Ruy de Sousa JÃºnior

List of Publications by Year
in descending order

45	773	471371	526166
papers	citations	17	27
		h-index	g-index

48	48	48	1032
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Mathematical modeling of polymer electrolyte fuel cells. Journal of Power Sources, 2005, 147, 32-45.	4.0	70
2	A kinetic model for hydrothermal pretreatment of sugarcane straw. Bioresource Technology, 2017, 228, 176-185.	4.8	68
3	Experimental optimization and techno-economic analysis of bioethanol production by simultaneous saccharification and fermentation process using sugarcane straw. Bioresource Technology, 2020, 297, 122494.	4.8	59
4	Biobutanol production from sugarcane straw: Defining optimal biomass loading for improved ABE fermentation. Industrial Crops and Products, 2020, 148, 112265.	2.5	57
5	Kinetic model of the hydrolysis of polypeptides catalyzed by AlcalaseÂ® immobilized on 10% glyoxyl-agarose. Enzyme and Microbial Technology, 2005, 36, 555-564.	1.6	55
6	Kinetic model for whey protein hydrolysis by alcalase multipoint-immobilized on agarose gel particles. Brazilian Journal of Chemical Engineering, 2004, 21, 147-153.	0.7	50
7	Recent trends in the modeling of cellulose hydrolysis. Brazilian Journal of Chemical Engineering, 2011, 28, 545-564.	0.7	35
8	Kinetic study of the enzymatic hydrolysis of sugarcane bagasse. Brazilian Journal of Chemical Engineering, 2013, 30, 437-447.	0.7	33
9	Enzymatic Hydrolysis of Pretreated Sugarcane Straw: Kinetic Study and Semi-Mechanistic Modeling. Applied Biochemistry and Biotechnology, 2016, 178, 1430-1444.	1.4	33
10	Hydrodynamic cavitation-assisted continuous pre-treatment of sugarcane bagasse for ethanol production: Effects of geometric parameters of the cavitation device. Ultrasonics Sonochemistry, 2020, 63, 104931.	3.8	33
11	Modeling and simulation of the anode in direct ethanol fuels cells. Journal of Power Sources, 2008, 180, 283-293.	4.0	29
12	Enzymatic synthesis of amoxicillin:Avoiding limitations of the mechanistic approach for reaction kinetics. Biotechnology and Bioengineering, 2002, 80, 622-631.	1.7	27
13	Estimation of mass transfer parameters in a Taylor-Couette-Poiseuille heterogeneous reactor. Brazilian Journal of Chemical Engineering, 2004, 21, 175-184.	0.7	21
14	GMC-fuzzy control of pH during enzymatic hydrolysis of cheese whey proteins. Computers and Chemical Engineering, 2004, 28, 1661-1672.	2.0	21
15	Direct Ethanol Fuel Cells: The influence of structural and electronic effects on Ptâ€“Sn/C electrocatalysts. International Journal of Hydrogen Energy, 2019, 44, 28812-28820.	3.8	20
16	An analysis of X-ray absorption spectra in the XANES region of platinum-based electrocatalysts for low-temperature fuel cells. Journal of Solid State Electrochemistry, 2007, 11, 1549-1557.	1.2	19
17	Design of a fuzzy system for the control of a biochemical reactor in fed-batch culture. Process Biochemistry, 2001, 37, 461-469.	1.8	18
18	Optimal Bioreactor Operational Policies for the Enzymatic Hydrolysis of Sugarcane Bagasse. Bioenergy Research, 2013, 6, 776-785.	2.2	11

