

Argimiro Resende Secchi

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

191
papers

1,443
citations

19
h-index

29
g-index

204
ext. papers

1,736
ext. citations

2.9
avg, IF

4.94
L-index

#	Paper	IF	Citations
191	Addressing scale and seasonality in the design of sugarcane to ethylene glycol biorefineries. <i>Journal of Cleaner Production</i> , 2022 , 337, 130585	10.3	0
190	Tuning of Model Predictive Controllers Based on Hybrid Optimization. <i>Processes</i> , 2022 , 10, 351	2.9	3
189	A Temporal Evolution Perspective of Lipase Production by <i>Yarrowia lipolytica</i> in Solid-State Fermentation. <i>Processes</i> , 2022 , 10, 381	2.9	1
188	Improvement of black oil delumping method applied to an offshore oil field. <i>Journal of Petroleum Science and Engineering</i> , 2022 , 214, 110514	4.4	0
187	Shear Flow and Relaxation Behaviors of Entangled Viscoelastic Nanorod-Stabilized Immiscible Polymer Blends. <i>Macromolecules</i> , 2021 , 54, 4198-4210	5.5	
186	A review on robust M-estimators for regression analysis. <i>Computers and Chemical Engineering</i> , 2021 , 147, 107254	4	17
185	Effect of doping concentration and sintering atmosphere on the microstructural and electrical characteristics of Y-doped SrTiO ₃ perovskite anode for SOFC. <i>Ceramics International</i> , 2021 , 47, 13331-13338	5.1	0
184	Insights into media supplementation in solid-state fermentation of soybean hulls by <i>Yarrowia lipolytica</i> : Impact on lipase production in tray and insulated packed-bed bioreactors. <i>Biochemical Engineering Journal</i> , 2021 , 166, 107866	4.2	4
183	Short-term oil production global optimization with operational constraints: A comparative study of nonlinear and piecewise linear formulations. <i>Journal of Petroleum Science and Engineering</i> , 2021 , 198, 108141	4.4	4
182	Multi-objective optimization of a 1G-2G biorefinery: A tool towards economic and environmental viability. <i>Journal of Cleaner Production</i> , 2021 , 284, 125431	10.3	5
181	Optimal Control of Crystal Size and Shape in Batch Crystallization Using a Bivariate Population Balance Modeling. <i>IFAC-PapersOnLine</i> , 2021 , 54, 653-660	0.7	1
180	A Real-Time Optimization Strategy for Small-Scale Facilities and Implementation in a Gas Processing Unit. <i>Processes</i> , 2021 , 9, 1179	2.9	1
179	Optimal performance comparison of the simulated moving bed process variants based on the modulation of the length of zones and the feed concentration. <i>Journal of Chromatography A</i> , 2021 , 1651, 462280	4.5	2
178	Model predictive control with dead-time compensation applied to a gas compression system. <i>Journal of Petroleum Science and Engineering</i> , 2021 , 203, 108580	4.4	4
177	Virtual flow metering of oil wells for a pre-salt field. <i>Journal of Petroleum Science and Engineering</i> , 2021 , 203, 108586	4.4	1
176	Molecular dynamics of dissolution of a 36-chain cellulose I β microfibril at different temperatures above the critical pressure of water. <i>Journal of Molecular Liquids</i> , 2021 , 336, 116271	6	0
175	Steady-state real-time optimization using transient measurements in the absence of a dynamic mechanistic model: A framework of HRT0 integrated with Adaptive Self-Optimizing IHMPC. <i>Journal of Process Control</i> , 2021 , 106, 1-19	3.9	3

