Argimiro Resende Secchi

List of Publications by Citations

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	EMSO: A new environment for modelling, simulation and optimisation. *Computer Aided Chemical Engineering*, **2003**, 14, 947-952	0.6	88
190	Viscoelastic flow analysis using the software OpenFOAM and differential constitutive equations. *Journal of Non-Newtonian Fluid Mechanics*, **2010**, 165, 1625-1636	2.7	85
189	Assessing the production of first and second generation bioethanol from sugarcane through the integration of global optimization and process detailed modeling. *Computers and Chemical Engineering*, **2012**, 43, 1-9	4	69
188	Utilization of protein-hydrolyzed cheese whey for production of beta-galactosidase by Kluyveromyces marxianus. *Journal of Industrial Microbiology and Biotechnology*, **1999**, 23, 91-96	4.2	59
187	Modeling and simulation of propylene polymerization in nonideal loop reactors. *AICHE Journal*, **2003**, 49, 2642-2654	3.6	40
186	Cost assessment and retro-techno-economic analysis of desalination technologies in onshore produced water treatment. *Desalination*, **2018**, 430, 107-119	10.3	33
185	Continuous pretreatment of sugarcane biomass using a twin-screw extruder. *Industrial Crops and Products*, **2017**, 97, 509-517	5.9	32
184	A growth kinetic model of Kluyveromyces marxianus cultures on cheese whey as substrate. *Journal of Industrial Microbiology and Biotechnology*, **2004**, 31, 35-40	4.2	31
183	Viscoelastic fluid analysis in internal and in free surface flows using the software OpenFOAM. *Computers and Chemical Engineering*, **2010**, 34, 1984-1993	4	30
182	Influence of oxygen transfer rate on the accumulation of poly(3-hydroxybutyrate) by Bacillus megaterium. *Process Biochemistry*, **2013**, 48, 420-425	4.8	29
181	Constrained optimal batch polymerization reactor control. *Polymer Engineering and Science*, **1990**, 30, 1209-1219	2.3	25
180	Modeling, simulation and kinetic parameter estimation for diesel hydrotreating. *Fuel*, **2017**, 209, 184-193	7.1	24
179	Determination of the external mass transfer coefficient and influence of mixing intensity in moving bed biofilm reactors for wastewater treatment. *Water Research*, **2015**, 80, 90-8	12.5	23
178	Investigation of silica particle structure containing metallocene immobilized by a sol-gel method. *Journal of Non-Crystalline Solids*, **2008**, 354, 3973-3979	3.9	22
177	Kinetic modeling for enzymatic hydrolysis of pretreated sugarcane straw. *Biochemical Engineering Journal*, **2015**, 104, 10-19	4.2	21
176	Direct production of ultra-high molecular weight polyethylene with oriented crystalline microstructures. *Journal of Molecular Catalysis A*, **2013**, 366, 74-83		21
175	Optimization of C:N ratio and minimal initial carbon source for poly(3-hydroxybutyrate) production by Bacillus megaterium. *Journal of Chemical Technology and Biotechnology*, **2009**, 84, 1756-1761	3.5	21

174	Teaching chemical reaction engineering using EMSO simulator. *Computer Applications in Engineering Education*, **2010**, 18, 607-618	1.6	21
173	A dynamic model for a FCC UOP stacked converter unit. *Computers and Chemical Engineering*, **2001**, 25, 851-858	4	21
172	Collection of benchmark test problems for data reconciliation and gross error detection and identification. *Computers and Chemical Engineering*, **2018**, 111, 134-148	4	19
171	A robust parallel algorithm of the particle swarm optimization method for large dimensional engineering problems. *Applied Mathematical Modelling*, **2015**, 39, 4223-4241	4.5	18
170	The effect of calcination atmosphere on structural properties of Y-doped SrTiO3 perovskite anode for SOFC prepared by solid-state reaction. *Ceramics International*, **2019**, 45, 9761-9770	5.1	17
169	Immobilization of Zirconocene into Silica Prepared by Non-Hydrolytic Sol-Gel Method. *Macromolecular Symposia*, **2006**, 245-246, 77-86	0.8	17
