 g-index
48 all docs	48 docs citations	48 times ranked	7546 citing authors

#	Article	IF	Citations
1	Technology development for the production of biobased products from biorefinery carbohydratesâ€"the US Department of Energyâ€™s â€œTop 10â€•revisited. Green Chemistry, 2010, 12, 539.	9.0	3,701
2	Connecting Biomass and Petroleum Processing with a Chemical Bridge. Science, 2010, 329, 522-523.	12.6	288
3	Feedstocks for the Future â€“ Biorefinery Production of Chemicals from Renewable Carbon. Clean - Soil, Air, Water, 2008, 36, 641-647.	1.1	193
4	Solvent fractionation of renewable woody feedstocks: Organosolv generation of biorefinery process streams for the production of biobased chemicals. Biomass and Bioenergy, 2011, 35, 4197-4208.	5.7	149
5	Cobalt-Schiff Base Complex Catalyzed Oxidation of Para-Substituted Phenolics. Preparation of Benzoquinones. Journal of Organic Chemistry, 1995, 60, 2398-2404.	3.2	143
6	Efficient Cobalt-Catalyzed Oxidative Conversion of Lignin Models to Benzoquinones. Organic Letters, 2013, 15, 2730-2733.	4.6	123
7	High-Performance Liquid Chromatography/High-Resolution Multiple Stage Tandem Mass Spectrometry Using Negative-Ion-Mode Hydroxide-Doped Electrospray Ionization for the Characterization of Lignin Degradation Products. Analytical Chemistry, 2012, 84, 6000-6007.	6.5	94
8	Characterization of Organosolv Lignins using Thermal and FT-IR Spectroscopic Analysis. BioResources, 2013, 8, .	1.0	94
9	A study of poplar organosolv lignin after melt rheology treatment as carbon fiber precursors. Green Chemistry, 2016, 18, 5015-5024.	9.0	85
10	Role of Physicochemical Structure of Organosolv Hardwood and Herbaceous Lignins on Carbon Fiber Performance. ACS Sustainable Chemistry and Engineering, 2016, 4, 5785-5798.	6.7	84
11	Progress toward Lignin Valorization via Selective Catalytic Technologies and the Tailoring of Biosynthetic Pathways. ACS Sustainable Chemistry and Engineering, 2016, 4, 5123-5135.	6.7	79
12	Characterization of organosolv switchgrass lignin by using high performance liquid chromatography/high resolution tandem mass spectrometry using hydroxide-doped negative-ion mode electrospray ionization. Green Chemistry, 2014, 16, 2713-2727.	9.0	78
13	Biomass Fractionation for the Biorefinery: Heteronuclear Multiple Quantum Coherenceâ€"Nuclear Magnetic Resonance Investigation of Lignin Isolated from Solvent Fractionation of Switchgrass. Journal of Agricultural and Food Chemistry, 2011, 59, 9232-9242.	5.2	77
14	Improving Processing and Performance of Pure Lignin Carbon Fibers through Hardwood and Herbaceous Lignin Blends. International Journal of Molecular Sciences, 2017, 18, 1410.	4.1	67
15	Catalytic oxidation of para-substituted phenols with cobaltâ€"Schiff base complexes/O2â€"selective conversion of syringyl and guaiacyl lignin models to benzoquinones. Tetrahedron Letters, 2012, 53, 2380-2383.	1.4	50
16	Steric effects in the design of Co-Schiff base complexes for the catalytic oxidation of lignin models to para-benzoquinones. Green Chemistry, 2014, 16, 3635-3642.	9.0	41
17	Catalytic oxidation of para-substituted phenols with nitrogen dioxide and oxygen. Tetrahedron Letters, 1998, 39, 2261-2264.	1.4	33
18	Approaches to the Selective Catalytic Conversion of Lignin: A Grand Challenge for Biorefinery Development. Topics in Current Chemistry, 2014, 353, 229-255.	4.0	32