174	Inferring kinetic dissolution of NaCl in aqueous glycol solution using a low-cost apparatus and population balance model. <i>Canadian Journal of Chemical Engineering</i> , 2020 , 98, 2435-2450	2.3	
173	Estimation of the nonlinear parameters of viscoelastic constitutive models using CFD and multipass rheometer data. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2020 , 281, 104284	2.7	0
172	Thermophysical Properties of Amorphous-Paracrystalline Celluloses by Molecular Dynamics. <i>Macromolecular Theory and Simulations</i> , 2020 , 29, 2000007	1.5	2
171	Slip and momentum transfer mechanisms mediated by Janus rods at polymer interfaces. <i>Soft Matter</i> , 2020 , 16, 6662-6672	3.6	4
170	Simultaneous absorption of UV-vis and circular dichroism to measure enantiomeric concentrations of praziquantel under nonlinear conditions. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2020 , 241, 118645	4.4	3
169	Integration of Prognostics and Control of an Oil/CO ₂ Subsea Separation System. <i>Processes</i> , 2020 , 8, 148	2.9	
168	Cost analysis of forward osmosis and reverse osmosis in a case study 2020 , 305-324		1
167	A morphological approach to the automatic detection of dark fringes of birefringence images obtained in a multipass rheometer. <i>Rheologica Acta</i> , 2020 , 59, 177-200	2.3	
166	Soraia: A Petrobras system of revenue optimization and artificial intelligence 2020 , 20, 390-391	0	
165	Divided Wall Column Modeling and Simulation in an Open-Source Environment. <i>Chemical and Biochemical Engineering Quarterly</i> , 2020 , 34, 149-167	1.8	1
164	Dynamic study of the evaporation stage of an integrated first and second generation ethanol sugarcane biorefinery using EMSO software. <i>Chemical Engineering Research and Design</i> , 2020 , 153, 613-625	5.5	2
163	Economics of Climate Change: a Sensitivity Analysis Study Applied to Integrated First- and Second-Generation Ethanol Biorefinery. <i>Computer Aided Chemical Engineering</i> , 2020 , 48, 1705-1710	0.6	
162	One-step optimization strategy in the simulated moving bed process with asynchronous movement of ports: A VariCol case study. <i>Journal of Chromatography A</i> , 2020 , 1634, 461672	4.5	4
161	Pipeline design with flow assurance constraints in offshore production lines. <i>Brazilian Journal of Chemical Engineering</i> , 2020 , 37, 555-568	1.7	
160	Carbon-based electrode loaded with Y-doped SrTiO ₃ perovskite as support for enzyme immobilization in biosensors. <i>Ceramics International</i> , 2020 , 46, 3592-3599	5.1	10
159	Dynamic Interfacial Trapping of Janus Nanorod Aggregates. <i>Langmuir</i> , 2020 , 36, 4184-4193	4	5
158	MODEL PREDICTIVE CONTROL FOR PRODUCTION OF ULTRA-LOW SULFUR DIESEL IN A HYDROTREATING PROCESS. <i>Brazilian Journal of Chemical Engineering</i> , 2019 , 36, 439-452	1.7	1
157	Integrating pinch analysis and process simulation within equation-oriented simulators. <i>Computers and Chemical Engineering</i> , 2019 , 130, 106555	4	9

156	Interfacial aggregation of Janus rods in binary polymer blends and their effect on phase separation. <i>Journal of Chemical Physics</i> , 2019 , 151, 114907	3.9	11
155	Tuning of Model Predictive Control Based on Hybrid Optimization. <i>IFAC-PapersOnLine</i> , 2019 , 52, 136-141	0.7	1
154	Machine learning models to support reservoir production optimization. <i>IFAC-PapersOnLine</i> , 2019 , 52, 498-501	0.7	5
153	NMPC integrated with optimization layer in offshore production. <i>IFAC-PapersOnLine</i> , 2019 , 52, 502-507	0.7	
152	Model Predictive Control with Adaptive Strategy Applied to an Electric Submersible Pump in a Subsea Environment. <i>IFAC-PapersOnLine</i> , 2019 , 52, 784-789	0.7	7
151	CO2 Subsea Separation: Concept & Control Strategies. <i>IFAC-PapersOnLine</i> , 2019 , 52, 790-795	0.7	3
150	Separation of praziquantel enantiomers using simulated moving bed chromatographic unit with performance designed for semipreparative applications. <i>Chirality</i> , 2019 , 31, 583-591	2.1	8
149	Amorphous paracrystalline structures from native crystalline cellulose: A molecular dynamics protocol. <i>Fluid Phase Equilibria</i> , 2019 , 491, 56-76	2.5	13
148	Wax appearance and prevention in two-phase flow using the multi-solid and drift-flux model. <i>Journal of Petroleum Science and Engineering</i> , 2019 , 177, 374-383	4.4	2
147	The effect of calcination atmosphere on structural properties of Y-doped SrTiO3 perovskite anode for SOFC prepared by solid-state reaction. <i>Ceramics International</i> , 2019 , 45, 9761-9770	5.1	17
146	Modeling of Catalyst Deactivation in Bioethanol Dehydration Reactor. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 2717-2726	3.9	1
145	Procedures to model and solve probabilistic dynamic system problems. <i>Reliability Engineering and System Safety</i> , 2019 , 191, 106554	6.3	2
144	A METHODOLOGY TO OBTAIN ANALYTICAL MODELS THAT REDUCE THE COMPUTATIONAL COMPLEXITY FACED IN REAL TIME IMPLEMENTATION OF NMPC CONTROLLERS. <i>Brazilian Journal of Chemical Engineering</i> , 2019 , 36, 1255-1278	1.7	3
143	Nonlinear dynamic analysis of chemical engineering processes described by differential-algebraic equations systems. <i>Computer Aided Chemical Engineering</i> , 2019 , 46, 769-774	0.6	
142	QUADRATURE ALGORITHMS FOR PHASE EQUILIBRIUM OF CONTINUOUS MIXTURES. <i>Brazilian Journal of Chemical Engineering</i> , 2019 , 36, 1303-1318	1.7	0
141	Optimization of an Integrated First- and Second-Generation Ethanol Production Plant with Focus on Hydrolysis Parameters. <i>Computer Aided Chemical Engineering</i> , 2019 , 241-246	0.6	1
140	An adaptive sequential wavelet-based algorithm developed for dynamic optimization problems. <i>Computers and Chemical Engineering</i> , 2019 , 121, 465-482	4	4
139	Direct computation of Hopf bifurcation points in differential-algebraic equations. <i>Computers and Chemical Engineering</i> , 2019 , 121, 639-645	4	1

