

Argimiro Resende Secchi

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1099508/publications.pdf>

Version: 2024-02-01

202
papers

2,059
citations

304368

22
h-index

360668

35
g-index

204
all docs

204
docs citations

204
times ranked

2121
citing authors

#	ARTICLE	IF	CITATIONS
1	EMSO: A new environment for modelling, simulation and optimisation. <i>Computer Aided Chemical Engineering</i> , 2003, 14, 947-952.	0.3	114
2	Viscoelastic flow analysis using the software OpenFOAM and differential constitutive equations. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2010, 165, 1625-1636.	1.0	107
3	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.	2.0	84
4	Utilization of protein-hydrolyzed cheese whey for production of β -galactosidase by <i>Kluyveromyces marxianus</i> . <i>Journal of Industrial Microbiology and Biotechnology</i> , 1999, 23, 91-96.	1.4	71
5	A review on robust M-estimators for regression analysis. <i>Computers and Chemical Engineering</i> , 2021, 147, 107254.	2.0	71
6	Modeling and simulation of propylene polymerization in nonideal loop reactors. <i>AIChE Journal</i> , 2003, 49, 2642-2654.	1.8	47
7	Cost assessment and retro-techno-economic analysis of desalination technologies in onshore produced water treatment. <i>Desalination</i> , 2018, 430, 107-119.	4.0	43
8	Continuous pretreatment of sugarcane biomass using a twin-screw extruder. <i>Industrial Crops and Products</i> , 2017, 97, 509-517.	2.5	42
9	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.	1.8	40
10	A growth kinetic model of <i>Kluyveromyces marxianus</i> cultures on cheese whey as substrate. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2004, 31, 35-40.	1.4	38
11	Modeling, simulation and kinetic parameter estimation for diesel hydrotreating. <i>Fuel</i> , 2017, 209, 184-193.	3.4	38
12	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.	1.6	36
13	Viscoelastic fluid analysis in internal and in free surface flows using the software OpenFOAM. <i>Computers and Chemical Engineering</i> , 2010, 34, 1984-1993.	2.0	35
14	Constrained optimal batch polymerization reactor control. <i>Polymer Engineering and Science</i> , 1990, 30, 1209-1219.	1.5	33
15	Kinetic modeling for enzymatic hydrolysis of pretreated sugarcane straw. <i>Biochemical Engineering Journal</i> , 2015, 104, 10-19.	1.8	28
16	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, 90-98.	5.3	27
17	Modelling and Extremum Seeking Control of Gas Lifted Oil Wells. <i>IFAC-PapersOnLine</i> , 2015, 48, 21-26.	0.5	27
18	Teaching chemical reaction engineering using EMSO simulator. <i>Computer Applications in Engineering Education</i> , 2010, 18, 607-618.	2.2	26

#	ARTICLE	IF	CITATIONS
19	Investigation of silica particle structure containing metallocene immobilized by a sol-gel method. <i>Journal of Non-Crystalline Solids</i> , 2008, 354, 3973-3979.	1.5	25
20	A robust parallel algorithm of the particle swarm optimization method for large dimensional engineering problems. <i>Applied Mathematical Modelling</i> , 2015, 39, 4223-4241.	2.2	25
21	Amorphous paracrystalline structures from native crystalline cellulose: A molecular dynamics protocol. <i>Fluid Phase Equilibria</i> , 2019, 491, 56-76.	1.4	25
22	A dynamic model for a FCC UOP stacked converter unit. <i>Computers and Chemical Engineering</i> , 2001, 25, 851-858.	2.0	24
23	Direct production of ultra-high molecular weight polyethylene with oriented crystalline microstructures. <i>Journal of Molecular Catalysis A</i> , 2013, 366, 74-83.	4.8	24
24	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.	1.8	24
25	Collection of benchmark test problems for data reconciliation and gross error detection and identification. <i>Computers and Chemical Engineering</i> , 2018, 111, 134-148.	2.0	23
26	The effect of calcination atmosphere on structural properties of Y-doped SrTiO ₃ perovskite anode for SOFC prepared by solid-state reaction. <i>Ceramics International</i> , 2019, 45, 9761-9770.	2.3	23
27	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.	1.8	22
28	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.	2.3	22
29	Immobilization of metallocene within silica-titania by a non-hydrolytic sol-gel method. <i>Applied Catalysis A: General</i> , 2009, 354, 88-101.	2.2	20
30	Model Predictive Control with Adaptive Strategy Applied to an Electric Submersible Pump in a Subsea Environment. <i>IFAC-PapersOnLine</i> , 2019, 52, 784-789.	0.5	20
31	Immobilization of Zirconocene into Silica Prepared by Non-Hydrolytic Sol-Gel Method. <i>Macromolecular Symposia</i> , 2006, 245-246, 77-86.	0.4	18
32	Dynamic Behavior and Control in an Industrial Fluidized-Bed Polymerization Reactor. <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 6058-6069.	1.8	18
33	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.	0.3	18
34	Multi-objective optimization of a 1G-2G biorefinery: A tool towards economic and environmental viability. <i>Journal of Cleaner Production</i> , 2021, 284, 125431.	4.6	18
35	Enhanced surrogate assisted framework for constrained global optimization of expensive black-box functions. <i>Computers and Chemical Engineering</i> , 2018, 118, 91-102.	2.0	17
36	Modeling P(3HB) production by <i>Bacillus megaterium</i> . <i>Journal of Chemical Technology and Biotechnology</i> , 2012, 87, 325-333.	1.6	15

