

# Rubens Maciel Filho

## List of Publications by Year in descending order

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163  
papers

7,618  
citations

47006

47  
h-index

58581

82  
g-index

165  
all docs

165  
docs citations

165  
times ranked

8209  
citing authors

#	ARTICLE	IF	CITATIONS
1	Green production of limonene diepoxide for potential biomedical applications. <i>Catalysis Today</i> , 2022, 388-389, 288-300.	4.4	5
2	Sustainable Aviation Fuels: Production, Use and Impact on Decarbonization. , 2022, , 348-371.		2
3	Isopropanol-butanol-ethanol production by cell-immobilized vacuum fermentation. <i>Bioresource Technology</i> , 2022, 344, 126313.	9.6	4
4	Are ionic liquids eco-friendly?. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 157, 112039.	16.4	81
5	Correlating biomass properties, gasification performance, and syngas applications of Brazilian feedstocks via simulation and multivariate analysis. <i>Industrial Crops and Products</i> , 2022, 181, 114808.	5.2	11
6	Thorough evaluation of the available light-duty engine technologies to reduce greenhouse gases emissions in Brazil. <i>Journal of Cleaner Production</i> , 2022, 358, 132051.	9.3	8
7	Cultivation of <i>Chlamydomonas reinhardtii</i> in Anaerobically Digested Vinasse for Bioethanol Production. <i>Waste and Biomass Valorization</i> , 2021, 12, 857-865.	3.4	10
8	Corrosion resistance improvement of additive manufactured scaffolds by anodizing. <i>Electrochimica Acta</i> , 2021, 366, 137423.	5.2	10
9	Graphical Analysis of Plant-Wide Heat Cascade for Increasing Energy Efficiency in the Production of Ethanol and Sugar from Sugarcane. <i>Process Integration and Optimization for Sustainability</i> , 2021, 5, 335-359.	2.6	5
10	Effect of light, CO <sub>2</sub> and nitrate concentration on <i>Chlorella vulgaris</i> growth and composition in a flat-plate photobioreactor. <i>Brazilian Journal of Chemical Engineering</i> , 2021, 38, 251-263.	1.3	8
11	Bone reconstruction surgery of complex craniomaxillofacial deformities using additive manufacturing customized implants - a case report. <i>Rapid Prototyping Journal</i> , 2021, 27, 872-878.	3.2	1
12	Evaluation of the feasibility of ethanol and gasoline in solid oxide fuel cell vehicles in Brazil. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 36381-36397.	7.1	12
13	Multi-Objective Sustainability Optimization of Biomass Residues to Ethanol via Gasification and Syngas Fermentation: Trade-Offs between Profitability, Energy Efficiency, and Carbon Emissions. <i>Fermentation</i> , 2021, 7, 201.	3.0	4
14	Bottlenecks and potentials for the gasification of lignocellulosic biomasses and Fischer-Tropsch synthesis: A case study on the production of advanced liquid biofuels in Brazil. <i>Energy Conversion and Management</i> , 2021, 245, 114629.	9.2	8
15	Effects of cultivation conditions on <i>Chlorella vulgaris</i> and <i>Desmodesmus</i> sp. grown in sugarcane agro-industry residues. <i>Bioresource Technology</i> , 2021, 342, 125949.	9.6	11
16	Comparative Techno-Economic and Exergetic Analysis of Circulating and Dual Bed Biomass Gasification Systems. <i>Frontiers in Chemical Engineering</i> , 2021, 3, .	2.7	4
17	Current Advances in Separation and Purification of Second-Generation Lactic Acid. <i>Separation and Purification Reviews</i> , 2020, 49, 159-175.	5.5	39
18	Polyurethane fibrous membranes tailored by rotary jet spinning for tissue engineering applications. <i>Journal of Applied Polymer Science</i> , 2020, 137, 48455.	2.6	5