168	A review on robust M-estimators for regression analysis. *Computers and Chemical Engineering*, **2021**, 147, 107254	4	17
167	Nonlinear model predictive control applied to the separation of praziquantel in simulated moving bed chromatography. *Journal of Chromatography A*, **2016**, 1470, 42-49	4.5	17
166	Retro-Techno-Economic Analysis: Using (Bio)Process Systems Engineering Tools To Attain Process Target Values. *Industrial & Engineering Chemistry Research*, **2016**, 55, 9865-9872	3.9	16
165	Immobilization of metallocene within silica–titania by a non-hydrolytic sol–gel method. *Applied Catalysis A: General*, **2009**, 354, 88-101	5.1	16
164	Viscoelastic Flow Simulation: Development of a Methodology of Analysis Using the Software OpenFOAM and Differential Constitutive Equations. *Computer Aided Chemical Engineering*, **2009**, 915-920	0.6	14
163	Simulation and optimization of an industrial PSA unit. *Brazilian Journal of Chemical Engineering*, **2000**, 17, 695-704	1.7	14
162	Amorphous paracrystalline structures from native crystalline cellulose: A molecular dynamics protocol. *Fluid Phase Equilibria*, **2019**, 491, 56-76	2.5	13
161	Enhanced surrogate assisted framework for constrained global optimization of expensive black-box functions. *Computers and Chemical Engineering*, **2018**, 118, 91-102	4	13
160	Modelling and Extremum Seeking Control of Gas Lifted Oil Wells. *IFAC-PapersOnLine*, **2015**, 48, 21-26	0.7	13
159	Heterogeneous Catalysts for Olefin Polymerization: Mathematical Model for Catalyst Particle Fragmentation. *Industrial & Engineering Chemistry Research*, **2015**, 54, 11997-12010	3.9	12
158	Dynamic Simulation of Rosemary Essential Oil Extraction in an Industrial Steam Distillation Unit. *Industrial & Engineering Chemistry Research*, **2011**, 50, 3955-3959	3.9	12
157	Dynamic Behavior and Control in an Industrial Fluidized-Bed Polymerization Reactor. *Industrial & Engineering Chemistry Research*, **2008**, 47, 6058-6069	3.9	12

156	Interfacial aggregation of Janus rods in binary polymer blends and their effect on phase separation. *Journal of Chemical Physics*, **2019**, 151, 114907	3.9	11
155	Structural analysis for static and dynamic models. *Mathematical and Computer Modelling*, **2012**, 55, 1051-1067		11
154	Modeling P(3HB) production by Bacillus megaterium. *Journal of Chemical Technology and Biotechnology*, **2012**, 87, 325-333	3.5	11
153	Novel method for looped pipeline network resolution. *Computers and Chemical Engineering*, **2017**, 96, 169-182	4	11
152	Immobilization of zirconocene within silica-tungsten by entrapment: Tuning electronic effects of the support on the supported complex. *Applied Catalysis A: General*, **2009**, 370, 114-122	5.1	11
151	Simulation of styrene polymerization reactors: kinetic and thermodynamic modeling. *Brazilian Journal of Chemical Engineering*, **2008**, 25, 337-349	1.7	11
150	Implementation of a block-oriented model library for undergraduate process control courses in EMSO simulator. *Education for Chemical Engineers*, **2017**, 18, 45-57	2.4	10
149	Modeling of Biomass Gasification Applied to a Combined Gasifier-Combustor Unit: Equilibrium and Kinetic Approaches. *Computer Aided Chemical Engineering*, **2009**, 27, 657-662	0.6	10
148	The waveform relaxation method in the concurrent dynamic process simulation. *Computers and Chemical Engineering*, **1993**, 17, 683-703	4	10
147	Carbon-based electrode loaded with Y-doped SrTiO3 perovskite as support for enzyme immobilization in biosensors. *Ceramics International*, **2020**, 46, 3592-3599	5.1	10
146	Integrating pinch analysis and process simulation within equation-oriented simulators. *Computers and Chemical Engineering*, **2019**, 130, 106555	4	9