138	Process Modeling and Simulation of an Industrial-Scale Plant for Green Ethylene Production. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 6401-6416	3.9	6
137	Collection of benchmark test problems for data reconciliation and gross error detection and identification. <i>Computers and Chemical Engineering</i> , 2018 , 111, 134-148	4	19
136	Cost assessment and retro-techno-economic analysis of desalination technologies in onshore produced water treatment. <i>Desalination</i> , 2018 , 430, 107-119	10.3	33
135	Employing process simulation for hazardous process deviation identification and analysis. <i>Safety Science</i> , 2018 , 101, 209-219	5.8	8
134	Optimization of chemical engineering problems with EMSO software. <i>Computer Applications in Engineering Education</i> , 2018 , 26, 141-161	1.6	5
133	Modeling and dynamic simulation of a two-stage pre-denitrification MBBR system under increasing organic loading rates. <i>Bioprocess and Biosystems Engineering</i> , 2018 , 41, 1573-1587	3.7	0
132	Enhanced surrogate assisted framework for constrained global optimization of expensive black-box functions. <i>Computers and Chemical Engineering</i> , 2018 , 118, 91-102	4	13
131	Nonlinear model predictive control application for gas-lift based oil production. <i>Computer Aided Chemical Engineering</i> , 2018 , 43, 1177-1182	0.6	2
130	Development of a gas composition soft sensor for distillation columns: A simplified model based and robust approach. <i>Computer Aided Chemical Engineering</i> , 2018 , 661-666	0.6	4
129	Reinforcement Learning Applied to Process Control: A Van der Vusse Reactor Case Study. <i>Computer Aided Chemical Engineering</i> , 2018 , 553-558	0.6	2
128	Application of the GIMP software in the analysis of birefringence images obtained in a multipass rheometer. <i>Rheologica Acta</i> , 2018 , 57, 113-126	2.3	3
127	Optimal operation of batch enantiomer crystallization: From ternary diagrams to predictive control. <i>AIChE Journal</i> , 2018 , 64, 1618-1637	3.6	5
126	AN APPROACH TO OPTIMIZE COSTS DURING ULTRA-LOW HYDRODESULFURIZATION OF A BLEND CONSISTING OF DIFFERENT OIL STREAMS. <i>Brazilian Journal of Chemical Engineering</i> , 2018 , 35, 1293-1304	1.7	2
125	Optimal Enantiomer Crystallization Operation using Ternary Diagram Information. <i>Computer Aided Chemical Engineering</i> , 2018 , 44, 499-504	0.6	1
124	A Kriging-based approach for conjugating specific dynamic models into whole plant stationary simulations. <i>Computers and Chemical Engineering</i> , 2018 , 119, 190-194	4	8
123	Preliminary Design of a Municipal Solid Waste Biorefinery for Environmentally Friendly NH ₃ Production. <i>Industrial & Engineering Chemistry Research</i> , 2018 ,	3.9	2
122	Dynamics and MPC of an Evaporative Continuous Crystallization Process. <i>Computer Aided Chemical Engineering</i> , 2018 , 43, 997-1002	0.6	2
121	Continuous pretreatment of sugarcane biomass using a twin-screw extruder. <i>Industrial Crops and Products</i> , 2017 , 97, 509-517	5.9	32

