Jae-Won Lee

List of Publications by Year
in descending order

99 papers	2,850 citations	159585 30 h-index	189892 50 g-index
99 all docs	99 docs citations	99 times ranked	3441 citing authors

#	Article	IF	Citations
1	Efficiencies of acid catalysts in the hydrolysis of lignocellulosic biomass over a range of combined severity factors. Bioresource Technology, 2011, 102, 5884-5890.	9.6	240
2	Biodegradability of bio-flour filled biodegradable poly(butylene succinate) bio-composites in natural and compost soil. Polymer Degradation and Stability, 2006, 91, 1117-1127.	5.8	217
3	Biological pretreatment of softwood Pinus densiflora by three white rot fungi. Journal of Microbiology, 2007, 45, 485-91.	2.8	118
4	Dilute oxalic acid pretreatment for biorefining giant reed (Arundo donax L.). Biomass and Bioenergy, 2011, 35, 3018-3024.	5.7	113
5	Bioconversion of giant reed (Arundo donax L.) hemicellulose hydrolysate to ethanol by Scheffersomyces stipitis CBS6054. Biomass and Bioenergy, 2012, 39, 296-305.	5.7	93
6	Optimizing the torrefaction of mixed softwood by response surface methodology for biomass upgrading to high energy density. Bioresource Technology, 2012, 116, 471-476.	9.6	90
7	Physical and chemical characteristics of products from the torrefaction of yellow poplar (Liriodendron tulipifera). Bioresource Technology, 2012, 116, 120-125.	9.6	85
8	Simultaneous saccharification and ethanol fermentation of oxalic acid pretreated corncob assessed with response surface methodology. Bioresource Technology, 2009, 100, 6307-6311.	9.6	83
9	The roles of xylan and lignin in oxalic acid pretreated corncob during separate enzymatic hydrolysis and ethanol fermentation. Bioresource Technology, 2010, 101, 4379-4385.	9.6	82
10	An effective approach to preparing partially graphitic activated carbon derived from structurally separated pitch pine biomass. Carbon, 2017, 118, 431-437.	10.3	80
11	Dilute Acid Pretreatment of Corncob for Efficient Sugar Production. Applied Biochemistry and Biotechnology, 2011, 163, 658-668.	2.9	64
12	Scale-up study of oxalic acid pretreatment of agricultural lignocellulosic biomass for the production of bioethanol. Bioresource Technology, 2011, 102, 7451-7456.	9.6	63
13	Characterization of ionic liquid pretreatment andÂthe bioconversion of pretreated mixed softwood biomass. Biomass and Bioenergy, 2015, 81, 1-8.	5.7	63
14	Preparation of high purity silica originated from rice husks by chemically removing metallic impurities. Journal of Industrial and Engineering Chemistry, 2017, 50, 79-85.	5.8	59
15	Purification and characterization of a thermostable xylanase from the brown-rot fungus Laetiporus sulphureus. Journal of Bioscience and Bioengineering, 2009, 107, 33-37.	2.2	50
16	Enhancement of waste biomass fuel properties by sequential leaching and wet torrefaction. Fuel, 2019, 239, 693-700.	6.4	50
17	Enzymatic saccharification of biologically pretreated Pinus densiflora using enzymes from brown rot fungi. Journal of Bioscience and Bioengineering, 2008, 106, 162-167.	2.2	49
18	Torrefaction of oil palm mesocarp fiber and their effect on pelletizing. Biomass and Bioenergy, 2013, 52, 159-165.	5.7	47

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19	Response surface optimization of oxalic acid pretreatment of yellow poplar (Liriodendron tulipifera) for production of glucose and xylose monosaccarides. Bioresource Technology, 2011, 102, 1440-1446.	9.6	45
20	Improvement of ethanol fermentation from lignocellulosic hydrolysates by the removal of inhibitors. Journal of Industrial and Engineering Chemistry, 2013, 19, 2010-2015.	5.8	45
