Valdeir Arantes

List of Publications by Year
in descending order

53 papers	4,264 citations	159358 30 h-index	182168 51 g-index
53 all docs	53 docs citations	53 times ranked	4555 citing authors

#	Article	IF	Citations
1	Paludibacter propionicigenes GH10 xylanase as a tool for enzymatic xylooligosaccharides production from heteroxylans. Carbohydrate Polymers, 2022, 275, 118684.	5.1	12
2	Ultra-refining for the production of long-term highly pH-stable lignin nanoparticles in high yield with high uniformity. Green Chemistry, 2022, 24, 1238-1258.	4.6	6
3	Economic assessment of the conversion of bleached eucalyptus Kraft pulp into cellulose nanocrystals in a standâ€alone facility via acid and enzymatic hydrolysis. Biofuels, Bioproducts and Biorefining, 2021, 15, 1775-1788.	1.9	12
4	Effect of thermally assisted hydrodynamic cavitation (HC) processing on physical, nutritional, microbial quality, and pectin methyl esterase (PME) inactivation kinetics in orange juice at different time and temperatures. Journal of Food Processing and Preservation, 2021, 45, e15794.	0.9	12
5	High yield biorefinery products from sugarcane bagasse: Prebiotic xylooligosaccharides, cellulosic ethanol, cellulose nanofibrils and lignin nanoparticles. Bioresource Technology, 2021, 342, 125970.	4.8	19
6	Single-Step Fiber Pretreatment with Monocomponent Endoglucanase: Defibrillation Energy and Cellulose Nanofibril Quality. ACS Sustainable Chemistry and Engineering, 2021, 9, 2260-2270.	3.2	33
7	Effect of chemical treatment of pineapple crown fiber in the production, chemical composition, crystalline structure, thermal stability and thermal degradation kinetic properties of cellulosic materials. Carbohydrate Research, 2021, 499, 108227.	1.1	33
8	The current status of the enzyme-mediated isolation and functionalization of nanocelluloses: production, properties, techno-economics, and opportunities. Cellulose, 2020, 27, 10571-10630.	2.4	48
9	Co-production of xylo-oligosaccharides, xylose and cellulose nanofibrils from sugarcane bagasse. Journal of Biotechnology, 2020, 321, 35-47.	1.9	18
10	Production of cellulose nanocrystals integrated into a biochemical sugar platform process via enzymatic hydrolysis at high solid loading. Industrial Crops and Products, 2020, 152, 112377.	2.5	56
11	A review on commercial-scale high-value products that can be produced alongside cellulosic ethanol. Biotechnology for Biofuels, 2019, 12, 240.	6.2	343
12	Kinetic changes in cellulose properties during defibrillation into microfibrillated cellulose and cellulose nanofibrils by ultra-refining. International Journal of Biological Macromolecules, 2019, 127, 637-648.	3.6	39
13	Exploring the action of endoglucanases on bleached eucalyptus kraft pulp as potential catalyst for isolation of cellulose nanocrystals. International Journal of Biological Macromolecules, 2019, 133, 1249-1259.	3.6	49
14	Preparation of nanocellulose from Imperata brasiliensis grass using Taguchi method. Carbohydrate Polymers, 2018, 192, 337-346.	5.1	106
15	The potential of tailoring the conditions of steam explosion to produce xylo-oligosaccharides from sugarcane bagasse. Bioresource Technology, 2018, 250, 221-229.	4.8	53
16	Nanocelluloses From Sugarcane Biomass. , 2018, , 179-196.		18
17	Limitation of cellulose accessibility and unproductive binding of cellulases by pretreated sugarcane bagasse lignin. Biotechnology for Biofuels, 2017, 10, 176.	6.2	95
18	A NaBH4 Coupled Ninhydrin-Based Assay for the Quantification of Protein/Enzymes During the Enzymatic Hydrolysis of Pretreated Lignocellulosic Biomass. Applied Biochemistry and Biotechnology, 2015, 176, 1564-1580.	1.4	24