#	Article	IF	Citations
19	Optimization of chemical engineering problems with EMSO software. Computer Applications in Engineering Education, 2018, 26, 141-161.	2.2	11
20	Lipozyme 435-Mediated Synthesis of Xylose Oleate in Methyl Ethyl Ketone. Molecules, 2021, 26, 3317.	1.7	11
21	Modeling the Kinetics of Complex Systems: Enzymatic Hydrolysis of Lignocellulosic Substrates. Applied Biochemistry and Biotechnology, 2014, 173, 1083-1096.	1.4	10
22	Hybrid Model for an Enzymatic Reactor: Hydrolysis of Cheese Whey Proteins by Alcalase Immobilized in Agarose Gel Particles. Applied Biochemistry and Biotechnology, 2003, 106, 413-422.	1.4	9
23	Modeling techniques applied to the study of gas diffusion electrodes and proton exchange membrane biochemical fuel cells. Journal of Power Sources, 2006, 161, 183-190.	4.0	9
24	Three-dimensional CFD modeling of direct ethanol fuel cells: evaluation of anodic flow field structures. Journal of Applied Electrochemistry, 2017, 47, 25-37.	1.5	8
25	Automatic solids feeder using fuzzy control: A tool for fed batch bioprocesses. Journal of Process Control, 2020, 93, 28-42.	1.7	8
26	Comparison of performance of different algorithms in noisy signals filtering of process in enzymatic hydrolysis of cheese whey. Brazilian Archives of Biology and Technology, 2005, 48, 151-159.	0.5	7
27	Development of a fuzzy system for dissolved oxygen control in a recombinant Escherichia coli cultivation for heterologous protein expression. Computer Aided Chemical Engineering, 2018, , 1129-1134.	0.3	5
28	Optimization of Lean Gas Injection in Gas-Condensate Reservoirs. , 1995, , .		5
29	Mathematical modeling of enzymatic syntheses of biosurfactants catalyzed by immobilized lipases. Reaction Kinetics, Mechanisms and Catalysis, 2020, 130, 699-712.	0.8	4
30	An experimental and computational study of biosurfactant production from soy molasses. Reaction Kinetics, Mechanisms and Catalysis, 2019, 128, 847-865.	0.8	3
31	Optimized Dissolved Oxygen Fuzzy Control for Recombinant Escherichia coli Cultivations. Algorithms, 2021, 14, 326.	1.2	3
32	Optimization of the Production of Inactivated Clostridium novyi Type B Vaccine Using Computational Intelligence Techniques. Applied Biochemistry and Biotechnology, 2016, 179, 895-909.	1.4	2
33	Fuzzy Control Applied to Combustion in Sugarcane Bagasse Boilers. Computer Aided Chemical Engineering, 2019, , 1135-1140.	0.3	2
34	Modeling and simulation of the biosurfactant production by enzymatic route using xylose and oleic acid as reagents. Chemical Industry and Chemical Engineering Quarterly, 2022, 28, 265-276.	0.4	2
35	Divided Wall Column Modeling and Simulation in an Open-Source Environment. Chemical and Biochemical Engineering Quarterly, 2020, 34, 149-167.	0.5	1
36	Effect of Thermal Treatment on Pt3Sn Catalysts for the Anode of a Direct Ethanol Fuel Cell. ECS Meeting Abstracts, 2009, , .	0.0	0

#	Article	IF	Citations
37	The Effect of Alloying in Pt-Sn/C Electrocatalysts in the Performance of a Direct Ethanol Fuel Cell. ECS Transactions, 2014, 64, 1139-1145.	0.3	0
38	Rational feeding strategies of substrate and enzymes to enzymatic hydrolysis bioreactors. Chemical Industry and Chemical Engineering Quarterly, 2022, 28, 191-200.	0.4	0
39	Modeling of Fuel Cell Systems. ECS Meeting Abstracts, 2005, , .	0.0	0
40	An Analysis of X-ray Absorption Spectra in the Xanes Region Of Platinum-Tin Electrocatalysts. ECS Meeting Abstracts, 2008, , .	0.0	0
41	Evaluation of Enzyme-modified Bioelectrodes Applied in a Microchannel Biofuel Cell. ECS Meeting Abstracts, 2009, , .	0.0	0
42	The Effect of Alloying in Pt-Sn/C Electrocatalysts in the Performance of a Direct Ethanol Fuel Cell. ECS Meeting Abstracts, 2014, , .	0.0	0
43	Estudo cinÃ©tico da etapa de hidrÃ³lise enzimÃ¡tica da palha da cana- de-aÃ§Ãºcar: efeito da velocidade de agitaÃ§Ã£o e da concentraÃ§Ã£o de substrato. , 0, , .		0
44	MODELAGEM MATEMÃ•TICA SEMI-MECANÃ•STICA DA HIDRÃ“LISE ENZIMÃ•TICA DO BAGAÃ‡O DE CANA-DE-AÃ‡ÃšCAR. , 0, , .		0
45	MODELAGEM MATEMÃ•TICA SEMI-MECANÃ•STICA DA HIDRÃ“LISE ENZIMÃ•TICA DA PALHA DE CANA-DE-AÃ‡ÃšCAR SUBMETIDA AOS PRÃ‰-TRATAMENTOS HIDROTÃ‰RMICO E ALCALINO.. , 0, , .		0