21	Dibutyl phthalate biodegradation by the white rot fungus,Polyporus brumalis. Biotechnology and Bioengineering, 2007, 97, 1516-1522.	3.3	42
22	Optimization of biomass torrefaction conditions by the Gain and Loss method and regression model analysis. Bioresource Technology, 2014, 172, 438-443.	9.6	42
23	Evaluation of waste mushroom logs as a potential biomass resource for the production of bioethanol. Bioresource Technology, 2008, 99, 2736-2741.	9.6	41
24	Recovery of an ionic liquid [BMIM]Cl from a hydrolysate of lignocellulosic biomass using electrodialysis. Separation and Purification Technology, 2013, 120, 86-91.	7.9	41
25	Sequential Fenton oxidation and hydrothermal treatment to improve the effect of pretreatment and enzymatic hydrolysis on mixed hardwood. Bioresource Technology, 2016, 200, 121-127.	9.6	40
26	Influence of pretreatment condition on the fermentable sugar production and enzymatic hydrolysis of dilute acid-pretreated mixed softwood. Bioresource Technology, 2013, 140, 306-311.	9.6	38
27	Acidified glycerol pretreatment for enhanced ethanol production from rice straw. Biomass and Bioenergy, 2016, 94, 39-45.	5.7	37
28	Enhanced bioethanol production from yellow poplar by deacetylation and oxalic acid pretreatment without detoxification. Bioresource Technology, 2015, 178, 28-35.	9.6	35
29	Improvement of the fermentability of oxalic acid hydrolysates by detoxification using electrodialysis and adsorption. Bioresource Technology, 2014, 152, 444-449.	9.6	33
30	Structural and Electrochemical Characteristics of Activated Carbon Derived from Lignin-Rich Residue. ACS Sustainable Chemistry and Engineering, 2019, 7, 2471-2482.	6.7	33
31	Phosphomolybdic Acid as a Catalyst for Oxidative Valorization of Biomass and Its Application as an Alternative Electron Source. ACS Catalysis, 2020, 10, 2060-2068.	11.2	33
32	Effects of pretreatment factors on fermentable sugar production and enzymatic hydrolysis of mixed hardwood. Bioresource Technology, 2013, 130, 97-101.	9.6	32
33	Optimization of pretreatment condition for ethanol production from oxalic acid pretreated biomass by response surface methodology. Industrial Crops and Products, 2016, 79, 1-6.	5.2	31
34	Evaluation of sulfuric acid-pretreated biomass-derived biochar characteristics and its diazinon adsorption mechanism. Bioresource Technology, 2022, 348, 126828.	9.6	30
35	Optimization of Ionic Liquid Pretreatment of Mixed Softwood by Response Surface Methodology and Reutilization of Ionic Liquid from Hydrolysate. Biotechnology and Bioprocess Engineering, 2018, 23, 228-237.	2.6	29
36	Optimization conditions for oxalic acid pretreatment of deacetylated yellow poplar for ethanol production. Journal of Industrial and Engineering Chemistry, 2015, 32, 298-304.	5.8	28

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37	Structural properties of pretreated biomass from different acid pretreatments and their effects on simultaneous saccharification and ethanol fermentation. Bioresource Technology, 2013, 139, 214-219.	9.6	27
38	Bioethanol production from oxalic acid-pretreated biomass and hemicellulose-rich hydrolysates via a combined detoxification process. Fuel, 2015, 161, 129-136.	6.4	27
39	Extraction of total phenolic compounds from yellow poplar hydrolysate and evaluation of their antioxidant activities. Industrial Crops and Products, 2017, 97, 574-581.	5.2	27
40	Ultrasound-assisted extraction and antioxidant activity of phenolic and flavonoid compounds and ascorbic acid from rugosa rose (Rosa rugosa Thunb.) fruit. Food Science and Biotechnology, 2018, 27, 375-382.	2.6	27