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19	Effects of organosolv fractionation time on thermal and chemical properties of lignins. RSC Advances, 2016, 6, 79228-79235.	3.6	31
20	Integrating Separation and Conversionâ€"Conversion of Biorefinery Process Streams to Biobased Chemicals and Fuels. Bioenergy Research, 2014, 7, 856-866.	3.9	27
21	Synthesis of Enantiomerically Pure Lignin Dimer Models for Catalytic Selectivity Studies. Journal of Organic Chemistry, 2015, 80, 1771-1780.	3.2	22
22	Co(salen)-Catalyzed Oxidation of Lignin Models to Form Benzoquinones and Benzaldehydes: A Computational and Experimental Study. ACS Sustainable Chemistry and Engineering, 2020, 8, 7225-7234.	6.7	18
23	The effect of axial ligand on the oxidation of syringyl alcohol by Co(salen) adducts. Physical Chemistry Chemical Physics, 2013, 15, 7328.	2.8	17
24	Effect of solvent fractionation pretreatment on energy consumption of cellulose nanofabrication from switchgrass. Journal of Materials Science, 2019, 54, 8010-8022.	3.7	17
25	Synthesis and Self-Assembly of Glycal-Based Bolaforms. Journal of Organic Chemistry, 2008, 73, 8763-8771.	3.2	16
26	Feedstocks for the Future: Using Technology Development as a Guide to Product Identification. ACS Symposium Series, 2006, , 1-12.	0.5	15
27	A Fundamental Tandem Mass Spectrometry Study of the Collisionâ€Activated Dissociation of Small Deprotonated Molecules Related to Lignin. ChemSusChem, 2016, 9, 3513-3526.	6.8	15
28	Compositional analysis of organosolv poplar lignin by using high-performance liquid chromatography/high-resolution multi-stage tandem mass spectrometry. Green Chemistry, 2021, 23, 983-1000.	9.0	14
29	Heteropolyacid Catalyzed Oxidation of Lignin and Lignin Models to Benzoquinones. Journal of Wood Chemistry and Technology, 2000, 20, 19-41.	1.7	13
30	Pulping Catalysts From Lignin (5). Nitrogen Dioxide Oxidation Of Lignin Models To Benzoquinones. Journal of Wood Chemistry and Technology, 1996, 16, 169-189.	1.7	11
31	Lignin yield maximization of mixed biorefinery feedstocks by organosolv fractionation using Taguchi Robust Product Design. Biomass and Bioenergy, 2015, 73, 209-216.	5.7	11
32	Chemicals and Materials from Renewable Resources. ACS Symposium Series, 2001, , 1-9.	0.5	10
33	Stereoselective and Regioselective Reaction of Cyclic Ortho Esters with Phenols. Journal of Organic Chemistry, 2001, 66, 3084-3089.	3.2	10
34	Enantioselective Syntheses of Lignin Models: An Efficient Synthesis of Î²â€Oâ€4 Dimers and Trimers by Using the Evans Chiral Auxiliary. Chemistry - A European Journal, 2016, 22, 12506-12517.	3.3	9
35	Deactivation of Co-Schiff base catalysts in the oxidation of para-substituted lignin models for the production of benzoquinones. Catalysis Science and Technology, 2020, 10, 403-413.	4.1	7
36	Short-time ultrasonication treatment in enzymatic hydrolysis of biomass. Holzforschung, 2013, 67, 891-897.	1.9	6

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37	Molecular structures of glycal-based bolaamphiphiles: analysis of crystal packing and hydrogen-bond networks. Carbohydrate Research, 2008, 343, 374-382.	2.3	4
38	Pulping Catalysts from Lignin. VIII. Nitrogen Dioxide Oxidation of Lignins to Benzoquinones. Journal of Wood Chemistry and Technology, 1997, 17, 235-258.	1.7	3
39	Steric effects of bulky tethered arylpiperazines on the reactivity of Co-Schiff base oxidation catalystsâ€"a synthetic and computational study. Tetrahedron, 2019, 75, 3118-3127.	1.9	3
40	Evaluation of process severity on the chemical composition of organosolv switchgrass lignins by using mass spectrometry. Green Chemistry, 2021, 23, 4024-4033.	9.0	3
41	Green Chemistry in Practice. , 0, , 338-365.		2
42	Sciadopitys verticillata Resin: Volatile Components and Impact on Plant Pathogenic and Foodborne Bacteria. Molecules, 2019, 24, 3767.	3.8	2
43	Self-Assembling Bolaforms from Biorefinery Polysaccharides. ACS Symposium Series, 2010, , 243-259.	0.5	1
44	Optimization of Component Yields and Thermal Properties by Organosolv Fractionation of Loblolly Pine (Pinus taeda) Using Response Surface Design. Bioenergy Research, 2018, 11, 652-664.	3.9	1
45	Alkylation of monomeric, dimeric, and polymeric lignin models through carbon-hydrogen activation using Ru-catalyzed Murai reaction. Tetrahedron, 2021, 100, 132475.	1.9	1
46	Catalytic Oxidation of Lignin for the Production of Low Molecular Weight Aromatics. , 2014, , 277-289.		0