120	Differential-Algebraic numerical approach to the one-dimensional Drift-Flux Model applied to a multicomponent hydrocarbon two-phase flow. <i>Computers and Chemical Engineering</i> , 2017 , 101, 125-137	4	2
119	Modeling, simulation and kinetic parameter estimation for diesel hydrotreating. <i>Fuel</i> , 2017 , 209, 184-193	1	24
118	Novel method for looped pipeline network resolution. <i>Computers and Chemical Engineering</i> , 2017 , 96, 169-182	4	11
117	Implementation of a block-oriented model library for undergraduate process control courses in EMSO simulator. <i>Education for Chemical Engineers</i> , 2017 , 18, 45-57	2.4	10
116	Assessment of the Accuracy and Dynamic Simulation Capabilities of Liquid-Vapour Two-Phase Flow Separated and Mixture Models. <i>Computer Aided Chemical Engineering</i> , 2017 , 2095-2100	0.6	1
115	Enhanced Surrogate Assisted Global Optimization Algorithm Based on Maximizing Probability of Improvement. <i>Computer Aided Chemical Engineering</i> , 2017 , 2065-2070	0.6	2
114	Retro-Techno-Economic Analysis: Using (Bio)Process Systems Engineering Tools To Attain Process Target Values. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 9865-9872	3.9	16
113	A morphological approach to the automatic detection of dark fringes applied to birefringence images 2016 ,		1
112	An optimal control-based safety system for cost efficient risk management of chemical processes. <i>Computers and Chemical Engineering</i> , 2016 , 91, 471-484	4	4
111	A simple approach to improve the robustness of equation-oriented simulators: Multilinear look-up table interpolators. <i>Computers and Chemical Engineering</i> , 2016 , 86, 1-4	4	9
110	Model Predictive Control with quality requirements on petroleum production platforms. <i>Journal of Petroleum Science and Engineering</i> , 2016 , 137, 10-21	4.4	8
109	Equation of state based on the hole-lattice theory and surface-charge density (COSMO): Part A □ Pure compounds. <i>Fluid Phase Equilibria</i> , 2016 , 409, 472-481	2.5	5
108	Optimization of Aeration Power in a SBR. <i>Computer Aided Chemical Engineering</i> , 2016 , 1341-1346	0.6	
107	Neural Networks Modeling of Dearomatization of Distillate Cuts with Furfural to Produce Lubricants. <i>Computer Aided Chemical Engineering</i> , 2016 , 38, 247-252	0.6	1
106	A NEW BENCHMARK FOR PLANTWIDE PROCESS CONTROL. <i>Brazilian Journal of Chemical Engineering</i> , 2016 , 33, 985-1002	1.7	1
105	MODELING AND SIMULATION OF THE PROCESS OF DEHYDRATION OF BIOETHANOL TO ETHYLENE. <i>Brazilian Journal of Chemical Engineering</i> , 2016 , 33, 479-490	1.7	5
104	MODELING STYRENE HYDROGENATION KINETICS USING PALLADIUM CATALYSTS. <i>Brazilian Journal of Chemical Engineering</i> , 2016 , 33, 637-647	1.7	1
103	Equation of state based on the hole-lattice theory and surface-charge density (COSMO): Part B □ Vapor□liquid equilibrium for mixtures. <i>Fluid Phase Equilibria</i> , 2016 , 419, 1-10	2.5	2