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19	Isopropanol-butanol-ethanol (IBE) production in repeated-batch cultivation of <i>Clostridium beijerinckii</i> DSM 6423 immobilized on sugarcane bagasse. <i>Fuel</i> , 2020, 263, 116708.	6.4	11
20	Optimization of Biomass Circulating Fluidized Bed Gasifier for Synthesis Applications using Simulation and Response Surface Methodology. <i>Computer Aided Chemical Engineering</i> , 2020, 48, 1585-1590.	0.5	1
21	Recent advances in lipid extraction using green solvents. <i>Renewable and Sustainable Energy Reviews</i> , 2020, 133, 110289.	16.4	73
22	CO <sub>2</sub> Gasification of Sugarcane Bagasse Char: Consideration of Pyrolysis Temperature, Silicon and Aluminum Contents, and Potassium Addition for Recirculation of Char. <i>Energy &amp; Fuels</i> , 2020, 34, 16201-16211.	5.1	4
23	Enabling butanol production from crude sugarcane bagasse hemicellulose hydrolysate by batch-feeding it into molasses fermentation. <i>Industrial Crops and Products</i> , 2020, 155, 112837.	5.2	17
24	Biodiesel production from microalgae by direct transesterification using green solvents. <i>Renewable Energy</i> , 2020, 160, 1283-1294.	8.9	76
25	A Simple Biorefinery Concept to Produce 2G-Lactic Acid from Sugar Beet Pulp (SBP): A High-Value Target Approach to Valorize a Waste Stream. <i>Molecules</i> , 2020, 25, 2113.	3.8	21
26	Biochemical conversion of sugarcane bagasse into the alcohol fuel mixture of isopropanol-butanol-ethanol (IBE): Is it economically competitive with cellulosic ethanol?. <i>Bioresource Technology</i> , 2020, 314, 123712.	9.6	11
27	Production of ethanol fuel via syngas fermentation: Optimization of economic performance and energy efficiency. <i>Chemical Engineering Science: X</i> , 2020, 5, 100056.	1.5	7
28	Modeling ethanol production through gas fermentation: a biothermodynamics and mass transfer-based hybrid model for microbial growth in a large-scale bubble column bioreactor. <i>Biotechnology for Biofuels</i> , 2020, 13, 59.	6.2	27
29	Process design and evaluation of syngas-to-ethanol conversion plants. <i>Journal of Cleaner Production</i> , 2020, 269, 122078.	9.3	13
30	Concentrating second-generation lactic acid from sugarcane bagasse via hybrid short path evaporation: Operational challenges. <i>Separation and Purification Technology</i> , 2019, 209, 26-31.	7.9	13
31	Dynamic modeling of syngas fermentation in a continuous stirred-tank reactor: Multi-response parameter estimation and process optimization. <i>Biotechnology and Bioengineering</i> , 2019, 116, 2473-2487.	3.3	19
32	Influence of unit cell and geometry size on scaffolds electrochemical response. <i>Journal of Electroanalytical Chemistry</i> , 2019, 853, 113528.	3.8	7
33	A roadmap for renewable C <sub>2</sub> -C <sub>3</sub> glycols production: a process engineering approach. <i>Green Chemistry</i> , 2019, 21, 5168-5194.	9.0	31
34	Low carbon biofuels and the New Brazilian National Biofuel Policy (RenovaBio): A case study for sugarcane mills and integrated sugarcane-microalgae biorefineries. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 115, 109365.	16.4	80
35	Beyond ethanol, sugar, and electricity: a critical review of product diversification in Brazilian sugarcane mills. <i>Biofuels, Bioproducts and Biorefining</i> , 2019, 13, 809-821.	3.7	50
36	Towards enhanced n-butanol production from sugarcane bagasse hemicellulosic hydrolysate: Strain screening, and the effects of sugar concentration and butanol tolerance. <i>Biomass and Bioenergy</i> , 2019, 126, 190-198.	5.7	30