145	A simple approach to improve the robustness of equation-oriented simulators: Multilinear look-up table interpolators. *Computers and Chemical Engineering*, **2016**, 86, 1-4	4	9
144	Dynamic optimization of a FCC converter unit: numerical analysis. *Brazilian Journal of Chemical Engineering*, **2011**, 28, 117-136	1.7	9
143	Kinetics of thermal inactivation of transglutaminase from a newly isolated Bacillus circulans BL32. *Journal of Chemical Technology and Biotechnology*, **2009**, 84, 1567-1575	3.5	9
142	A new cubic equation of state for prediction of VLE of polymer solutions. *Fluid Phase Equilibria*, **2010**, 295, 38-45	2.5	9
141	Dynamic simulation and experimental evaluation of EPDM terpolymerization with vanadium-based catalyst. *Journal of Applied Polymer Science*, **1998**, 70, 1173-1189	2.9	9
140	Modifications, simplifications, and efficiency tests for the CAPE-OPEN numerical open interfaces. *Computers and Chemical Engineering*, **2004**, 28, 1611-1621	4	9
139	Separation of praziquantel enantiomers using simulated moving bed chromatographic unit with performance designed for semipreparative applications. *Chirality*, **2019**, 31, 583-591	2.1	8

138	Effects of electrostatic correlations on ion dynamics in alternating current voltages. *Electrochimica Acta*, **2015**, 152, 84-92	6.7	8
137	Employing process simulation for hazardous process deviation identification and analysis. *Safety Science*, **2018**, 101, 209-219	5.8	8
136	Model Predictive Control with quality requirements on petroleum production platforms. *Journal of Petroleum Science and Engineering*, **2016**, 137, 10-21	4.4	8
135	Accelerating the parameters identifiability procedure: Set by set selection. *Computers and Chemical Engineering*, **2013**, 55, 181-197	4	8
134	Heat integration of an Olefins Plant: Pinch Analysis and mathematical optimization working together. *Brazilian Journal of Chemical Engineering*, **2011**, 28, 101-116	1.7	8
133	Simulation of Free Surface Viscoelastic Fluid Flow Using the viscoelasticInterFoam Solver. *Computer Aided Chemical Engineering*, **2010**, 31-36	0.6	8
132	Simulation of an ultrafiltration process of bovine serum albumin in hollow-fiber membranes. *Journal of Membrane Science*, **1999**, 160, 255-265	9.6	8
131	A Kriging-based approach for conjugating specific dynamic models into whole plant stationary simulations. *Computers and Chemical Engineering*, **2018**, 119, 190-194	4	8
130	Model Predictive Control with Adaptive Strategy Applied to an Electric Submersible Pump in a Subsea Environment. *IFAC-PapersOnLine*, **2019**, 52, 784-789	0.7	7
129	Observability analysis and model formulation for nonlinear state estimation. *Applied Mathematical Modelling*, **2014**, 38, 5407-5420	4.5	7
128	Multivariable control strategy based on bifurcation analysis of an industrial gas-phase polymerization reactor. *Journal of Process Control*, **2009**, 19, 530-538	3.9	7
127	Mass transfer in olefin polymerization: estimative of macro- and microscale diffusion coefficients through the swollen polymer. *Chemical Engineering Science*, **2008**, 63, 3727-3739	4.4	7
126	Dynamic simulation and experimental evaluation of EPDM synthesis with ET(IND)2ZRCL2/MAO catalyst system. *Journal of Applied Polymer Science*, **2000**, 76, 425-438	2.9	7
125	Process Modeling and Simulation of an Industrial-Scale Plant for Green Ethylene Production. *Industrial & Engineering Chemistry Research*, **2018**, 57, 6401-6416	3.9	6
124	Steric effects on ion dynamics near charged electrodes. *Fluid Phase Equilibria*, **2014**, 362, 177-186	2.5	6
123	Dispersant effects on YSZ electrolyte characteristics for solid oxide fuel cells. *Ceramics International*, **2015**, 41, 6141-6148	5.1	6
122	Direct initialisation and solution of high-index DAE systems. *Computer Aided Chemical Engineering*, **2005**, 20, 157-162	0.6	6