102	Model Reformulation and Global Optimization of Oil Production Using Gas Lift. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 10114-10120	3.9	1
101	Nonlinear model predictive control applied to the separation of praziquantel in simulated moving bed chromatography. <i>Journal of Chromatography A</i> , 2016 , 1470, 42-49	4.5	17
100	Modelling of Hg0 Removal from Gaseous Streams and its Fixation in Hydroxyapatite-Based Adsorbents Modified with Copper Sulphide. <i>Adsorption Science and Technology</i> , 2015 , 33, 175-190	3.6	2
99	Process Alternatives for Second Generation Ethanol Production from Sugarcane Bagasse. <i>Computer Aided Chemical Engineering</i> , 2015 , 1349-1354	0.6	2
98	Kinetic modeling for enzymatic hydrolysis of pretreated sugarcane straw. <i>Biochemical Engineering Journal</i> , 2015 , 104, 10-19	4.2	21
97	Heterogeneous Catalysts for Olefin Polymerization: Mathematical Model for Catalyst Particle Fragmentation. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 11997-12010	3.9	12
96	Effects of electrostatic correlations on ion dynamics in alternating current voltages. <i>Electrochimica Acta</i> , 2015 , 152, 84-92	6.7	8
95	Differential-Algebraic Approach to Solve Steady-State Two-Phase Flow Drift-Flux Model with Phase Change. <i>Computer Aided Chemical Engineering</i> , 2015 , 37, 317-322	0.6	1
94	Two-Phase Flow in Pipes: Numerical Improvements and Qualitative Analysis for a Refining Process. <i>Oil and Gas Science and Technology</i> , 2015 , 70, 497-510	1.9	5
93	Simultaneous parameters identifiability and estimation of an E. coli metabolic network model. <i>BioMed Research International</i> , 2015 , 2015, 454765	3	5
92	A smart safety system for chemical processes. <i>Computer Aided Chemical Engineering</i> , 2015 , 37, 1799-1804	6	0
91	HIGHLY-ACCURATE MODEL ORDER REDUCTION TECHNIQUE ON A DISCRETE DOMAIN. <i>Brazilian Journal of Chemical Engineering</i> , 2015 , 32, 767-779	1.7	2
90	Determination of the external mass transfer coefficient and influence of mixing intensity in moving bed biofilm reactors for wastewater treatment. <i>Water Research</i> , 2015 , 80, 90-8	12.5	23
89	Modelling and Extremum Seeking Control of Gas Lifted Oil Wells. <i>IFAC-PapersOnLine</i> , 2015 , 48, 21-26	0.7	13
88	A robust parallel algorithm of the particle swarm optimization method for large dimensional engineering problems. <i>Applied Mathematical Modelling</i> , 2015 , 39, 4223-4241	4.5	18
87	Dispersant effects on YSZ electrolyte characteristics for solid oxide fuel cells. <i>Ceramics International</i> , 2015 , 41, 6141-6148	5.1	6
86	STEADY STATE AND PSEUDO-TRANSIENT ELECTRIC POTENTIAL USING THE POISSONBOLTZMANN EQUATION. <i>Brazilian Journal of Chemical Engineering</i> , 2015 , 32, 293-302	1.7	1
85	Fast Nonlinear Predictive Control and State Estimation of Distillation Columns Using First-Principles Reduced-order Model. <i>Computer Aided Chemical Engineering</i> , 2014 , 33, 715-720	0.6	