41	Structural characterization of the lignin-carbohydrate complex in biomass pretreated with Fenton oxidation and hydrothermal treatment and consequences on enzymatic hydrolysis efficiency. Carbohydrate Polymers, 2021, 270, 118375.	10.2	26
42	A feasibility study on the multistage process for the oxalic acid pretreatment of a lignocellulosic biomass using electrodialysis. Bioresource Technology, 2013, 130, 211-217.	9.6	25
43	Characterization of oxalic acid pretreatment on lignocellulosic biomass using oxalic acid recovered by electrodialysis. Bioresource Technology, 2013, 133, 87-91.	9.6	25
44	Hydrothermal Treatment. , 2015, , 61-74.		25
45	An integrated detoxification process with electrodialysis and adsorption from the hemicellulose hydrolysates of yellow poplars. Bioresource Technology, 2014, 161, 280-287.	9.6	22
46	Evaluation of Ethanol Production from Corncob Using Scheffersomyces (Pichia) stipitis CBS 6054 by Volumetric Scale-up. Applied Biochemistry and Biotechnology, 2011, 165, 814-822.	2.9	21
47	Removal of inhibitors from a hydrolysate of lignocellulosic biomass using electrodialysis. Separation and Purification Technology, 2014, 122, 242-247.	7.9	20
48	Bioethanol production from detoxified hydrolysate and the characterization of oxalic acid pretreated Eucalyptus (Eucalyptus globulus) biomass. Industrial Crops and Products, 2016, 83, 322-328.	5.2	19
49	Changes in chemical and physical properties of yellow poplar (Liriodendron tulipifera) during torrefaction. Wood Science and Technology, 2015, 49, 257-272.	3.2	17
50	Catalytic effect of iron on sequential Fenton oxidation, hydrothermal treatment, and enzymatic hydrolysis to produce monosaccharide from lignocellulosic biomass. Industrial Crops and Products, 2020, 158, 112953.	5.2	16
51	Characterization of cell wall structure in dilute acid-pretreated biomass by confocal Raman microscopy and enzymatic hydrolysis. Biomass and Bioenergy, 2016, 93, 33-37.	5.7	13
52	Antioxidant Activities of Hot Water Extracts from Different Parts of Rugosa rose (Rosa rugosa) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 142	3.0	13
53	Estrogenic reduction of styrene monomer degraded by Phanerochaete chrysosporium KFRI 20742. Journal of Microbiology, 2006, 44, 177-84.	2.8	13
54	Biodegradation of Methoxychlor and Its Metabolites by the White Rot Fungus Stereum hirsutum Related to the Inactivation of Estrogenic Activity. Journal of Environmental Science and Health - Part B Pesticides, Food Contaminants, and Agricultural Wastes, 2006, 41, 385-397.	1.5	11

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55	Optimal condition of torrefaction for high energy density solid fuel of fast growing tree species. Korean Journal of Chemical Engineering, 2015, 32, 1547-1553.	2.7	11
56	Enzyme adsorption properties on dilute acid pretreated biomass by low vacuum-scanning electron microscopy and structural analysis of lignin. Bioresource Technology, 2018, 262, 107-113.	9.6	11
57	Structural changes in biomass (yellow poplar and empty fruit bunch) during hydrothermal and oxalic acid pretreatments and their effects on enzymatic hydrolysis efficiency. Industrial Crops and Products, 2022, 178, 114569.	5.2	11
58	Efficient utilization of lignin residue for activated carbon in supercapacitor applications. Materials Chemistry and Physics, 2022, 284, 126073.	4.0	11
59	Near infrared spectroscopy model for analyzing chemical composition of biomass subjected to Fenton oxidation and hydrothermal treatment. Renewable Energy, 2021, 172, 1341-1350.	8.9	9
