Rachael Simister

List of Publications by Year
in descending order

21 papers	673 citations	759233 12 h-index	713466 21 g-index
22 all docs	22 docs citations	22 times ranked	1074 citing authors

#	Article	IF	Citations
1	An ancient family of lytic polysaccharide monooxygenases with roles in arthropod development and biomass digestion. Nature Communications, 2018, 9, 756.	12.8	192
2	Evaluating the composition and processing potential of novel sources of Brazilian biomass for sustainable biorenewables production. Biotechnology for Biofuels, 2014, 7, 10.	6.2	87
3	Cell wall remodeling under salt stress: Insights into changes in polysaccharides, feruloylation, lignification, and phenolic metabolism in maize. Plant, Cell and Environment, 2020, 43, 2172-2191.	5.7	79
4	Biomass composition of the golden tide pelagic seaweeds Sargassum fluitans and S. natans (morphotypes I and VIII) to inform valorisation pathways. Science of the Total Environment, 2021, 762, 143134.	8.0	72
5	Characterization of the cellulolytic secretome of Trichoderma harzianum during growth on sugarcane bagasse and analysis of the activity boosting effects of swollenin. Biotechnology Progress, 2016, 32, 327-336.	2.6	39
6	Optimization of biomass pretreatments using fractional factorial experimental design. Biotechnology for Biofuels, 2018, 11, 206.	6.2	37
7	A glycosyl transferase family 43 protein involved in xylan biosynthesis is associated with straw digestibility in Brachypodium distachyon. New Phytologist, 2018, 218, 974-985.	7.3	21
8	Side by Side Comparison of Chemical Compounds Generated by Aqueous Pretreatments of Maize Stover, Miscanthus and Sugarcane Bagasse. Bioenergy Research, 2014, 7, 1466-1480.	3.9	19
9	Nutrient and drought stress: implications for phenology and biomass quality in miscanthus. Annals of Botany, 2019, 124, 553-566.	2.9	19
10	Design of experiments driven optimization of alkaline pretreatment and saccharification for sugarcane bagasse. Bioresource Technology, 2021, 321, 124499.	9.6	16
11	Fast pyrolysis of rice husk under vacuum conditions to produce levoglucosan. Journal of Analytical and Applied Pyrolysis, 2021, 156, 105105.	5.5	16
12	Sustainable Galactarateâ€Based Polymers: Multiâ€Enzymatic Production of Pectinâ€Derived Polyesters. Macromolecular Rapid Communications, 2019, 40, e1900361.	3.9	14
13	Improved hydrolysis yields and silica recovery by design of experiments applied to acid-alkali pretreatment in rice husks. Industrial Crops and Products, 2021, 170, 113676.	5.2	12
14	Biorefining Potential of Wild-Grown Arundo donax, Cortaderia selloana and Phragmites australis and the Feasibility of White-Rot Fungi-Mediated Pretreatments. Frontiers in Plant Science, 2021, 12, 679966.	3.6	11
15	Biomass recalcitrance in barley, wheat and triticale straw: Correlation of biomass quality with classic agronomical traits. PLoS ONE, 2018, 13, e0205880.	2.5	9
16	Sudangrass, an alternative lignocellulosic feedstock for bioenergy in Argentina. PLoS ONE, 2019, 14, e0217435.	2.5	8
17	Response of cell-wall composition and RNA-seq transcriptome to methyl-jasmonate in Brachypodium distachyon callus. Planta, 2018, 248, 1213-1229.	3.2	7
18	Linkage Mapping of Stem Saccharification Digestibility in Rice. PLoS ONE, 2016, 11, e0159117.	2.5	6

#	Article	IF	Citations
19	Variability for cell-wall and yield components in commercial sugarcane (Saccharum spp.) progeny: contrasts with parental lines and energy cane. Journal of Crop Improvement, 2022, 36, 769-788.	1.7	4
20	Senna reticulata: a Viable Option for Bioenergy Production in the Amazonian Region. Bioenergy Research, 2021, 14, 91-105.	3.9	3
21	Elucidating the multifunctional role of the cell wall components in the maize exploitation. BMC Plant Biology, 2021, 21, 251.	3.6	2