121	Machine learning models to support reservoir production optimization. *IFAC-PapersOnLine*, **2019**, 52, 498-501	0.7	5

120	Optimization of chemical engineering problems with EMSO software. *Computer Applications in Engineering Education*, **2018**, 26, 141-161	1.6	5
119	Equation of state based on the hole-lattice theory and surface-charge density (COSMO): Part A Pure compounds. *Fluid Phase Equilibria*, **2016**, 409, 472-481	2.5	5
118	Two-Phase Flow in Pipes: Numerical Improvements and Qualitative Analysis for a Refining Process. *Oil and Gas Science and Technology*, **2015**, 70, 497-510	1.9	5
117	Simultaneous parameters identifiability and estimation of an E. coli metabolic network model. *BioMed Research International*, **2015**, 2015, 454765	3	5
116	State estimators for better bioprocesses operation. *Computer Aided Chemical Engineering*, **2012**, 1267-1271	0.6	5
115	High-order finite volume method for solving viscoelastic fluid lows. *Brazilian Journal of Chemical Engineering*, **2008**, 25, 153-166	1.7	5
114	MODELING AND SIMULATION OF THE PROCESS OF DEHYDRATION OF BIOETHANOL TO ETHYLENE. *Brazilian Journal of Chemical Engineering*, **2016**, 33, 479-490	1.7	5
113	Dynamic Interfacial Trapping of Janus Nanorod Aggregates. *Langmuir*, **2020**, 36, 4184-4193	4	5
112	Multi-objective optimization of a 1G-2G biorefinery: A tool towards economic and environmental viability. *Journal of Cleaner Production*, **2021**, 284, 125431	10.3	5
111	Optimal operation of batch enantiomer crystallization: From ternary diagrams to predictive control. *AICHE Journal*, **2018**, 64, 1618-1637	3.6	5
110	Slip and momentum transfer mechanisms mediated by Janus rods at polymer interfaces. *Soft Matter*, **2020**, 16, 6662-6672	3.6	4
109	An optimal control-based safety system for cost efficient risk management of chemical processes. *Computers and Chemical Engineering*, **2016**, 91, 471-484	4	4
108	Development of a gas composition soft sensor for distillation columns: A simplified model based and robust approach. *Computer Aided Chemical Engineering*, **2018**, 661-666	0.6	4
107	One-step optimization strategy in the simulated moving bed process with asynchronous movement of ports: A VariCol case study. *Journal of Chromatography A*, **2020**, 1634, 461672	4.5	4
106	An adaptive sequential wavelet-based algorithm developed for dynamic optimization problems. *Computers and Chemical Engineering*, **2019**, 121, 465-482	4	4
105	Insights into media supplementation in solid-state fermentation of soybean hulls by Yarrowia lipolytica: Impact on lipase production in tray and insulated packed-bed bioreactors. *Biochemical Engineering Journal*, **2021**, 166, 107866	4.2	4
104	Short-term oil production global optimization with operational constraints: A comparative study of nonlinear and piecewise linear formulations. *Journal of Petroleum Science and Engineering*, **2021**, 198, 108141	4.4	4
103	Model predictive control with dead-time compensation applied to a gas compression system. *Journal of Petroleum Science and Engineering*, **2021**, 203, 108580	4.4	4

102	CO2 Subsea Separation: Concept & Control Strategies. *IFAC-PapersOnLine*, **2019**, 52, 790-795	0.7	3
101	Simultaneous absorption of UV-vis and circular dichroism to measure enantiomeric concentrations of praziquantel under nonlinear conditions. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2020**, 241, 118645	4.4	3
100	Implementation of Galerkin and moments methods by Gaussian quadrature in advection□diffusion problems with chemical reactions. *Computers and Chemical Engineering*, **2014**, 61, 156-174	4	3
99	Reduced Rigorous Models for Efficient Dynamic Simulation and Optimization of Distillation Columns. *Computer Aided Chemical Engineering*, **2012**, 30, 1262-1266	0.6	3
98	Numerical Pitfalls by State Covariance Computation. *Computer Aided Chemical Engineering*, **2009**, 27, 1215-1220	0.6	3