60	Optimal Condition of Torrefaction for the High-density Solid Fuel of Larch (Larix kaempferi). Korean Chemical Engineering Research, 2013, 51, 739-744.	0.2	9
61	Kinetic study on the dilute acid catalyzed hydrolysis of waste mushroom medium. Journal of Industrial and Engineering Chemistry, 2015, 25, 176-179.	5.8	8
62	Study on the possibility of waste mushroom medium as a biomass resource for biorefinery. Journal of Industrial and Engineering Chemistry, 2013, 19, 1535-1539.	5.8	7
63	Evaluation of Oxalic Acid Pretreatment Condition Using Response Surface Method for Producing Bio-ethanol from Yellow Poplar (Liriodendron tulipifera) by Simultaneous Saccharification and Fermentation. Journal of the Korean Wood Science and Technology, 2011, 39, 75-85.	3.0	7
64	Bioethanol production from deacetylated yellow poplar pretreated with oxalic acid recovered through electrodialysis. Bioresource Technology, 2016, 208, 170-177.	9.6	6
65	Evaluation of antioxidant activity of the residues generated from ethanol concentration of lignocellulosic biomass using pervaporation. Journal of Industrial and Engineering Chemistry, 2017, 52, 51-58.	5.8	6
66	Microstructural changes in the cell wall and enzyme adsorption properties of lignocellulosic biomass subjected to thermochemical pretreatment. Cellulose, 2019, 26, 1111-1124.	4.9	6
67	Enzymatic Hydrolysis Condition of Pretreated Corncob by Oxalic Acid to Improve Ethanol Production. Journal of the Korean Wood Science and Technology, 2012, 40, 294-301.	3.0	5
68	Comparison of the electrochemical properties of activated carbon prepared from woody biomass with different lignin content. Wood Science and Technology, 2020, 54, 1165-1180.	3.2	4
69	Effects of Sugars and Degradation Products Derived from Lignocellulosic Biomass on Maleic Acid Production. Energies, 2021, 14, 918.	3.1	4
70	Effects of chemical composition of Miscanthus sacchariflorus var. No. 1 on pelletizing, focusing on optimal pressure and compression ratio. Industrial Crops and Products, 2021, 161, 113189.	5.2	4
71	Optimal Condition for Torrefaction of Eucalyptus by Response Surface Methodology. Journal of the Korean Wood Science and Technology, 2013, 41, 497-506.	3.0	4
72	Improvement in The Fuel Characteristics of Empty Fruit Bunch by Leaching and Wet Torrefaction. Journal of the Korean Wood Science and Technology, 2016, 44, 360-369.	3.0	4

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73	Characterization of xylanase from Lentinus edodes M290 cultured on waste mushroom logs. Journal of Microbiology and Biotechnology, 2007, 17, 1811-7.	2.1	4
74	Characteristics and Partial Purification of a Bacteriocin Produced by Pediococcus damnosus JNU 534. Korean Journal for Food Science of Animal Resources, 2011, 31, 952-959.	1.5	3
75	Study on the Hydrolysis Kinetics of Xylan on Different Acid Catalysts. Korean Chemical Engineering Research, 2014, 52, 226-232.	0.2	3
76	Microscopic Observation of Pellets Fabricated with Torrefied Larch and Tulip Tree Chips and Effect of Binders on the Durability of the Pellets. Korean Chemical Engineering Research, 2015, 53, 224-230.	0.2	3
77	Optimal Condition for Simultaneous Saccharification and Fermentation Using Pretreated Corncob by Oxalic Acid. Journal of the Korean Wood Science and Technology, 2011, 39, 490-497.	3.0	3
78	Furfural Production and Recovery by Two-stage Acid Treatment of Lignocellulosic Biomass. Journal of the Korean Wood Science and Technology, 2015, 43, 76-85.	3.0	3
79	Thermal Degradation Behavior of Biomass Depending on Torrefaction Temperatures and Heating Rates. Journal of the Korean Wood Science and Technology, 2016, 44, 685-694.	3.0	3