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37	(Epoxidized castor oil & citric acid) copolyester as a candidate polymer for biomedical applications. Journal of Polymer Research, 2019, 26, 1.	2.4	8
38	Acetone-free biobutanol production: Past and recent advances in the Isopropanol-Butanol-Ethanol (IBE) fermentation. Bioresource Technology, 2019, 287, 121425.	9.6	30
39	Comparison of several methods for effective lipid extraction from wet microalgae using green solvents. Renewable Energy, 2019, 143, 130-141.	8.9	85
40	Biodegradability study of Egeria densa biomass using acid and basic pre-treatments for use in bioprocessing of energy products. Bioresource Technology Reports, 2019, 6, 279-284.	2.7	5
41	Polymer grade L-lactic acid production from sugarcane bagasse hemicellulosic hydrolysate using Bacillus coagulans. Bioresource Technology Reports, 2019, 6, 26-31.	2.7	43
42	Sugarcane bagasse gasification: Simulation and analysis of different operating parameters, fluidizing media, and gasifier types. Biomass and Bioenergy, 2019, 122, 433-445.	5.7	34
43	Mass and Heat Integration in Ethanol Production Mills for Enhanced Process Efficiency and Exergy-Based Renewability Performance. Processes, 2019, 7, 670.	2.8	8
44	Biodiesel purification by column chromatography and liquid-liquid extraction using green solvents. Fuel, 2019, 235, 1123-1130.	6.4	45
45	Challenges and opportunities in lactic acid bioprocess design&quot;From economic to production aspects. Biochemical Engineering Journal, 2018, 133, 219-239.	3.6	223
46	Integration of microalgae production with industrial biofuel facilities: A critical review. Renewable and Sustainable Energy Reviews, 2018, 82, 1376-1392.	16.4	99
47	Process design and economics of a flexible ethanol-butanol plant annexed to a eucalyptus kraft pulp mill. Bioresource Technology, 2018, 250, 345-354.	9.6	16
48	Evaluation of Hybrid Short Path Evaporation to Concentrate Lactic Acid and Sugars from Fermentation. BioResources, 2018, 13, .	1.0	1
49	Sugar Extraction via Moving-Bed Diffusers in Ethanol Production Industry: Phenomenological Modeling and Finite-Volumes Simulation. Industrial & Engineering Chemistry Research, 2018, 57, 13769-13782.	3.7	1
50	Cardiac tissue engineering: current state-of-the-art materials, cells and tissue formation. Einstein (Sao Paulo, Brazil), 2018, 16, eRB4538.	0.7	51
51	Economic potential of 2-methyltetrahydrofuran (MTHF) and ethyl levulinate (EL) produced from hemicelluloses-derived furfural. Biomass and Bioenergy, 2018, 119, 492-502.	5.7	33
52	Laboratory extraction of microalgal lipids using sugarcane bagasse derived green solvents. Algal Research, 2018, 35, 292-300.	4.6	23
53	Resolving mismatches in the flexible production of ethanol and butanol from eucalyptus wood with vacuum fermentation. Bioprocess and Biosystems Engineering, 2018, 41, 1651-1663.	3.4	12
54	Different Strategies To Improve Lactic Acid Productivity Based on Microorganism Physiology and Optimum Operating Conditions. Industrial & Engineering Chemistry Research, 2018, 57, 10118-10125.	3.7	8

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55	Biomass gasification in fluidized beds: A review of biomass moisture content and operating pressure effects. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 94, 998-1023.	16.4	203
56	Detoxification of sugarcane-derived hemicellulosic hydrolysate using a lactic acid producing strain. <i>Journal of Biotechnology</i> , 2018, 278, 56-63.	3.8	25
57	Hydrous bioethanol production from sugarcane bagasse via energy self-sufficient gasification-fermentation hybrid route: Simulation and financial analysis. <i>Journal of Cleaner Production</i> , 2017, 168, 1625-1635.	9.3	34
58	Central composite experimental design applied to evaluate the lactic acid concentration by short path evaporation. <i>Chemical Engineering and Processing: Process Intensification</i> , 2017, 117, 89-94.	3.6	7
59	Potential of algal biofuel production in a hybrid photobioreactor. <i>Chemical Engineering Science</i> , 2017, 171, 282-292.	3.8	27
60	Electrospun polyurethane membranes for Tissue Engineering applications. <i>Materials Science and Engineering C</i> , 2017, 72, 113-117.	7.3	55
61	Epoxy monomers obtained from castor oil using a toxicity-free catalytic system. <i>Journal of Molecular Catalysis A</i> , 2017, 426, 550-556.	4.8	49
62	Hydrodynamics and mass transfer in bubble column, conventional airlift, stirred airlift and stirred tank bioreactors, using viscous fluid: A comparative study. <i>Biochemical Engineering Journal</i> , 2017, 118, 70-81.	3.6	71
63	Purification of Lactic Acid Produced by Fermentation: Focus on Non-traditional Distillation Processes. <i>Separation and Purification Reviews</i> , 2017, 46, 241-254.	5.5	46
64	Lactic Acid Production to Purification: A Review. <i>BioResources</i> , 2017, 12, 4364-4383.	1.0	126
65	Influence of Residual Sugars on the Purification of Lactic Acid Using Short Path Evaporation. <i>BioResources</i> , 2017, 12, .	1.0	4
66	Lactic acid production to purification: A review. <i>BioResources</i> , 2017, 12, 4364-4383.	1.0	125
67	<i>Botryococcus braunii</i> for biodiesel production. <i>Renewable and Sustainable Energy Reviews</i> , 2016, 64, 260-270.	16.4	72
68	Sugarcane molasses fermentation with in situ gas stripping using low and moderate sugar concentrations for ethanol production: Experimental data and modeling. <i>Biochemical Engineering Journal</i> , 2016, 110, 152-161.	3.6	23
69	Influence of impeller type on hydrodynamics and gas-liquid mass transfer in stirred airlift bioreactor. <i>AIChE Journal</i> , 2015, 61, 3159-3171.	3.6	25
70	Lactic acid purification by reactive distillation system using design of experiments. <i>Chemical Engineering and Processing: Process Intensification</i> , 2015, 95, 26-30.	3.6	34
71	The Effect of Evaporator Temperature on Lactic Acid Purity and Recovery by Short Path Evaporation. <i>Separation Science and Technology</i> , 2015, 50, 1548-1553.	2.5	16
72	Functionalization of Ti6Al4V scaffolds produced by direct metal laser for biomedical applications. <i>Materials and Design</i> , 2015, 83, 6-13.	7.0	57

