Kwang Ho Kim

List of Publications by Year
in descending order

46 papers	2,234 citations	304368 22 h-index	243296 44 g-index
46 all docs	46 docs citations	46 times ranked	2571 citing authors

#	Article	IF	Citations
1	Catalytic pyrolysis of individual components of lignocellulosic biomass. Green Chemistry, 2014, 16, 727-735.	4.6	429
2	Biomass pretreatment using deep eutectic solvents from lignin derived phenols. Green Chemistry, 2018, 20, 809-815.	4.6	235
3	Formation of phenolic oligomers during fast pyrolysis of lignin. Fuel, 2014, 128, 170-179.	3.4	199
4	Pyrolytic Sugars from Cellulosic Biomass. ChemSusChem, 2012, 5, 2228-2236.	3.6	155
5	Lignin to Materials: A Focused Review on Recent Novel Lignin Applications. Applied Sciences (Switzerland), 2020, 10, 4626.	1.3	112
6	Investigation of a Lignin-Based Deep Eutectic Solvent Using <i>p</i>-Hydroxybenzoic Acid for Efficient Woody Biomass Conversion. ACS Sustainable Chemistry and Engineering, 2020, 8, 12542-12553.	3.2	83
7	Integration of renewable deep eutectic solvents with engineered biomass to achieve a closed-loop biorefinery. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 13816-13824.	3.3	68
8	Hydrogen-Donor-Assisted Solvent Liquefaction of Lignin to Short-Chain Alkylphenols Using a Micro Reactor/Gas Chromatography System. Energy & Fuels, 2014, 28, 6429-6437.	2.5	67
9	The influence of alkali and alkaline earth metals on char and volatile aromatics from fast pyrolysis of lignin. Journal of Analytical and Applied Pyrolysis, 2017, 127, 385-393.	2.6	63
10	Recent Efforts to Prevent Undesirable Reactions From Fractionation to Depolymerization of Lignin: Toward Maximizing the Value From Lignin. Frontiers in Energy Research, 2018, 6, .	1.2	63
11	Biocompatible Choline-Based Deep Eutectic Solvents Enable One-Pot Production of Cellulosic Ethanol. ACS Sustainable Chemistry and Engineering, 2018, 6, 8914-8919.	3.2	63
12	Pyrolysis mechanisms of methoxy substituted Î±-O-4 lignin dimeric model compounds and detection of free radicals using electron paramagnetic resonance analysis. Journal of Analytical and Applied Pyrolysis, 2014, 110, 254-263.	2.6	61
13	Rapid room temperature solubilization and depolymerization of polymeric lignin at high loadings. Green Chemistry, 2016, 18, 6012-6020.	4.6	60
14	Quantitative Investigation of Free Radicals in Bioâ€Oil and their Potential Role in Condensedâ€Phase Polymerization. ChemSusChem, 2015, 8, 894-900.	3.6	56
15	Chemoselective Methylation of Phenolic Hydroxyl Group Prevents Quinone Methide Formation and Repolymerization During Lignin Depolymerization. ACS Sustainable Chemistry and Engineering, 2017, 5, 3913-3919.	3.2	55
16	Impact of lignin polymer backbone esters on ionic liquid pretreatment of poplar. Biotechnology for Biofuels, 2017, 10, 101.	6.2	48
17	Partial oxidative pyrolysis of acid infused red oak using a fluidized bed reactor to produce sugar rich bio-oil. Fuel, 2014, 130, 135-141.	3.4	33
18	Kinetic understanding of the effect of Na and Mg on pyrolytic behavior of lignin using a distributed activation energy model and density functional theory modeling. Green Chemistry, 2019, 21, 1099-1107.	4.6	33