#	Article	IF	Citations
19	The Accessible Cellulose Surface Influences Cellulase Synergism during the Hydrolysis of Lignocellulosic Substrates. ChemSusChem, 2015, 8, 901-907.	3.6	31
20	The Use of Carbohydrate Binding Modules (CBMs) to Monitor Changes in Fragmentation and Cellulose Fiber Surface Morphology during Cellulase- and Swollenin-induced Deconstruction of Lignocellulosic Substrates. Journal of Biological Chemistry, 2015, 290, 2938-2945.	1.6	43
21	Steam pretreatment of agricultural residues facilitates hemicellulose recovery while enhancing enzyme accessibility to cellulose. Bioresource Technology, 2015, 185, 302-307.	4.8	45
22	Optimization of chip size and moisture content to obtain high, combined sugar recovery after sulfur dioxide-catalyzed steam pretreatment of softwood and enzymatic hydrolysis of the cellulosic component. Bioresource Technology, 2015, 187, 288-298.	4.8	17
23	The addition of accessory enzymes enhances the hydrolytic performance of cellulase enzymes at high solid loadings. Bioresource Technology, 2015, 186, 149-153.	4.8	150
24	THE DEVELOPMENT AND USE OF AN ELISA-BASED METHOD TO FOLLOW THE DISTRIBUTION OF CELLULASE MONOCOMPONENTS DURING THE HYDROLYSIS OF PRETREATED CORN STOVER. , 2015, , 101-129.		0
25	Current Understanding of Brown-Rot Fungal Biodegradation Mechanisms: A Review. ACS Symposium Series, 2014, , 3-21.	0.5	119
26	Substrate factors that influence the synergistic interaction of AA9 and cellulases during the enzymatic hydrolysis of biomass. Energy and Environmental Science, 2014, 7, 2308-2315.	15.6	193
27	The enzymatic hydrolysis of pretreated pulp fibers predominantly involves â€œpeeling/erosionâ€•modes of action. Biotechnology for Biofuels, 2014, 7, 87.	6.2	34
28	The synergistic action of accessory enzymes enhances the hydrolytic potential of a â€œcellulase mixtureâ€•but is highly substrate specific. Biotechnology for Biofuels, 2013, 6, 112.	6.2	185
29	Swollenin aids in the amorphogenesis step during the enzymatic hydrolysis of pretreated biomass. Bioresource Technology, 2013, 142, 498-503.	4.8	115
30	The development and use of an ELISA-based method to follow the distribution of cellulase monocomponents during the hydrolysis of pretreated corn stover. Biotechnology for Biofuels, 2013, 6, 80.	6.2	11
31	Use of substructure-specific carbohydrate binding modules to track changes in cellulose accessibility and surface morphology during the amorphogenesis step of enzymatic hydrolysis. Biotechnology for Biofuels, 2012, 5, 51.	6.2	57
32	The use of predictive models to optimize sugar recovery obtained after the steam preâ€treatment of softwoods. Biofuels, Bioproducts and Biorefining, 2012, 6, 534-548.	1.9	12
33	Peculiarities of brown-rot fungi and biochemical Fenton reaction with regard to their potential as a model for bioprocessing biomass. Applied Microbiology and Biotechnology, 2012, 94, 323-338.	1.7	280
34	The adsorption and enzyme activity profiles of specific Trichoderma reesei cellulase/xylanase components when hydrolyzing steam pretreated corn stover. Enzyme and Microbial Technology, 2012, 50, 195-203.	1.6	77
35	The lignin present in steam pretreated softwood binds enzymes and limits cellulose accessibility. Bioresource Technology, 2012, 103, 201-208.	4.8	340
36	Optimal recovery process conditions for manganese-peroxidase obtained by solid-state fermentation of eucalyptus residue using Lentinula edodes. Biomass and Bioenergy, 2011, 35, 4040-4044.	2.9	11