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73	Sugarcane processing for ethanol and sugar in Brazil. <i>Environmental Development</i> , 2015, 15, 35-51.	4.1	177
74	Biomass Processing Routes for Production of Raw Materials with High Added Value. , 2015, , 241-273.		0
75	Customised titanium implant fabricated in additive manufacturing for craniomaxillofacial surgery. <i>Virtual and Physical Prototyping</i> , 2014, 9, 115-125.	10.4	101
76	Evaluation of lactic acid purification from fermentation broth by hybrid short path evaporation using factorial experimental design. <i>Separation and Purification Technology</i> , 2014, 136, 233-240.	7.9	23
77	Cranial reconstruction: 3D biomodel and custom-built implant created using additive manufacturing. <i>Journal of Cranio-Maxillo-Facial Surgery</i> , 2014, 42, 1877-1884.	1.7	277
78	Alkaline hydrogen peroxide pretreatment, enzymatic hydrolysis and fermentation of sugarcane bagasse to ethanol. <i>Fuel</i> , 2014, 136, 349-357.	6.4	98
79	Limonene epoxidation with H <sub>2</sub> O <sub>2</sub> promoted by Al <sub>2</sub> O <sub>3</sub> : Kinetic study, experimental design. <i>Journal of Catalysis</i> , 2014, 319, 71-86.	6.2	50
80	Butanol production in a sugarcane biorefinery using ethanol as feedstock. Part II: Integration to a second generation sugarcane distillery. <i>Chemical Engineering Research and Design</i> , 2014, 92, 1452-1462.	5.6	29
81	Butanol production in a sugarcane biorefinery using ethanol as feedstock. Part I: Integration to a first generation sugarcane distillery. <i>Chemical Engineering Research and Design</i> , 2014, 92, 1441-1451.	5.6	38
82	Fluid catalytic cracking optimisation using factorial design and genetic algorithm techniques. <i>Canadian Journal of Chemical Engineering</i> , 2013, 91, 279-290.	1.7	7
83	Cogeneration in integrated first and second generation ethanol from sugarcane. <i>Chemical Engineering Research and Design</i> , 2013, 91, 1411-1417.	5.6	81
84	Butanol production in a first-generation Brazilian sugarcane biorefinery: Technical aspects and economics of greenfield projects. <i>Bioresource Technology</i> , 2013, 135, 316-323.	9.6	111
85	Utilization of pentoses from sugarcane biomass: Techno-economics of biogas vs. butanol production. <i>Bioresource Technology</i> , 2013, 142, 390-399.	9.6	81
86	Lime Pretreatment and Fermentation of Enzymatically Hydrolyzed Sugarcane Bagasse. <i>Applied Biochemistry and Biotechnology</i> , 2013, 169, 1696-1712.	2.9	30
87	Evaluation of process configurations for second generation integrated with first generation bioethanol production from sugarcane. <i>Fuel Processing Technology</i> , 2013, 109, 84-89.	7.2	76
88	Liquid-Liquid Equilibrium in Ternary Systems Present in Biodiesel Purification from Soybean Oil and Castor Oil at (298.2 and 333.2) K. <i>Journal of Chemical &amp; Engineering Data</i> , 2013, 58, 605-610.	1.9	11
89	Biorefineries for the production of first and second generation ethanol and electricity from sugarcane. <i>Applied Energy</i> , 2013, 109, 72-78.	10.1	144
90	Estimation hydrodynamic parameters and mass transfer in a stirred airlift bioreactor using viscous fluids. <i>New Biotechnology</i> , 2012, 29, S213.	4.4	1