84	Steric effects on ion dynamics near charged electrodes. <i>Fluid Phase Equilibria</i> , 2014 , 362, 177-186	2.5	6
83	Observability analysis and model formulation for nonlinear state estimation. <i>Applied Mathematical Modelling</i> , 2014 , 38, 5407-5420	4.5	7
82	State estimation of chemical engineering systems tending to multiple solutions. <i>Brazilian Journal of Chemical Engineering</i> , 2014 , 31, 771-785	1.7	2
81	Implementation of Galerkin and moments methods by Gaussian quadrature in advection-diffusion problems with chemical reactions. <i>Computers and Chemical Engineering</i> , 2014 , 61, 156-174	4	3
80	Utilizaço da tcnica de birrefringncia em refletor multipasse para a diferenciaço de grades de poliestireno cristal. <i>Polimeros</i> , 2014 , 24, 596-603	1.6	2
79	Optimal Wavelet-Threshold Selection to Solve Dynamic Optimization Problems. <i>Computer Aided Chemical Engineering</i> , 2014 , 247-252	0.6	
78	Accelerating the parameters identifiability procedure: Set by set selection. <i>Computers and Chemical Engineering</i> , 2013 , 55, 181-197	4	8
77	Influence of oxygen transfer rate on the accumulation of poly(3-hydroxybutyrate) by <i>Bacillus megaterium</i> . <i>Process Biochemistry</i> , 2013 , 48, 420-425	4.8	29
76	Direct production of ultra-high molecular weight polyethylene with oriented crystalline microstructures. <i>Journal of Molecular Catalysis A</i> , 2013 , 366, 74-83		21
75	The use of Gauss-Hermite quadrature in the determination of the molecular weight distribution of linear polymers by rheometry. <i>Brazilian Journal of Chemical Engineering</i> , 2013 , 30, 909-921	1.7	1
74	Structural analysis for static and dynamic models. <i>Mathematical and Computer Modelling</i> , 2012 , 55, 1051-1067		11
73	Modeling P(3HB) production by <i>Bacillus megaterium</i> . <i>Journal of Chemical Technology and Biotechnology</i> , 2012 , 87, 325-333	3.5	11
72	Reduced Rigorous Models for Efficient Dynamic Simulation and Optimization of Distillation Columns. <i>Computer Aided Chemical Engineering</i> , 2012 , 30, 1262-1266	0.6	3
71	Wavelet-Threshold Influence in Optimal Control Problems. <i>Computer Aided Chemical Engineering</i> , 2012 , 30, 1222-1226	0.6	1
70	An Efficient Adjoint-Free Dynamic Optimization Methodology for Batch Processing using Pontryagin's Formulation. <i>Computer Aided Chemical Engineering</i> , 2012 , 30, 1297-1301	0.6	1
69	Solving dynamic optimization infeasibility problems. <i>Computers and Chemical Engineering</i> , 2012 , 36, 227-246		2
68	Assessing the production of first and second generation bioethanol from sugarcane through the integration of global optimization and process detailed modeling. <i>Computers and Chemical Engineering</i> , 2012 , 43, 1-9	4	69
67	Integrated tool for simulation and optimization of a first and second generation ethanol-from-sugarcane production plant. <i>Computer Aided Chemical Engineering</i> , 2012 , 81-85	0.6	3

66	State estimators for better bioprocesses operation. <i>Computer Aided Chemical Engineering</i> , 2012 , 1267-1276	5
65	Hybrid Monitoring of Offshore Compression Systems. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2012 , 45, 245-250	
64	Practical aspects on nonlinear state estimation. <i>Computer Aided Chemical Engineering</i> , 2012 , 30, 1272-1276	
63	Dynamic Simulation of Rosemary Essential Oil Extraction in an Industrial Steam Distillation Unit. <i>Industrial & Engineering Chemistry Research</i> , 2011 , 50, 3955-3959	3.9 12
62	Dynamic optimization of a FCC converter unit: numerical analysis. <i>Brazilian Journal of Chemical Engineering</i> , 2011 , 28, 117-136	1.7 9
61	Heat integration of an Olefins Plant: Pinch Analysis and mathematical optimization working together. <i>Brazilian Journal of Chemical Engineering</i> , 2011 , 28, 101-116	1.7 8
60	Catalisadores metaloc�nicos suportados para a produ�o de poliolefinas: revis�o das estrat�gias de imobiliza�o. <i>Quimica Nova</i> , 2011 , 34, 646-657	1.6 2
59	Simulation of Free Surface Viscoelastic Fluid Flow Using the viscoelasticInterFoam Solver. <i>Computer Aided Chemical Engineering</i> , 2010 , 31-36	0.6 8
58	A new cubic equation of state for prediction of VLE of polymer solutions. <i>Fluid Phase Equilibria</i> , 2010 , 295, 38-45	2.5 9
57	Overall efficiency evaluation of commercial distillation columns with valve and dualflow trays. <i>AIChE Journal</i> , 2010 , 56, NA-NA	3.6 3
56	Teaching chemical reaction engineering using EMSO simulator. <i>Computer Applications in Engineering Education</i> , 2010 , 18, 607-618	1.6 21
55	Viscoelastic flow analysis using the software OpenFOAM and differential constitutive equations. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2010 , 165, 1625-1636	2.7 85
54	Viscoelastic fluid analysis in internal and in free surface flows using the software OpenFOAM. <i>Computers and Chemical Engineering</i> , 2010 , 34, 1984-1993	4 30
53	Simula�o operacional de uma torre de destila�o atmosf�rica via Aspen Plus e avalia�o de modelos de analisadores virtuais. <i>Controle and Automacao</i> , 2009 , 20, 305-322	
52	Numerical Pitfalls by State Covariance Computation. <i>Computer Aided Chemical Engineering</i> , 2009 , 27, 1215-1220	0.6 3
51	Viscoelastic Flow Simulation: Development of a Methodology of Analysis Using the Software OpenFOAM and Differential Constitutive Equations. <i>Computer Aided Chemical Engineering</i> , 2009 , 915-920	0.6 14
50	Kinetics of thermal inactivation of transglutaminase from a newly isolated <i>Bacillus circulans</i> BL32. <i>Journal of Chemical Technology and Biotechnology</i> , 2009 , 84, 1567-1575	3.5 9
49	Optimization of C:N ratio and minimal initial carbon source for poly(3-hydroxybutyrate) production by <i>Bacillus megaterium</i> . <i>Journal of Chemical Technology and Biotechnology</i> , 2009 , 84, 1756-1761	3.5 21