#	ARTICLE	IF	CITATIONS
37	Heterogeneous Catalysts for Olefin Polymerization: Mathematical Model for Catalyst Particle Fragmentation. <i>Industrial & Engineering Chemistry Research</i> , 2015, 54, 11997-12010.	1.8	15
38	Machine learning models to support reservoir production optimization. <i>IFAC-PapersOnLine</i> , 2019, 52, 498-501.	0.5	15
39	Simulation and optimization of an industrial PSA unit. <i>Brazilian Journal of Chemical Engineering</i> , 2000, 17, 695-704.	0.7	15
40	Simulation of styrene polymerization reactors: kinetic and thermodynamic modeling. <i>Brazilian Journal of Chemical Engineering</i> , 2008, 25, 337-349.	0.7	14
41	Dynamic Simulation of Rosemary Essential Oil Extraction in an Industrial Steam Distillation Unit. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 3955-3959.	1.8	14
42	Structural analysis for static and dynamic models. <i>Mathematical and Computer Modelling</i> , 2012, 55, 1051-1067.	2.0	14
43	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.	2.8	14
44	Integrating pinch analysis and process simulation within equation-oriented simulators. <i>Computers and Chemical Engineering</i> , 2019, 130, 106555.	2.0	14
45	Interfacial aggregation of Janus rods in binary polymer blends and their effect on phase separation. <i>Journal of Chemical Physics</i> , 2019, 151, 114907.	1.2	14
46	The waveform relaxation method in the concurrent dynamic process simulation. <i>Computers and Chemical Engineering</i> , 1993, 17, 683-703.	2.0	13
47	Dynamic optimization of a FCC converter unit: numerical analysis. <i>Brazilian Journal of Chemical Engineering</i> , 2011, 28, 117-136.	0.7	13
48	Novel method for looped pipeline network resolution. <i>Computers and Chemical Engineering</i> , 2017, 96, 169-182.	2.0	13
49	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.	2.2	12
50	Observability analysis and model formulation for nonlinear state estimation. <i>Applied Mathematical Modelling</i> , 2014, 38, 5407-5420.	2.2	12
51	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.	2.0	12
52	Overall efficiency evaluation of commercial distillation columns with valve and dualflow trays. <i>AIChE Journal</i> , 2010, 56, 2323-2330.	1.8	11
53	Effects of electrostatic correlations on ion dynamics in alternating current voltages. <i>Electrochimica Acta</i> , 2015, 152, 84-92.	2.6	11
54	Model Predictive Control with quality requirements on petroleum production platforms. <i>Journal of Petroleum Science and Engineering</i> , 2016, 137, 10-21.	2.1	11

