Rui Katahira

List of Publications by Year
in descending order

36	2,344	25	39
papers	citations	h-index	g-index
		236833	302012

39	39	39	2896
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Reductive Catalytic Fractionation of Corn Stover Lignin. ACS Sustainable Chemistry and Engineering, 2016, 4, 6940-6950.	3.2	235
2	Flowthrough Reductive Catalytic Fractionation of Biomass. Joule, 2017, 1, 613-622.	11.7	197
3	Base-Catalyzed Depolymerization of Biorefinery Lignins. ACS Sustainable Chemistry and Engineering, 2016, 4, 1474-1486.	3.2	172
4	Lignin depolymerisation by nickel supported layered-double hydroxide catalysts. Green Chemistry, 2014, 16, 824-835.	4.6	161
5	Differences in S/G ratio in natural poplar variants do not predict catalytic depolymerization monomer yields. Nature Communications, 2019, 10, 2033.	5.8	127
6	Metabolic engineering of <i>Pseudomonas putida</i> for increased polyhydroxyalkanoate production from lignin. Microbial Biotechnology, 2020, 13, 290-298.	2.0	120
7	Enhanced characteristics of genetically modified switchgrass (Panicum virgatum L.) for high biofuel production. Biotechnology for Biofuels, 2013, 6, 71.	6.2	118
8	Base-Catalyzed Depolymerization of Solid Lignin-Rich Streams Enables Microbial Conversion. ACS Sustainable Chemistry and Engineering, 2017, 5, 8171-8180.	3.2	115
9	Revisiting alkaline aerobic lignin oxidation. Green Chemistry, 2018, 20, 3828-3844.	4.6	114
10	Pyrolysis reaction networks for lignin model compounds: unraveling thermal deconstruction of Î²-O-4 and Î±-O-4 compounds. Green Chemistry, 2016, 18, 1762-1773.	4.6	92
11	Reductive Catalytic Fractionation of C-Lignin. ACS Sustainable Chemistry and Engineering, 2018, 6, 11211-11218.	3.2	89
12	Outer membrane vesicles catabolize lignin-derived aromatic compounds in <i>Pseudomonas putida</i> KT2440. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 9302-9310.	3.3	82
13	Intracellular pathways for lignin catabolism in white-rot fungi. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	82
14	Alkaline Peroxide Delignification of Corn Stover. ACS Sustainable Chemistry and Engineering, 2017, 5, 6310-6321.	3.2	60
15	Metal-Free Aqueous Flow Battery with Novel Ultrafiltered Lignin as Electrolyte. ACS Sustainable Chemistry and Engineering, 2018, 6, 5394-5400.	3.2	52
16	A thermodynamic investigation of the cellulose allomorphs: Cellulose(am), cellulose IÎ²(cr), cellulose II(cr), and cellulose III(cr). Journal of Chemical Thermodynamics, 2015, 81, 184-226.	1.0	50
17	Heavy Metal-Free Tannin from Bark for Sustainable Energy Storage. Nano Letters, 2017, 17, 7897-7907.	4.5	46
18	Molybdenum incorporated mesoporous silica catalyst for production of biofuels and value-added chemicals via catalytic fast pyrolysis. Green Chemistry, 2015, 17, 3035-3046.	4.6	45

#	Article	IF	Citations
19	Identification and quantification of lignin monomers and oligomers from reductive catalytic fractionation of pine wood with GC Ã— GC â€“ FID/MS. Green Chemistry, 2022, 24, 191-206.	4.6	41
20	Effect of mechanical disruption on the effectiveness of three reactors used for dilute acid pretreatment of corn stover Part 1: chemical and physical substrate analysis. Biotechnology for Biofuels, 2014, 7, 57.	6.2	39
21	Clean Fractionation Pretreatment Reduces Enzyme Loadings for Biomass Saccharification and Reveals the Mechanism of Free and Cellulosomal Enzyme Synergy. ACS Sustainable Chemistry and Engineering, 2014, 2, 1377-1387.	3.2	35
22	Characterization of alkylguaiacol-degrading cytochromes P450 for the biocatalytic valorization of lignin. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 25771-25778.	3.3	35
23	Mesoscale Reactionâ€“Diffusion Phenomena Governing Ligninâ€First Biomass Fractionation. ChemSusChem, 2020, 13, 4495-4509.	3.6	35
24	Microbial electrochemical treatment of biorefinery black liquor and resource recovery. Green Chemistry, 2019, 21, 1258-1266.	4.6	28
25	Ga/ZSM-5 catalyst improves hydrocarbon yields and increases alkene selectivity during catalytic fast pyrolysis of biomass with co-fed hydrogen. Green Chemistry, 2020, 22, 2403-2418.	4.6	26
26	Flow-through solvolysis enables production of native-like lignin from biomass. Green Chemistry, 2021, 23, 5437-5441.	4.6	25
27	Degradation of Carbohydrates during Dilute Sulfuric Acid Pretreatment Can Interfere with Lignin Measurements in Solid Residues. Journal of Agricultural and Food Chemistry, 2013, 61, 3286-3292.	2.4	24
28	Pathway discovery and engineering for cleavage of a Î²-1 lignin-derived biaryl compound. Metabolic Engineering, 2021, 65, 1-10.	3.6	22
29	Integrated Biorefining: Coproduction of Renewable Resol Biopolymer for Aqueous Stream Valorization. ACS Sustainable Chemistry and Engineering, 2017, 5, 6615-6625.	3.2	19
30	Downregulation of p-Coumaroyl Quinate/Shikimate 3â€²-Hydroxylase (C3â€²H) or Cinnamate-4-hydrolylase (C4H) in Eucalyptus urophyllaâ€‰Ã—â€‰Eucalyptus grandis Leads to Increased Extractability. Bioenergy Research, 2016, 9, 691-699.	2.2	12
31	Recovery of low molecular weight compounds from alkaline pretreatment liquor <i>via</i> membrane separations. Green Chemistry, 2022, 24, 3152-3166.	4.6	8
32	Structural and functional analysis of lignostilbene dioxygenases from Sphingobium sp. SYK-6. Journal of Biological Chemistry, 2021, 296, 100758.	1.6	7
33	Investigation of Xylose Reversion Reactions That Can Occur during Dilute Acid Pretreatment. Energy & Fuels, 2013, 27, 7389-7397.	2.5	5
34	Bioconversion of wastewater-derived cresols to methyl muconic acids for use in performance-advantaged bioproducts. Green Chemistry, 2022, 24, 3677-3688.	4.6	4
35	Fractionation of Lignin Streams Using Tangential Flow Filtration. Industrial & Engineering Chemistry Research, 2022, 61, 4407-4417.	1.8	4
36	The cell utilized partitioning model as a predictive tool for optimizing counter-current chromatography processes. Separation and Purification Technology, 2022, 285, 120330.	3.9	1