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91	Reliability-Based Optimization using Surface Response Methodology to Split Heavy Petroleum Fractions by Centrifugal Molecular Distillation Process. <i>Separation Science and Technology</i> , 2012, 47, 1213-1233.	2.5	9
92	Improving second generation ethanol production through optimization of first generation production process from sugarcane. <i>Energy</i> , 2012, 43, 246-252.	8.8	87
93	Evaluation of different cogeneration systems in first and second generation ethanol production from sugarcane. <i>Computer Aided Chemical Engineering</i> , 2012, , 172-176.	0.5	1
94	Economic and environmental assessment of integrated 1st and 2nd generation sugarcane bioethanol production evaluating different 2nd generation process alternatives. <i>Computer Aided Chemical Engineering</i> , 2012, 30, 177-181.	0.5	10
95	Evaluation of methyl chavicol concentration by different evaporation processes using central composite experimental design. <i>Separation and Purification Technology</i> , 2012, 98, 464-471.	7.9	18
96	Improvements in Biobutanol Fermentation and Their Impacts on Distillation Energy Consumption and Wastewater Generation. <i>Bioenergy Research</i> , 2012, 5, 504-514.	3.9	65
97	Environmental and economic assessment of sugarcane first generation biorefineries in Brazil. <i>Clean Technologies and Environmental Policy</i> , 2012, 14, 399-410.	4.1	136
98	Integrated versus stand-alone second generation ethanol production from sugarcane bagasse and trash. <i>Bioresource Technology</i> , 2012, 103, 152-161.	9.6	294
99	Poly-lactic acid synthesis for application in biomedical devices – A review. <i>Biotechnology Advances</i> , 2012, 30, 321-328.	11.7	929
100	Energy requirements during butanol production and in situ recovery by cyclic vacuum. <i>Renewable Energy</i> , 2012, 47, 183-187.	8.9	39
101	Assessment of <i>in situ</i> butanol recovery by vacuum during acetone butanol ethanol (ABE) fermentation. <i>Journal of Chemical Technology and Biotechnology</i> , 2012, 87, 334-340.	3.2	69
102	Energy Requirements for Butanol Recovery Using the Flash Fermentation Technology. <i>Energy &amp; Fuels</i> , 2011, 25, 2347-2355.	5.1	90
103	Analysis of the particle swarm algorithm in the optimization of a three-phase slurry catalytic reactor. <i>Computers and Chemical Engineering</i> , 2011, 35, 2741-2749.	3.8	10
104	Second generation ethanol in Brazil: Can it compete with electricity production?. <i>Bioresource Technology</i> , 2011, 102, 8964-8971.	9.6	188
105	Simulation of integrated first and second generation bioethanol production from sugarcane: comparison between different biomass pretreatment methods. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2011, 38, 955-966.	3.0	89
106	Fuzzy cognitive approach of a molecular distillation process. <i>Chemical Engineering Research and Design</i> , 2011, 89, 471-479.	5.6	15
107	Kinetics of Lime Pretreatment of Sugarcane Bagasse to Enhance Enzymatic Hydrolysis. <i>Applied Biochemistry and Biotechnology</i> , 2011, 163, 612-625.	2.9	31
108	Bioproduction of butanol in bioreactors: New insights from simultaneous <i>in situ</i> butanol recovery to eliminate product toxicity. <i>Biotechnology and Bioengineering</i> , 2011, 108, 1757-1765.	3.3	105