#	ARTICLE	IF	CITATIONS
55	Optimization of chemical engineering problems with EMSO software. <i>Computer Applications in Engineering Education</i> , 2018, 26, 141-161.	2.2	11
56	Separation of praziquantel enantiomers using simulated moving bed chromatographic unit with performance designed for semipreparative applications. <i>Chirality</i> , 2019, 31, 583-591.	1.3	11
57	Dynamic simulation and experimental evaluation of EPDM terpolymerization with vanadium-based catalyst. <i>Journal of Applied Polymer Science</i> , 1998, 70, 1173-1189.	1.3	10
58	Modifications, simplifications, and efficiency tests for the CAPE-OPEN numerical open interfaces. <i>Computers and Chemical Engineering</i> , 2004, 28, 1611-1621.	2.0	10
59	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.	1.9	10
60	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.	0.3	10
61	Simulation of Free Surface Viscoelastic Fluid Flow Using the viscoelasticInterFoam Solver. <i>Computer Aided Chemical Engineering</i> , 2010, , 31-36.	0.3	10
62	Process Modeling and Simulation of an Industrial-Scale Plant for Green Ethylene Production. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 6401-6416.	1.8	10
63	A Kriging-based approach for conjugating specific dynamic models into whole plant stationary simulations. <i>Computers and Chemical Engineering</i> , 2018, 119, 190-194.	2.0	10
64	Simulation of an ultrafiltration process of bovine serum albumin in hollow-fiber membranes. <i>Journal of Membrane Science</i> , 1999, 160, 255-265.	4.1	9
65	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.	1.6	9
66	A new cubic equation of state for prediction of VLE of polymer solutions. <i>Fluid Phase Equilibria</i> , 2010, 295, 38-45.	1.4	9
67	Heat integration of an Olefins Plant: Pinch Analysis and mathematical optimization working together. <i>Brazilian Journal of Chemical Engineering</i> , 2011, 28, 101-116.	0.7	9
68	Accelerating the parameters identifiability procedure: Set by set selection. <i>Computers and Chemical Engineering</i> , 2013, 55, 181-197.	2.0	9
69	Steric effects on ion dynamics near charged electrodes. <i>Fluid Phase Equilibria</i> , 2014, 362, 177-186.	1.4	9
70	An optimal control-based safety system for cost efficient risk management of chemical processes. <i>Computers and Chemical Engineering</i> , 2016, 91, 471-484.	2.0	9
71	Employing process simulation for hazardous process deviation identification and analysis. <i>Safety Science</i> , 2018, 101, 209-219.	2.6	9
72	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.	2.0	9

#	ARTICLE	IF	CITATIONS
73	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.	1.8	9
74	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.	2.3	9
75	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. <i>Journal of Process Control</i> , 2021, 106, 1-19.	1.7	9
76	Dynamic simulation and experimental evaluation of EPDM synthesis with ET(IND)2ZRCL2/MAO catalyst system. <i>Journal of Applied Polymer Science</i> , 2000, 76, 425-438.	1.3	8
77	Multivariable control strategy based on bifurcation analysis of an industrial gas-phase polymerization reactor. <i>Journal of Process Control</i> , 2009, 19, 530-538.	1.7	8
78	Dynamic Interfacial Trapping of Janus Nanorod Aggregates. <i>Langmuir</i> , 2020, 36, 4184-4193.	1.6	8
79	A Temporal Evolution Perspective of Lipase Production by <i>Yarrowia lipolytica</i> in Solid-State Fermentation. <i>Processes</i> , 2022, 10, 381.	1.3	8
80	Direct initialisation and solution of high-index DAE systems. <i>Computer Aided Chemical Engineering</i> , 2005, 20, 157-162.	0.3	7
81	State estimators for better bioprocesses operation. <i>Computer Aided Chemical Engineering</i> , 2012, , 1267-1271.	0.3	7
82	Dispersant effects on YSZ electrolyte characteristics for solid oxide fuel cells. <i>Ceramics International</i> , 2015, 41, 6141-6148.	2.3	7
83	Slip and momentum transfer mechanisms mediated by Janus rods at polymer interfaces. <i>Soft Matter</i> , 2020, 16, 6662-6672.	1.2	7
84	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.	2.1	7
85	Model predictive control with dead-time compensation applied to a gas compression system. <i>Journal of Petroleum Science and Engineering</i> , 2021, 203, 108580.	2.1	7
86	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.	0.7	7
87	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.	1.4	6
88	MODELING AND SIMULATION OF THE PROCESS OF DEHYDRATION OF BIOETHANOL TO ETHYLENE. <i>Brazilian Journal of Chemical Engineering</i> , 2016, 33, 479-490.	0.7	6
89	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.	1.4	6
90	Dynamics and MPC of an Evaporative Continuous Crystallization Process. <i>Computer Aided Chemical Engineering</i> , 2018, 43, 997-1002.	0.3	6

