Rui Katahira

List of Publications by Year
in descending order

36 papers	2,344 citations	257101 24 h-index	301761 39 g-index
39 all docs	39 docs citations	39 times ranked	2896 citing authors

#	Article	IF	Citations
1	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
2	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
3	Bioconversion of wastewater-derived cresols to methyl muconic acids for use in performance-advantaged bioproducts. Green Chemistry, 2022, 24, 3677-3688.	4.6	4
4	Recovery of low molecular weight compounds from alkaline pretreatment liquor <i>via</i> membrane separations. Green Chemistry, 2022, 24, 3152-3166.	4.6	8
5	Fractionation of Lignin Streams Using Tangential Flow Filtration. Industrial & Engineering Chemistry Research, 2022, 61, 4407-4417.	1.8	4
6	Structural and functional analysis of lignostilbene dioxygenases from Sphingobium sp. SYK-6. Journal of Biological Chemistry, 2021, 296, 100758.	1.6	7
7	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
8	Pathway discovery and engineering for cleavage of a Î²-1 lignin-derived biaryl compound. Metabolic Engineering, 2021, 65, 1-10.	3.6	22
9	Flow-through solvolysis enables production of native-like lignin from biomass. Green Chemistry, 2021, 23, 5437-5441.	4.6	25
10	Metabolic engineering of <i>Pseudomonas putida</i> for increased polyhydroxyalkanoate production from lignin. Microbial Biotechnology, 2020, 13, 290-298.	2.0	120
11	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
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	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
14	Mesoscale Reactionâ€"Diffusion Phenomena Governing Ligninâ€First Biomass Fractionation. ChemSusChem, 2020, 13, 4495-4509.	3.6	35
15	Microbial electrochemical treatment of biorefinery black liquor and resource recovery. Green Chemistry, 2019, 21, 1258-1266.	4.6	28
16	Differences in S/G ratio in natural poplar variants do not predict catalytic depolymerization monomer yields. Nature Communications, 2019, 10, 2033.	5.8	127
17	Metal-Free Aqueous Flow Battery with Novel Ultrafiltered Lignin as Electrolyte. ACS Sustainable Chemistry and Engineering, 2018, 6, 5394-5400.	3.2	52
18	Revisiting alkaline aerobic lignin oxidation. Green Chemistry, 2018, 20, 3828-3844.	4.6	114

#	Article	IF	Citations
19	Reductive Catalytic Fractionation of C-Lignin. ACS Sustainable Chemistry and Engineering, 2018, 6, 11211-11218.	3.2	89
20	Alkaline Peroxide Delignification of Corn Stover. ACS Sustainable Chemistry and Engineering, 2017, 5, 6310-6321.	3.2	60
21	Flowthrough Reductive Catalytic Fractionation of Biomass. Joule, 2017, 1, 613-622.	11.7	197
22	Base-Catalyzed Depolymerization of Solid Lignin-Rich Streams Enables Microbial Conversion. ACS Sustainable Chemistry and Engineering, 2017, 5, 8171-8180.	3.2	115
23	Heavy Metal-Free Tannin from Bark for Sustainable Energy Storage. Nano Letters, 2017, 17, 7897-7907.	4.5	46
24	Integrated Biorefining: Coproduction of Renewable Resol Biopolymer for Aqueous Stream Valorization. ACS Sustainable Chemistry and Engineering, 2017, 5, 6615-6625.	3.2	19
25	Reductive Catalytic Fractionation of Corn Stover Lignin. ACS Sustainable Chemistry and Engineering, 2016, 4, 6940-6950.	3.2	235
26	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
27	Base-Catalyzed Depolymerization of Biorefinery Lignins. ACS Sustainable Chemistry and Engineering, 2016, 4, 1474-1486.	3.2	172
28	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
29	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
30	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
31	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
32	Lignin depolymerisation by nickel supported layered-double hydroxide catalysts. Green Chemistry, 2014, 16, 824-835.	4.6	161
33	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
34	Enhanced characteristics of genetically modified switchgrass (Panicum virgatum L.) for high biofuel production. Biotechnology for Biofuels, 2013, 6, 71.	6.2	118
35	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
36	Investigation of Xylose Reversion Reactions That Can Occur during Dilute Acid Pretreatment. Energy & Fuels, 2013, 27, 7389-7397.	2.5	5