80	Evaluation of the Reuse of the Hydrolysate Generated from an Empty Fruit Bunch Hydrothermal Pretreatment. New & Renewable Energy, 2019, 15, 52-60.	0.4	3
81	Optimization of Ascorbic Acid Extraction from Rugosa Rose (Rosa rugosa Thunb.) Fruit Using Response Surface Methodology and Validation of the Analytical Method. Journal of the Korean Wood Science and Technology, 2020, 48, 364-375.	3.0	3
82	Biodegradation Characteristics of Monochlorophenols by Wood Rot Fungi. Korean Journal of Environmental Agriculture, 2002, 21, 261-268.	0.4	2
83	Recovery of Catalyst Used in Oxalic Acid Pretreatment of Empty Fruit Bunch (EFB) and Bioethanol Production. Journal of the Korean Wood Science and Technology, 2013, 41, 507-514.	3.0	2
84	Production of High-density Solid Fuel Using Torrefeid Biomass of Larch Wood. Journal of the Korean Wood Science and Technology, 2015, 43, 381-389.	3.0	2
85	Study on the Size Reduction Characteristics of Miscanthus sacchariflorus via Image Processing. Journal of the Korean Wood Science and Technology, 2018, 46, 309-314.	3.0	2
86	Analysis of Factors Affecting Ethanol Fermentation of Hydrolysate Derived from the Oxalic Acid Pretreatment of Yellow Poplar (Liriodendron tulipifera). New & Renewable Energy, 2019, 15, 75-85.	0.4	2
87	Enhancement of Ethanol Production by The Removal of Fermentation Inhibitors, and Effect of Lignin-derived Inhibitors on Fermentation. Journal of the Korean Wood Science and Technology, 2016, 44, 389-397.	3.0	2
88	Chemical Properties of Artificially Buried Wood in an Intertidal Zone during the Deterioration Period. Journal of the Korean Wood Science and Technology, 2020, 48, 896-906.	3.0	2
89	Effect of torrefied biomass on hydrophobicity and mechanical properties of polylactic acid composite. International Journal of Biological Macromolecules, 2022, 215, 36-44.	7.5	2
90	Optimal particle size for fermentable sugar production from Miscanthus sacchariflorus var. No. 1 (Goedae-Uksae 1) considering energy consumption for comminution. Biomass Conversion and Biorefinery, 2020, , 1.	4.6	1

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91	Production of Levulinic Acid Using Glucose Derived from Office Waste Paper. New & Renewable Energy, 2021, 17, 32-39.	0.4	1
92	Antifungal and Antioxidant Activities of Volatile Organic Compounds Generated During the Drying Process of Chamaecyparis obtuse. Korean Journal of Microbiology, 2012, 48, 305-308.	0.2	1
93	Improvement of Biomass Degradation by Fenton Oxidation and Reusability of the Fenton Oxidation Solution. New & Renewable Energy, 2020, 16, 83-91.	0.4	1
94	Improved Sugar Production by Optimizing Planetary Mill Pretreatment and Enzyme Hydrolysis Process. BioMed Research International, 2015, 2015, 1-5.	1.9	0
95	Biotransformation of trans,trans-farnesol by Wood Rot Fungi. Korean Journal of Microbiology, 2012, 48, 37-41.	0.2	0
96	Kinetic Study on the Acid-catalyzed Hydrolysis of Xylan. Journal of the Korean Wood Science and Technology, 2012, 40, 389-396.	3.0	0
97	Antioxidant Activity of The Residue Generated During Pervaporation of Bioethanol Produced from Lignocellulosic Biomass. Journal of the Korean Wood Science and Technology, 2015, 43, 826-837.	3.0	0
98	Improved Ethanol Production from Deacetylated Yellow Poplar (Liriodendron tulipifera) by Detoxification of Hydrolysate and Semi-SSF. Korean Chemical Engineering Research, 2016, 54, 494-500.	0.2	0
99	Bioethanol Production from Spent Shiitake (Lentinula edodes) Mushroom Medium by Oxalic Acid Pretreatment. Trends in Agriculture & Life Sciences, 2018, 56, 47-54.	0.1	0