#	ARTICLE	IF	CITATIONS
91	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.	0.3	6
92	Reinforcement Learning Applied to Process Control: A Van der Vusse Reactor Case Study. <i>Computer Aided Chemical Engineering</i> , 2018, , 553-558.	0.3	6
93	CO2 Subsea Separation: Concept & Control Strategies. <i>IFAC-PapersOnLine</i> , 2019, 52, 790-795.	0.5	6
94	Development of a Nonlinear Model Predictive Control for Stabilization of a Gas-Lift Oil Well. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 8411-8421.	1.8	6
95	STATE ESTIMATION OF AN EXPERIMENTAL BIOREACTOR USING THE EXTENDED KALMAN FILTERING TECHNOLOGY. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2002, 35, 379-382.	0.4	5
96	AN ALGORITHM FOR AUTOMATIC SELECTION AND ESTIMATION OF MODEL PARAMETERS. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2006, 39, 789-794.	0.4	5
97	High-order finite volume method for solving viscoelastic fluid flows. <i>Brazilian Journal of Chemical Engineering</i> , 2008, 25, 153-166.	0.7	5
98	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.	0.4	5
99	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.	0.3	5
100	Simultaneous Parameters Identifiability and Estimation of an E. coli Metabolic Network Model. <i>BioMed Research International</i> , 2015, 2015, 1-21.	0.9	5
101	Optimal operation of batch enantiomer crystallization: From ternary diagrams to predictive control. <i>AIChE Journal</i> , 2018, 64, 1618-1637.	1.8	5
102	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.	2.1	5
103	An adaptive sequential wavelet-based algorithm developed for dynamic optimization problems. <i>Computers and Chemical Engineering</i> , 2019, 121, 465-482.	2.0	5
104	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.	1.8	5
105	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.	1.8	5
106	Virtual flow metering of oil wells for a pre-salt field. <i>Journal of Petroleum Science and Engineering</i> , 2021, 203, 108586.	2.1	5
107	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.	2.3	5
108	Enhanced Surrogate Assisted Global Optimization Algorithm Based on Maximizing Probability of Improvement. <i>Computer Aided Chemical Engineering</i> , 2017, , 2065-2070.	0.3	4

#	ARTICLE	IF	CITATIONS
109	Modeling of Catalyst Deactivation in Bioethanol Dehydration Reactor. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 2717-2726.	1.8	4
110	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.	2.7	4
111	Thermophysical Properties of Amorphous&Paracrystalline Celluloses by Molecular Dynamics. <i>Macromolecular Theory and Simulations</i> , 2020, 29, 2000007.	0.6	4
112	Optimal Control of Crystal Size and Shape in Batch Crystallization Using a Bivariate Population Balance Modeling. <i>IFAC-PapersOnLine</i> , 2021, 54, 653-660.	0.5	4
113	A Real-Time Optimization Strategy for Small-Scale Facilities and Implementation in a Gas Processing Unit. <i>Processes</i> , 2021, 9, 1179.	1.3	4
114	Tuning of Model Predictive Controllers Based on Hybrid Optimization. <i>Processes</i> , 2022, 10, 351.	1.3	4
115	Comparison between Phenomenological and Empirical Models for Gas-Phase Polymerization Process Control. <i>Industrial & Engineering Chemistry Research</i> , 2006, 45, 2651-2660.	1.8	3
116	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.	0.4	3
117	Numerical Pitfalls by State Covariance Computation. <i>Computer Aided Chemical Engineering</i> , 2009, 27, 1215-1220.	0.3	3
118	A Continuous Implementation of the Ideal Time Delay in EMSO. <i>Computer Aided Chemical Engineering</i> , 2009, , 273-278.	0.3	3
119	Reduced Rigorous Models for Efficient Dynamic Simulation and Optimization of Distillation Columns. <i>Computer Aided Chemical Engineering</i> , 2012, 30, 1262-1266.	0.3	3
120	An Efficient Adjoint-Free Dynamic Optimization Methodology for Batch Processing using Pontryagin's Formulation. <i>Computer Aided Chemical Engineering</i> , 2012, 30, 1297-1301.	0.3	3
121	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.	2.0	3
122	Application of the GIMP software in the analysis of birefringence images obtained in a multipass rheometer. <i>Rheologica Acta</i> , 2018, 57, 113-126.	1.1	3
123	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.	0.7	3
124	Nonlinear model predictive control application for gas-lift based oil production. <i>Computer Aided Chemical Engineering</i> , 2018, 43, 1177-1182.	0.3	3
125	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.	0.7	3
126	Direct computation of Hopf bifurcation points in differential-algebraic equations. <i>Computers and Chemical Engineering</i> , 2019, 121, 639-645.	2.0	3