48	Multivariable control strategy based on bifurcation analysis of an industrial gas-phase polymerization reactor. <i>Journal of Process Control</i> , 2009 , 19, 530-538	3.9	7
47	Immobilization of zirconocene within silica/tungsten by entrapment: Tuning electronic effects of the support on the supported complex. <i>Applied Catalysis A: General</i> , 2009 , 370, 114-122	5.1	11
46	Immobilization of metallocene within silica/titania by a non-hydrolytic sol-gel method. <i>Applied Catalysis A: General</i> , 2009 , 354, 88-101	5.1	16
45	Modeling of Ammonia Removal in RBCs: An Industrial Case. <i>Computer Aided Chemical Engineering</i> , 2009 , 507-512	0.6	
44	Modeling of Biomass Gasification Applied to a Combined Gasifier-Combustor Unit: Equilibrium and Kinetic Approaches. <i>Computer Aided Chemical Engineering</i> , 2009 , 27, 657-662	0.6	10
43	Fluid Dynamics Simulation for Design of a Biomass Gasifier. <i>Computer Aided Chemical Engineering</i> , 2009 , 27, 1071-1076	0.6	1
42	A Continuous Implementation of the Ideal Time Delay in EMSO. <i>Computer Aided Chemical Engineering</i> , 2009 , 273-278	0.6	1
41	A New Process Noise Covariance Matrix Tuning Algorithm for Kalman Based State Estimators. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2009 , 42, 572-577		2
40	Adaptive Random Search: A Promising Method for Determining the Stability of Mixtures. <i>Computer Aided Chemical Engineering</i> , 2009 , 27, 321-326	0.6	1
39	Dynamic Behavior and Control in an Industrial Fluidized-Bed Polymerization Reactor. <i>Industrial & Engineering Chemistry Research</i> , 2008 , 47, 6058-6069	3.9	12
38	Investigation of silica particle structure containing metallocene immobilized by a sol-gel method. <i>Journal of Non-Crystalline Solids</i> , 2008 , 354, 3973-3979	3.9	22
37	Simulation of styrene polymerization reactors: kinetic and thermodynamic modeling. <i>Brazilian Journal of Chemical Engineering</i> , 2008 , 25, 337-349	1.7	11
36	Data treatment and analysis for on-line dynamic process optimization. <i>Computer Aided Chemical Engineering</i> , 2008 , 25, 519-524	0.6	1
35	High-order finite volume method for solving viscoelastic fluid flows. <i>Brazilian Journal of Chemical Engineering</i> , 2008 , 25, 153-166	1.7	5
34	Mass transfer in olefin polymerization: estimative of macro- and microscale diffusion coefficients through the swollen polymer. <i>Chemical Engineering Science</i> , 2008 , 63, 3727-3739	4.4	7
33	Debugging for equation-oriented CAPE tools. <i>Computer Aided Chemical Engineering</i> , 2007 , 237-242	0.6	
32	DYNAMIC SIMULATION OF REACTIVE DISTILLATION PROCESSES TO PREDICT START-UP BEHAVIOR. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2007 , 40, 285-290		3
31	DEBUGGING STATIC AND DYNAMIC RIGOROUS MODELS FOR EQUATION-ORIENTED CAPE TOOLS. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2007 , 40, 291-296		

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