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19	Catalytic Effect of Alkali and Alkaline Earth Metals in Lignin Pyrolysis: A Density Functional Theory Study. Energy & Fuels, 2020, 34, 9734-9740.	2.5	32
20	Sustainable biorefinery processes using renewable deep eutectic solvents. Current Opinion in Green and Sustainable Chemistry, 2021, 27, 100396.	3.2	28
21	Tandem conversion of lignin to catechols via demethylation and catalytic hydrogenolysis. Industrial Crops and Products, 2021, 159, 113095.	2.5	27
22	Understanding the Effects of Ethylene Glycol-Assisted Biomass Fractionation Parameters on Lignin Characteristics Using a Full Factorial Design and Computational Modeling. ACS Omega, 2019, 4, 16103-16110.	1.6	25
23	Alkaline sulfonation and thermomechanical pulping pretreatment of softwood chips and pellets to enhance enzymatic hydrolysis. Bioresource Technology, 2020, 315, 123789.	4.8	23
24	Effect of Alkyl Chain Length of Ionic Surfactants on Selective Removal of Asphaltene from Oil Sand Bitumen. Energy & Fuels, 2018, 32, 9304-9313.	2.5	20
25	Cascade Production of Lactic Acid from Universal Types of Sugars Catalyzed by Lanthanum Triflate. ChemSusChem, 2018, 11, 598-604.	3.6	18
26	Evaluating Protic Ionic Liquid for Woody Biomass One-Pot Pretreatment + Saccharification, Followed by <i>Rhodosporidium toruloides</i> Cultivation. ACS Sustainable Chemistry and Engineering, 2020, 8, 782-791.	3.2	18
27	Improved hydrodeoxygenation of lignin-derived oxygenates and biomass pyrolysis oil into hydrocarbon fuels using titania-supported nickel phosphide catalysts. Energy Conversion and Management, 2022, 266, 115822.	4.4	18
28	Enhancing Enzyme-Mediated Hydrolysis of Mechanical Pulps by Deacetylation and Delignification. ACS Sustainable Chemistry and Engineering, 2020, 8, 5847-5855.	3.2	13
29	Integrated Process for the Production of Lactic Acid from Lignocellulosic Biomass: From Biomass Fractionation and Characterization to Chemocatalytic Conversion with Lanthanum(III) Triflate. Industrial & Engineering Chemistry Research, 2020, 59, 10832-10839.	1.8	13
30	The production of lactic acid from chemi-thermomechanical pulps using a chemo-catalytic approach. Bioresource Technology, 2021, 324, 124664.	4.8	12
31	Stabilization of acid-rich bio-oil by catalytic mild hydrotreating. Environmental Pollution, 2021, 272, 116180.	3.7	11
32	Pyrolysis kinetics and product distribution of Î±-cellulose: Effect of potassium and calcium impregnation. Renewable Energy, 2022, 181, 329-340.	4.3	11
33	Microwave-assisted phenolation of acid-insoluble Klason lignin and its application in adhesion. Green Chemistry, 2022, 24, 2051-2061.	4.6	11
34	Ferric chloride aided peracetic acid pretreatment for effective utilization of sugarcane bagasse. Fuel, 2022, 319, 123739.	3.4	10
35	Engineered Sorghum Bagasse Enables a Sustainable Biorefinery with <i>p</i>â€Hydroxybenzoic Acidâ€Based Deep Eutectic Solvent. ChemSusChem, 2021, 14, 5235-5244.	3.6	9
36	Deep Eutectic Solvent Pretreatment of Transgenic Biomass With Increased C6C1 Lignin Monomers. Frontiers in Plant Science, 2019, 10, 1774.	1.7	8

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37	Enhancing Enzyme-Mediated Cellulose Hydrolysis by Incorporating Acid Groups Onto the Lignin During Biomass Pretreatment. Frontiers in Bioengineering and Biotechnology, 2020, 8, 608835.	2.0	8
38	Challenges and Perspective of Recent Biomass Pretreatment Solvents. Frontiers in Chemical Engineering, 2021, 3, .	1.3	8
39	Catalytic conversion of waste corrugated cardboard into lactic acid using lanthanide triflates. Waste Management, 2022, 144, 41-48.	3.7	7
40	Parahydrogen-induced polarization in the hydrogenation of lignin-derived phenols using Wilkinsonâ€™s catalyst. Fuel, 2019, 255, 115845.	3.4	6
41	One-pot selective production of deoxygenated monomeric, dimeric, and trimeric hydrocarbons from xylose-derived 2-methylfuran using multifunctional tungstate-zirconia-supported Ru, Pd, and Ni catalysts. Chemical Engineering Journal, 2022, 441, 135581.	6.6	5
42	The use of steam pretreatment to enhance pellet durability and the enzyme-mediated hydrolysis of pellets to fermentable sugars. Bioresource Technology, 2022, 347, 126731.	4.8	4
43	Characteristics of Rapid Pyrolysis for Upgrading Heavy Oils in a Circulating Fluidized Bed Reactor. Energy & Fuels, 2017, 31, 5959-5968.	2.5	3
44	Influence of hydrocracking and ionic liquid pretreatments on composition and properties of Arabidopsis thaliana wild type and CAD mutant lignins. Renewable Energy, 2020, 152, 1241-1249.	4.3	3
45	Tailoring Lignin Structure to Maximize the Value from Lignin. ACS Symposium Series, 2021, , 13-36.	0.5	0
46	Editorial on Special Issue â€œBiorefinery: Current Status, Challenges, and New Strategiesâ€• Applied Sciences (Switzerland), 2021, 11, 4674.	1.3	0