#	ARTICLE	IF	CITATIONS
127	Cost analysis of forward osmosis and reverse osmosis in a case study. , 2020, , 305-324.		3
128	Shear Flow and Relaxation Behaviors of Entangled Viscoelastic Nanorod-Stabilized Immiscible Polymer Blends. <i>Macromolecules</i> , 2021, 54, 4198-4210.	2.2	3
129	Utiliza�o da t�cnica de birrefring�ncia em r�metro multipasse para a diferen�a de grades de poliestireno cristal. <i>Polimeros</i> , 2014, 24, 596-603.	0.2	3
130	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.	0.3	3
131	Dynamic process simulation using a concurrent differential and algebraic solver. <i>Computers and Chemical Engineering</i> , 1993, 17, S467-S472.	2.0	2
132	Automatic structural characterization of DAE systems. <i>Computer Aided Chemical Engineering</i> , 2001, , 123-128.	0.3	2
133	Adaptive Random Search: A Promising Method for Determining the Stability of Mixtures. <i>Computer Aided Chemical Engineering</i> , 2009, 27, 321-326.	0.3	2
134	Wavelet-Threshold Influence in Optimal Control Problems. <i>Computer Aided Chemical Engineering</i> , 2012, 30, 1222-1226.	0.3	2
135	Solving dynamic optimization infeasibility problems. <i>Computers and Chemical Engineering</i> , 2012, 36, 227-246.	2.0	2
136	State estimation of chemical engineering systems tending to multiple solutions. <i>Brazilian Journal of Chemical Engineering</i> , 2014, 31, 771-785.	0.7	2
137	HIGHLY-ACCURATE MODEL ORDER REDUCTION TECHNIQUE ON A DISCRETE DOMAIN. <i>Brazilian Journal of Chemical Engineering</i> , 2015, 32, 767-779.	0.7	2
138	Modelling of Hg ⁰ 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.	1.5	2
139	Process Alternatives for Second Generation Ethanol Production from Sugarcane Bagasse. <i>Computer Aided Chemical Engineering</i> , 2015, , 1349-1354.	0.3	2
140	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.	1.4	2
141	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.	2.0	2
142	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.	0.3	2
143	Optimal Enantiomer Crystallization Operation using Ternary Diagram Information. <i>Computer Aided Chemical Engineering</i> , 2018, 44, 499-504.	0.3	2
144	Preliminary Design of a Municipal Solid Waste Biorefinery for Environmentally Friendly NH ₃ Production. <i>Industrial & Engineering Chemistry Research</i> , 2018, , .	1.8	2