97	Integrated tool for simulation and optimization of a first and second generation ethanol-from-sugarcane production plant. *Computer Aided Chemical Engineering*, **2012**, 81-85	0.6	3
96	Overall efficiency evaluation of commercial distillation columns with valve and dualflow trays. *AICHE Journal*, **2010**, 56, NA-NA	3.6	3
95	DYNAMIC SIMULATION OF REACTIVE DISTILLATION PROCESSES TO PREDICT START-UP BEHAVIOR. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2007**, 40, 285-290		3
94	Comparison between Phenomenological and Empirical Models for Gas-Phase Polymerization Process Control. *Industrial & Engineering Chemistry Research*, **2006**, 45, 2651-2660	3.9	3
93	STATE ESTIMATION OF AN EXPERIMENTAL BIOREACTOR USING THE EXTENDED KALMAN FILTERING TECHNOLOGY. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2002**, 35, 379-382		3
92	A METHODOLOGY TO OBTAIN ANALYTICAL MODELS THAT REDUCE THE COMPUTATIONAL COMPLEXITY FACED IN REAL TIME IMPLEMENTATION OF NMPC CONTROLLERS. *Brazilian Journal of Chemical Engineering*, **2019**, 36, 1255-1278	1.7	3
91	Application of the GIMP software in the analysis of birefringence images obtained in a multipass rheometer. *Rheologica Acta*, **2018**, 57, 113-126	2.3	3
90	Steady-state real-time optimization using transient measurements in the absence of a dynamic mechanistic model: A framework of HRTO integrated with Adaptive Self-Optimizing IHMPC. *Journal of Process Control*, **2021**, 106, 1-19	3.9	3
89	Tuning of Model Predictive Controllers Based on Hybrid Optimization. *Processes*, **2022**, 10, 351	2.9	3
88	Differential-Algebraic numerical approach to the one-dimensional Drift-Flux Model applied to a multicomponent hydrocarbon two-phase flow. *Computers and Chemical Engineering*, **2017**, 101, 125-137	4	2
87	Wax appearance and prevention in two-phase flow using the multi-solid and drift-flux model. *Journal of Petroleum Science and Engineering*, **2019**, 177, 374-383	4.4	2
86	Modelling of Hg0 Removal from Gaseous Streams and its Fixation in Hydroxyapatite-Based Adsorbents Modified with Copper Sulphide. *Adsorption Science and Technology*, **2015**, 33, 175-190	3.6	2
85	Process Alternatives for Second Generation Ethanol Production from Sugarcane Bagasse. *Computer Aided Chemical Engineering*, **2015**, 1349-1354	0.6	2

84	Thermophysical Properties of Amorphous-Paracrystalline Celluloses by Molecular Dynamics. *Macromolecular Theory and Simulations*, **2020**, 29, 2000007	1.5	2
83	Nonlinear model predictive control application for gas-lift based oil production. *Computer Aided Chemical Engineering*, **2018**, 43, 1177-1182	0.6	2
82	Reinforcement Learning Applied to Process Control: A Van der Vusse Reactor Case Study. *Computer Aided Chemical Engineering*, **2018**, 553-558	0.6	2
81	Procedures to model and solve probabilistic dynamic system problems. *Reliability Engineering and System Safety*, **2019**, 191, 106554	6.3	2
80	Enhanced Surrogate Assisted Global Optimization Algorithm Based on Maximizing Probability of Improvement. *Computer Aided Chemical Engineering*, **2017**, 2065-2070	0.6	2
79	HIGHLY-ACCURATE MODEL ORDER REDUCTION TECHNIQUE ON A DISCRETE DOMAIN. *Brazilian Journal of Chemical Engineering*, **2015**, 32, 767-779	1.7	2
78	State estimation of chemical engineering systems tending to multiple solutions. *Brazilian Journal of Chemical Engineering*, **2014**, 31, 771-785	1.7	2
77	Solving dynamic optimization infeasibility problems. *Computers and Chemical Engineering*, **2012**, 36, 227-246	4	2
76	A New Process Noise Covariance Matrix Tuning Algorithm for Kalman Based State Estimators. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2009**, 42, 572-577		2
75	AN ALGORITHM FOR AUTOMATIC SELECTION AND ESTIMATION OF MODEL PARAMETERS. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2006**, 39, 789-794		2