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109	Use of experimental design to investigate biodiesel production by multiple-stage Ultra-Shear reactor. <i>Bioresource Technology</i> , 2011, 102, 2672-2677.	9.6	22
110	Improving bioethanol production from sugarcane: evaluation of distillation, thermal integration and cogeneration systems. <i>Energy</i> , 2011, 36, 3691-3703.	8.8	157
111	Real-time optimization for lactic acid production from sucrose fermentation by <i>Lactobacillus plantarum</i> . <i>Computer Aided Chemical Engineering</i> , 2011, 29, 1396-1400.	0.5	6
112	Advanced Control of a Continuous Solution Copolymerization Process. <i>International Journal of Chemical Engineering</i> , 2011, 2011, 1-17.	2.4	1
113	Adaptive Advanced Control of a Copolymerization System. <i>Computer Aided Chemical Engineering</i> , 2011, 29, 693-697.	0.5	0
114	Production of Lactic Acid from Sucrose: Strain Selection, Fermentation, and Kinetic Modeling. <i>Applied Biochemistry and Biotechnology</i> , 2010, 161, 227-237.	2.9	43
115	Biodiesel Production from Integration Between Reaction and Separation System: Reactive Distillation Process. <i>Applied Biochemistry and Biotechnology</i> , 2010, 161, 245-254.	2.9	55
116	Optimisation of a fermentation process for butanol production by particle swarm optimisation (PSO). <i>Journal of Chemical Technology and Biotechnology</i> , 2010, 85, 934-949.	3.2	15
117	Enzymatic hydrolysis of sugarcane bagasse for bioethanol production: determining optimal enzyme loading using neural networks. <i>Journal of Chemical Technology and Biotechnology</i> , 2010, 85, 983-992.	3.2	48
118	Nanoparticle processes modelling: The role of key parameters for population balances for on-line crystallization processes applications. <i>Powder Technology</i> , 2010, 202, 89-94.	4.2	4
119	Development of real-time state estimators for reaction-separation processes: A continuous flash fermentation as a study case. <i>Chemical Engineering and Processing: Process Intensification</i> , 2010, 49, 402-409.	3.6	12
120	Factorial design applied to concentrate bioactive component of <i>Cymbopogon citratus</i> essential oil using short path distillation. <i>Chemical Engineering Research and Design</i> , 2010, 88, 239-244.	5.6	26
121	Optimisation of a continuous flash fermentation for butanol production using the response surface methodology. <i>Chemical Engineering Research and Design</i> , 2010, 88, 562-571.	5.6	26
122	Optimization of a Three-Phase Catalytic Slurry Reactor Using Reduced Statistical Models. <i>International Journal of Chemical Reactor Engineering</i> , 2010, 8, .	1.1	2
123	Genetic Algorithms (Binary and Real Codes) for the Optimisation of a Fermentation Process for Butanol Production. <i>International Journal of Chemical Reactor Engineering</i> , 2010, 8, .	1.1	3
124	Simulation of ethanol production from sugarcane in Brazil: economic study of an autonomous distillery. <i>Computer Aided Chemical Engineering</i> , 2010, 28, 733-738.	0.5	24
125	A LabVIEW-based intelligent system for monitoring of bioprocesses. <i>Computer Aided Chemical Engineering</i> , 2009, , 309-314.	0.5	6
126	Soft-Sensor for Real-Time Estimation of Ethanol Concentration in Continuous Flash Fermentation. <i>Computer Aided Chemical Engineering</i> , 2009, 27, 1653-1658.	0.5	1