#	ARTICLE	IF	CITATIONS
145	Procedures to model and solve probabilistic dynamic system problems. Reliability Engineering and System Safety, 2019, 191, 106554.	5.1	2
146	ANODES FOR SOFC: REVIEW OF MATERIAL SELECTION, INTERFACE AND ELECTROCHEMICAL PHENOMENA. Quimica Nova, 2020, , .	0.3	2
147	QUADRATURE ALGORITHMS FOR PHASE EQUILIBRIUM OF CONTINUOUS MIXTURES. Brazilian Journal of Chemical Engineering, 2019, 36, 1303-1318.	0.7	2
148	Addressing scale and seasonality in the design of sugarcane to ethylene glycol biorefineries. Journal of Cleaner Production, 2022, 337, 130585.	4.6	2
149	Improvement of black oil delumping method applied to an offshore oil field. Journal of Petroleum Science and Engineering, 2022, 214, 110514.	2.1	2
150	The waveform relaxation method in the concurrent dynamic process simulation. Computers and Chemical Engineering, 1993, 17, S453-S465.	2.0	1
151	On the positivity of multivariable scalar functions. Journal of the Franklin Institute, 2001, 338, 509-516.	1.9	1
152	Dynamic behaviour and control of an industrial fluidised-bed polymerisation reactor. Computer Aided Chemical Engineering, 2005, , 409-414.	0.3	1
153	Uma nova metodologia para a simulaÃ§Ã£o de escoamentos de fluidos viscoelÃ¡sticos. Polimeros, 2005, 15, 53-58.	0.2	1
154	Data treatment and analysis for on-line dynamic process optimization. Computer Aided Chemical Engineering, 2008, 25, 519-524.	0.3	1
155	SimulaÃ§Ã£o operacional de uma torre de destilaÃ§Ã£o atmosfÃ©rica via Aspen Plus e avaliaÃ§Ã£o de modelos de analisadores virtuais. Controle and Automacao, 2009, 20, 305-322.	0.2	1
156	Fluid Dynamics Simulation for Design of a Biomass Gasifier. Computer Aided Chemical Engineering, 2009, 27, 1071-1076.	0.3	1
157	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.	0.7	1
158	Differential-Algebraic Approach to Solve Steady-State Two-Phase Flow Drift-Flux Model with Phase Change. Computer Aided Chemical Engineering, 2015, 37, 317-322.	0.3	1
159	A smart safety system for chemical processes. Computer Aided Chemical Engineering, 2015, 37, 1799-1804.	0.3	1
160	Neural Networks Modeling of Dearomatization of Distillate Cuts with Furfural to Produce Lubricants. Computer Aided Chemical Engineering, 2016, 38, 247-252.	0.3	1
161	A NEW BENCHMARK FOR PLANTWIDE PROCESS CONTROL. Brazilian Journal of Chemical Engineering, 2016, 33, 985-1002.	0.7	1
162	MODELING STYRENE HYDROGENATION KINETICS USING PALLADIUM CATALYSTS. Brazilian Journal of Chemical Engineering, 2016, 33, 637-647.	0.7	1

#	ARTICLE	IF	CITATIONS
163	Model Reformulation and Global Optimization of Oil Production Using Gas Lift. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 10114-10120.	1.8	1
164	A morphological approach to the automatic detection of dark fringes applied to birefringence images. , 2016, , .		1
165	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.	1.7	1
166	Tuning of Model Predictive Control Based on Hybrid Optimization. <i>IFAC-PapersOnLine</i> , 2019, 52, 136-141.	0.5	1
167	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.	0.3	1
168	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.	1.0	1
169	Selected papers from the 1st Brazilian Congress on Process Systems Engineering. <i>Brazilian Journal of Chemical Engineering</i> , 2021, 38, 639-639.	0.7	1
170	Dynamic process simulation using a concurrent differential and algebraic solver. <i>Computers and Chemical Engineering</i> , 1993, 17, S467-S472.	2.0	1
171	STEADY STATE AND PSEUDO-TRANSIENT ELECTRIC POTENTIAL USING THE POISSONBOLTZMANN EQUATION. <i>Brazilian Journal of Chemical Engineering</i> , 2015, 32, 293-302.	0.7	1
172	Alargamento da distribuiÃ§Ã£o de massa molar de polÃªmeros sintetizados com catalisadores metalocÃªnicos dual-site. <i>Quimica Nova</i> , 2008, 31, 1199-1207.	0.3	1
173	Divided Wall Column Modeling and Simulation in an Open-Source Environment. <i>Chemical and Biochemical Engineering Quarterly</i> , 2020, 34, 149-167.	0.5	1
174	A Novel Algorithm to Local Model Network Generation. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2000, 33, 383-388.	0.4	0
175	Extending the Zubov's Theorem to Compass Estimates of the Domain of Attraction for Autonomous Systems 1. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2001, 34, 401-405.	0.4	0
176	Local thermodynamic models networks: A novel approach for process simulation. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2001, 34, 493-498.	0.4	0
177	Automatic Integration of High-Index Dynamic Systems. <i>Computer Aided Chemical Engineering</i> , 2002, 10, 865-870.	0.3	0
178	A New Signal Design Tool for Process Model Identification. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2004, 37, 23-28.	0.4	0
179	DYNAMIC REAL-TIME OPTIMIZATION OF A FCC CONVERTER UNIT. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2006, 39, 1055-1061.	0.4	0
180	Debugging for equation-oriented CAPE tools. <i>Computer Aided Chemical Engineering</i> , 2007, , 237-242.	0.3	0