74	Utilizaão da tcnica de birrefringncia em reômetro multipasse para a diferenciaão de grades de poliestireno cristal. *Polimeros*, **2014**, 24, 596-603	1.6	2
73	Catalisadores metalocênicos suportados para a produção de poliolefinas: revisão das estratégias de imobilização. *Quimica Nova*, **2011**, 34, 646-657	1.6	2
72	Dynamic study of the evaporation stage of an integrated first and second generation ethanol sugarcane biorefinery using EMSO software. *Chemical Engineering Research and Design*, **2020**, 153, 613-625	5.5	2
71	Equation of state based on the hole-lattice theory and surface-charge density (COSMO): Part B Vaporliquid equilibrium for mixtures. *Fluid Phase Equilibria*, **2016**, 419, 1-10	2.5	2
70	AN APPROACH TO OPTIMIZE COSTS DURING ULTRA-LOW HYDRODESULFURIZATION OF A BLEND CONSISTING OF DIFFERENT OIL STREAMS. *Brazilian Journal of Chemical Engineering*, **2018**, 35, 1293-1304	1.7	2
69	Preliminary Design of a Municipal Solid Waste Biorefinery for Environmentally Friendly NH3Production. *Industrial & Engineering Chemistry Research*, **2018**,	3.9	2
68	Dynamics and MPC of an Evaporative Continuous Crystallization Process. *Computer Aided Chemical Engineering*, **2018**, 43, 997-1002	0.6	2
67	Optimal performance comparison of the simulated moving bed process variants based on the modulation of the length of zones and the feed concentration. *Journal of Chromatography A*, **2021**, 1651, 462280	4.5	2

66	MODEL PREDICTIVE CONTROL FOR PRODUCTION OF ULTRA-LOW SULFUR DIESEL IN A HYDROTREATING PROCESS. *Brazilian Journal of Chemical Engineering*, **2019**, 36, 439-452	1.7	1
65	Tuning of Model Predictive Control Based on Hybrid Optimization. *IFAC-PapersOnLine*, **2019**, 52, 136-141	0.7	1
64	Modeling of Catalyst Deactivation in Bioethanol Dehydration Reactor. *Industrial & Engineering Chemistry Research*, **2019**, 58, 2717-2726	3.9	1
63	Cost analysis of forward osmosis and reverse osmosis in a case study **2020**, 305-324		1
62	A morphological approach to the automatic detection of dark fringes applied to birefringence images **2016**,		1
61	Assessment of the Accuracy and Dynamic Simulation Capabilities of Liquid-Vapour Two-Phase Flow Separated and Mixture Models. *Computer Aided Chemical Engineering*, **2017**, 2095-2100	0.6	1
60	Differential-Algebraic Approach to Solve Steady-State Two-Phase Flow Drift-Flux Model with Phase Change. *Computer Aided Chemical Engineering*, **2015**, 37, 317-322	0.6	1
59	Wavelet-Threshold Influence in Optimal Control Problems. *Computer Aided Chemical Engineering*, **2012**, 30, 1222-1226	0.6	1
58	An Efficient Adjoint-Free Dynamic Optimization Methodology for Batch Processing using Pontryagin's Formulation. *Computer Aided Chemical Engineering*, **2012**, 30, 1297-1301	0.6	1
57	The use of Gauss-Hermite quadrature in the determination of the molecular weight distribution of linear polymers by rheometry. *Brazilian Journal of Chemical Engineering*, **2013**, 30, 909-921	1.7	1
56	Fluid Dynamics Simulation for Design of a Biomass Gasifier. *Computer Aided Chemical Engineering*, **2009**, 27, 1071-1076	0.6	1
55	A Continuous Implementation of the Ideal Time Delay in EMSO. *Computer Aided Chemical Engineering*, **2009**, 273-278	0.6	1
54	Adaptive Random Search: A Promising Method for Determining the Stability of Mixtures. *Computer Aided Chemical Engineering*, **2009**, 27, 321-326	0.6	1
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51	On the positivity of multivariable scalar functions. *Journal of the Franklin Institute*, **2001**, 338, 509-516	4	1
50	The waveform relaxation method in the concurrent dynamic process simulation. *Computers and Chemical Engineering*, **1993**, 17, S453-S465	4	1
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47	Divided Wall Column Modeling and Simulation in an Open-Source Environment. *Chemical and Biochemical Engineering Quarterly*, **2020**, 34, 149-167	1.8	1