#	Article	IF	Citations
37	Lignocellulosic polysaccharides and lignin degradation by wood decay fungi: the relevance of nonenzymatic Fenton-based reactions. Journal of Industrial Microbiology and Biotechnology, 2011, 38, 541-555.	1.4	155
38	Cellulose accessibility limits the effectiveness of minimum cellulase loading on the efficient hydrolysis of pretreated lignocellulosic substrates. Biotechnology for Biofuels, 2011, 4, 3.	6.2	263
39	The enhancement of enzymatic hydrolysis of lignocellulosic substrates by the addition of accessory enzymes such as xylanase: is it an additive or synergistic effect?. Biotechnology for Biofuels, 2011, 4, 36.	6.2	347
40	Access to cellulose limits the efficiency of enzymatic hydrolysis: the role of amorphogenesis. Biotechnology for Biofuels, 2010, 3, 4.	6.2	437
41	RelevÃ¢ncia de compostos de baixa massa molar produzidos por fungos e envolvidos na biodegradaÃ§Ã£o da madeira. Quimica Nova, 2009, 32, 1586-1595.	0.3	21
42	Biomimetic oxidative treatment of spruce wood studied by pyrolysisâ€“molecular beam mass spectrometry coupled with multivariate analysis and 13C-labeled tetramethylammonium hydroxide thermochemolysis: implications for fungal degradation of wood. Journal of Biological Inorganic Chemistry, 2009, 14, 1253-1263.	1.1	24
43	Effect of pH and oxalic acid on the reduction of Fe3+ by a biomimetic chelator and on Fe3+ desorption/adsorption onto wood: Implications for brown-rot decay. International Biodeterioration and Biodegradation, 2009, 63, 478-483.	1.9	65
44	Enzymology of the thermophilic ascomycetous fungus Thermoascus aurantiacus. Fungal Biology Reviews, 2008, 22, 120-130.	1.9	29
45	Application of statistical experimental design to the treatment of bleaching kraft mill effluent using a mediated free radical system. Water Science and Technology, 2007, 55, 1-7.	1.2	7
46	Identification of iron-regulated cellular proteins, Fe³⁺-reducing and -chelating compounds, in the white-rot fungus Perenniporia medulla-panis. Canadian Journal of Microbiology, 2007, 53, 1323-1329.	0.8	2
47	The synergistic action of ligninolytic enzymes (MnP and Laccase) and Fe3+-reducing activity from white-rot fungi for degradation of Azure B. Enzyme and Microbial Technology, 2007, 42, 17-22.	1.6	52
48	The effect of a catecholate chelator as a redox agent in Fenton-based reactions on degradation of lignin-model substrates and on COD removal from effluent of an ECF kraft pulp mill. Journal of Hazardous Materials, 2007, 141, 273-279.	6.5	28
49	Response of Wolfiporia cocos to iron availability: alterations in growth, expression of cellular proteins, Fe³⁺-reducing activity and Fe³⁺-chelators production. Journal of Applied Microbiology, 2007, 104, 070915215109009-???.	1.4	12
50	Degradation and decolorization of a biodegradable-resistant polymeric dye by chelator-mediated Fenton reactions. Chemosphere, 2006, 63, 1764-1772.	4.2	31
51	Evaluation of different carbon sources for production of iron-reducing compounds by Wolfiporia cocos and Perenniporia medulla-panis. Process Biochemistry, 2006, 41, 887-891.	1.8	20
52	Degradation of cellulosic and hemicellulosic substrates using a chelator-mediated Fenton reaction. Journal of Chemical Technology and Biotechnology, 2006, 81, 413-419.	1.6	36
53	Production of metal chelating compounds by white and brown-rot fungi and their comparative abilities for pulp bleaching. Enzyme and Microbial Technology, 2002, 30, 562-565.	1.6	39