#	ARTICLE	IF	CITATIONS
181	DEBUGGING STATIC AND DYNAMIC RIGOROUS MODELS FOR EQUATION-ORIENTED CAPE TOOLS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 291-296.	0.4	0
182	Modeling of Ammonia Removal in RBCs: An Industrial Case. Computer Aided Chemical Engineering, 2009, , 507-512.	0.3	0
183	Hybrid Monitoring of Offshore Compression Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 245-250.	0.4	0
184	Fast Nonlinear Predictive Control and State Estimation of Distillation Columns Using First-Principles Reduced-order Model. Computer Aided Chemical Engineering, 2014, 33, 715-720.	0.3	0
185	Optimization of Aeration Power in a SBR. Computer Aided Chemical Engineering, 2016, , 1341-1346.	0.3	0
186	Discrete-time state and parameter estimation using a set-based approach. , 2016, , .		0
187	Model Predictive Control of Batch Enantiomer Crystallization Using Ternary Diagram Information. , 2018, , .		0
188	NMPC integrated with optimization layer in offshore production. IFAC-PapersOnLine, 2019, 52, 502-507.	0.5	0
189	Economics of Climate Change: a Sensitivity Analysis Study Applied to Integrated First- and Second-Generation Ethanol Biorefinery. Computer Aided Chemical Engineering, 2020, 48, 1705-1710.	0.3	0
190	Pipeline design with flow assurance constraints in offshore production lines. Brazilian Journal of Chemical Engineering, 2020, 37, 555-568.	0.7	0
191	Inferring kinetic dissolution of NaCl in aqueous glycol solution using a low-cost apparatus and population balance model. Canadian Journal of Chemical Engineering, 2020, 98, 2435-2450.	0.9	0
192	Integration of Prognostics and Control of an Oil/CO2 Subsea Separation System. Processes, 2020, 8, 148.	1.3	0
193	A morphological approach to the automatic detection of dark fringes of birefringence images obtained in a multipass rheometer. Rheologica Acta, 2020, 59, 177-200.	1.1	0
194	Practical aspects on nonlinear state estimation. Computer Aided Chemical Engineering, 2012, 30, 1272-1276.	0.3	0
195	Advances on Viscoelastic Fluid Flow Simulation. , 2012, , 233-265.		0
196	Optimal Wavelet-Threshold Selection to Solve Dynamic Optimization Problems. Computer Aided Chemical Engineering, 2014, , 247-252.	0.3	0
197	Improving the Convergence of the SELEST Identifiability Procedure. , 2016, , .		0
198	Nonlinear dynamic analysis of chemical engineering processes described by differential-algebraic equations systems. Computer Aided Chemical Engineering, 2019, 46, 769-774.	0.3	0

#	ARTICLE	IF	CITATIONS
199	Advanced control of compression systems for oil and natural gas production platforms. Technical Papers ... Rio Oil & Gas, 2020, 20, 181-182.	0.0	0
200	Virtual flow measurement methodology. Technical Papers ... Rio Oil & Gas, 2020, 20, 170-171.	0.0	0
201	Soraia: A Petrobras system of revenue optimization and artificial intelligence. Technical Papers ... Rio Oil & Gas, 2020, 20, 390-391.	0.0	0
202	Nonlinear dynamic analysis and numerical continuation of periodic orbits in high-index differential-algebraic equation systems. Nonlinear Dynamics, 0, , 1.	2.7	0