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127	Study of kinetic parameters in a mechanistic model for bioethanol production through a screening technique and optimization. <i>Bioprocess and Biosystems Engineering</i> , 2009, 32, 673-680.	3.4	18
128	Constructive learning neural network applied to identification and control of a fuel-ethanol fermentation process. <i>Engineering Applications of Artificial Intelligence</i> , 2009, 22, 201-215.	8.1	41
129	Lime Pretreatment of Sugarcane Bagasse for Bioethanol Production. <i>Applied Biochemistry and Biotechnology</i> , 2009, 153, 139-150.	2.9	120
130	Optimization Strategies Based on Sequential Quadratic Programming Applied for a Fermentation Process for Butanol Production. <i>Applied Biochemistry and Biotechnology</i> , 2009, 159, 366-381.	2.9	15
131	Production of bioethanol and other bio-based materials from sugarcane bagasse: Integration to conventional bioethanol production process. <i>Chemical Engineering Research and Design</i> , 2009, 87, 1206-1216.	5.6	262
132	Fuzzy Model-Based Predictive Hybrid Control of Polymerization Processes. <i>Industrial &amp; Engineering Chemistry Research</i> , 2009, 48, 8542-8550.	3.7	26
133	Biodiesel Production from Castor Oil: Optimization of Alkaline Ethanolysis. <i>Energy &amp; Fuels</i> , 2009, 23, 5636-5642.	5.1	83
134	Simulation of the Azeotropic Distillation for Anhydrous Bioethanol Production: Study on the Formation of a Second Liquid Phase. <i>Computer Aided Chemical Engineering</i> , 2009, , 1143-1148.	0.5	11
135	An Evaluation of a Multi-method Tool for Real-Time Implementation of Two-layer Optimization. <i>Computer Aided Chemical Engineering</i> , 2009, 26, 537-541.	0.5	1
136	Optimization of a large scale industrial reactor by genetic algorithms. <i>Chemical Engineering Science</i> , 2008, 63, 330-341.	3.8	32
137	A Comparison Between Lime and Alkaline Hydrogen Peroxide Pretreatments of Sugarcane Bagasse for Ethanol Production. <i>Applied Biochemistry and Biotechnology</i> , 2008, 144, 87-100.	2.9	50
138	A Comparison between Lime and Alkaline Hydrogen Peroxide Pretreatments of Sugarcane Bagasse for Ethanol Production. <i>Applied Biochemistry and Biotechnology</i> , 2008, 148, 45-58.	2.9	51
139	Evaluation of control algorithms for three-phase hydrogenation catalytic reactor. <i>Chemical Engineering Journal</i> , 2008, 141, 250-263.	12.7	11
140	A cognitive approach to develop dynamic models: Application to polymerization systems. <i>Journal of Applied Polymer Science</i> , 2007, 106, 981-992.	2.6	16
141	Considerations on the crystallization modeling: Population balance solution. <i>Computers and Chemical Engineering</i> , 2007, 31, 206-218.	3.8	78
142	Prior detection of genetic algorithm significant parameters: Coupling factorial design technique to genetic algorithm. <i>Chemical Engineering Science</i> , 2007, 62, 4780-4801.	3.8	17
143	Development of adaptive modeling techniques to describe the temperature-dependent kinetics of biotechnological processes. <i>Biochemical Engineering Journal</i> , 2007, 36, 157-166.	3.6	30
144	Control Strategies Evaluation for a Three-Phase Hydrogenation Catalytic Reactor. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2006, 39, 427-432.	0.4	0

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145	Evaluation of optimization techniques for parameter estimation: Application to ethanol fermentation considering the effect of temperature. <i>Process Biochemistry</i> , 2006, 41, 1682-1687.	3.7	72
146	Mathematical modeling and optimal control strategy development for an adipic acid crystallization process. <i>Chemical Engineering and Processing: Process Intensification</i> , 2005, 44, 737-753.	3.6	42
147	Evaluation of optimisation techniques and control variable formulations for a batch cooling crystallization process. <i>Chemical Engineering Science</i> , 2005, 60, 5312-5322.	3.8	22
148	Development of a software for simulation analysis of the phenomenon of phase change of three-phase catalytic slurry reactor. <i>Computers and Chemical Engineering</i> , 2005, 29, 1369-1378.	3.8	6
149	Off-line optimization and control for real time integration of a three-phase hydrogenation catalytic reactor. <i>Computers and Chemical Engineering</i> , 2005, 29, 2485-2493.	3.8	11
150	Factorial design technique applied to genetic algorithm parameters in a batch cooling crystallization optimisation. <i>Computers and Chemical Engineering</i> , 2005, 29, 2229-2241.	3.8	23
151	Non-linear multivariable predictive control of an alcoholic fermentation process using functional link networks. <i>Brazilian Archives of Biology and Technology</i> , 2005, 48, 7-18.	0.5	9
152	Control and Optimization of a Three Phase Industrial Hydrogenation Reactor. <i>International Journal of Chemical Reactor Engineering</i> , 2004, 2, .	1.1	10
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