46	Neural Networks Modeling of Dearomatization of Distillate Cuts with Furfural to Produce Lubricants. *Computer Aided Chemical Engineering*, **2016**, 38, 247-252	0.6	1
45	A NEW BENCHMARK FOR PLANTWIDE PROCESS CONTROL. *Brazilian Journal of Chemical Engineering*, **2016**, 33, 985-1002	1.7	1
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43	Model Reformulation and Global Optimization of Oil Production Using Gas Lift. *Industrial & Engineering Chemistry Research*, **2016**, 55, 10114-10120	3.9	1
42	Optimization of an Integrated First- and Second-Generation Ethanol Production Plant with Focus on Hydrolysis Parameters. *Computer Aided Chemical Engineering*, **2019**, 241-246	0.6	1
41	Direct computation of Hopf bifurcation points in differential-algebraic equations. *Computers and Chemical Engineering*, **2019**, 121, 639-645	4	1
40	Optimal Control of Crystal Size and Shape in Batch Crystallization Using a Bivariate Population Balance Modeling. *IFAC-PapersOnLine*, **2021**, 54, 653-660	0.7	1
39	Optimal Enantiomer Crystallization Operation using Ternary Diagram Information. *Computer Aided Chemical Engineering*, **2018**, 44, 499-504	0.6	1
38	A Real-Time Optimization Strategy for Small-Scale Facilities and Implementation in a Gas Processing Unit. *Processes*, **2021**, 9, 1179	2.9	1
37	Virtual flow metering of oil wells for a pre-salt field. *Journal of Petroleum Science and Engineering*, **2021**, 203, 108586	4.4	1
36	A Temporal Evolution Perspective of Lipase Production by Yarrowia lipolytica in Solid-State Fermentation. *Processes*, **2022**, 10, 381	2.9	1
35	Estimation of the nonlinear parameters of viscoelastic constitutive models using CFD and multipass rheometer data. *Journal of Non-Newtonian Fluid Mechanics*, **2020**, 281, 104284	2.7	0
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33	A smart safety system for chemical processes. *Computer Aided Chemical Engineering*, **2015**, 37, 1799-1804	0.6	0
32	Dynamic behaviour and control of an industrial fluidised-bed polymerisation reactor. *Computer Aided Chemical Engineering*, **2005**, 409-414	0.6	0
31	Addressing scale and seasonality in the design of sugarcane to ethylene glycol biorefineries. *Journal of Cleaner Production*, **2022**, 337, 130585	10.3	0

30	QUADRATURE ALGORITHMS FOR PHASE EQUILIBRIUM OF CONTINUOUS MIXTURES. *Brazilian Journal of Chemical Engineering*, **2019**, 36, 1303-1318	1.7	0
29	Effect of doping concentration and sintering atmosphere on the microstructural and electrical characteristics of Y-doped SrTiO3 perovskite anode for SOFC. *Ceramics International*, **2021**, 47, 13331-13338	5.1	0
28	Molecular dynamics of dissolution of a 36-chain cellulose Iβ microfibril at different temperatures above the critical pressure of water. *Journal of Molecular Liquids*, **2021**, 336, 116271	6	0
27	Improvement of black oil delumping method applied to an offshore oil field. *Journal of Petroleum Science and Engineering*, **2022**, 214, 110514	4.4	0
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24	Integration of Prognostics and Control of an Oil/CO2 Subsea Separation System. *Processes*, **2020**, 8, 148	2.9	
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19	Hybrid Monitoring of Offshore Compression Systems. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2012**, 45, 245-250		
18	Debugging for equation-oriented CAPE tools. *Computer Aided Chemical Engineering*, **2007**, 237-242	0.6	
17	DEBUGGING STATIC AND DYNAMIC RIGOROUS MODELS FOR EQUATION-ORIENTED CAPE TOOLS. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2007**, 40, 291-296		
16	DYNAMIC REAL-TIME OPTIMIZATION OF A FCC CONVERTER UNIT. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2006**, 39, 1055-1061		
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