Gustavo Mendes Platt

List of Publications by Year
in descending order

38 papers	371 citations	1040056 9 h-index	839539 18 g-index
41 all docs	41 docs citations	41 times ranked	386 citing authors

#	Article	IF	Citations
1	A Novel Reliability-Based Robust Design Multiobjective Optimization Formulation Applied in Chemical Engineering. Industrial & Engineering Chemistry Research, 2022, 61, 3483-3501.	3.7	1
2	Critical point calculations by numerical inversion of functions. Chemical Engineering Communications, 2021, 208, 1245-1259.	2.6	0
3	Mathematical modelling of the second wave of COVID-19 infections using deterministic and stochastic SIDR models. Nonlinear Dynamics, 2021, 106, 1359-1373.	5.2	8
4	Novas Abordagens sobre o Problema de OtimizaÃ§Ã£o do Projeto do NÃºcleo do Reator. Vetor, 2021, 31, .	0.0	0
5	Identification of an Epidemiological Model to Simulate the COVID-19 Epidemic Using Robust Multiobjective Optimization and Stochastic Fractal Search. Computational and Mathematical Methods in Medicine, 2020, 2020, 1-8.	1.3	14
6	Evaluation of a New Multimodal Optimization Algorithm in Fluid Phase Equilibrium Problems. Ingenieria E Investigacion, 2020, 40, 27-33.	0.4	0
7	Adaptive second order step length algorithm for inverse reliability analysis. Advances in Engineering Software, 2020, 146, 102831.	3.8	5
8	Basins of attraction and critical curves for Newton-type methods in a phase equilibrium problem. International Journal of Computational Science and Engineering, 2020, 23, 91.	0.5	0
9	Determination of an optimal control strategy for vaccine administration in COVID-19 pandemic treatment. Computer Methods and Programs in Biomedicine, 2020, 196, 105664.	4.7	108
10	An Overview of the Use of Metaheuristics in Two Phase Equilibrium Calculation Problems. , 2019, , 1-27.		0
11	Geometry of Phase Equilibrium with an Application to Double Retrograde Vaporization Prediction. Industrial & Engineering Chemistry Research, 2018, 57, 4651-4663.	3.7	2
12	Azeotropy in a refrigerant system: a useful scenario to test and compare metaheuristics. International Journal of Metaheuristics, 2018, 7, 43.	0.1	3
13	Multiple solution algorithm with applications to robot kinematics. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2017, 39, 1313-1321.	1.6	3
14	A study of equivalent electrical circuit fitting to electrochemical impedance using a stochastic method. Applied Soft Computing Journal, 2017, 50, 183-193.	7.2	16
15	Basins of Attraction in the Calculation of Critical Points. International Review of Chemical Engineering (IRECHE), 2017, 9, 55.	0.0	1
16	Numerical experiments with new metaheuristic algorithms in phase equilibrium problems. International Journal of Mathematical Modelling and Numerical Optimisation, 2016, 7, 189.	0.2	4
17	Robust Pediction of Double Retrograde Vaporization by Numerical Inversion of Functions. International Review of Mechanical Engineering, 2016, 10, 452.	0.2	2
18	Prediction of azeotropic behaviour by the inversion of functions from the plane to the plane. Canadian Journal of Chemical Engineering, 2015, 93, 914-928.	1.7	7

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19	Application of the Firefly and Luusâ€“Jaakola algorithms in the calculation of a double reactive azeotrope. Computational Science & Discovery, 2014, 7, 015002.	1.5	4
20	Characterization and Dissolution Dynamics of Tricalcium Phosphates in Acidified Solution. Journal of Biomimetics, Biomaterials, and Tissue Engineering, 2013, 18, 61-71.	0.7	0
21	Calculation of a double reactive azeotrope using stochastic optimization approaches. Journal of Physics: Conference Series, 2013, 410, 012020.	0.4	3
22	Hyper-heuristic applied to nuclear reactor core design. Journal of Physics: Conference Series, 2013, 410, 012021.	0.4	0
23	Thermodynamic Simulation of Phosphate Precipitation based on Ion-Selective Microelectrode Measurements. Journal of the Brazilian Chemical Society, 2013, , .	0.6	0
24	Double Azeotropy: calculations with Newton-like methods and continuous GRASP (C-GRASP). International Journal of Mathematical Modelling and Numerical Optimisation, 2011, 2, 387.	0.2	6
25	Analytical reconstruction scheme for the coarse-mesh solution generated by the spectral nodal method for neutral particle discrete ordinates transport model in slab geometry. Annals of Nuclear Energy, 2010, 37, 1461-1466.	1.8	4
26	Finding more than one root of nonlinear equations via a polarization technique: An application to double retrograde vaporization. Chemical Engineering Research and Design, 2010, 88, 551-561.	5.6	22
27	Theoretical study of Tris and Bistris effects on simulated body fluids. Journal of Molecular Liquids, 2008, 139, 121-130.	4.9	22
28	Characterization of coating produced on titanium surface by a designed solution containing calcium and phosphate ions. Materials Chemistry and Physics, 2008, 109, 429-435.	4.0	25
29	The Luus-Jaakola algorithm applied to a nuclear reactor core design optimisation. International Journal of Nuclear Energy Science and Technology, 2008, 4, 1.	0.0	6
30	Designed Solution to Coat Titanium Sheets with Octacalcium Phosphate. Key Engineering Materials, 2007, 361-363, 665-668.	0.4	1
31	Estudo teÃ³rico e experimental da SoluÃ§Ã£o Avaliadora de Bioatividade (SAB). Revista Materia, 2007, 12, 358-366.	0.2	1
32	Determination of critical conditions for the esterification of acetic acid with ethanol in the presence of carbon dioxide. Brazilian Journal of Chemical Engineering, 2006, 23, 359-364.	1.3	1
33	Supercritical fluid flow in porous media: modeling and simulation. Chemical Engineering Science, 2005, 60, 1797-1808.	3.8	25
34	Modeling of Closed-Vessel Experiments and Ballistic Parameter Estimation. Journal of Energetic Materials, 2005, 23, 59-73.	2.0	5
35	Novel approach for the calculation of critical points in binary mixtures using global optimization. Fluid Phase Equilibria, 2004, 225, 29-37.	2.5	25
36	Prediction of critical points: A new methodology using global optimization. AICHE Journal, 2004, 50, 1300-1314.	3.6	35

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37	Vaporâ€“liquid equilibria of multi-indexed continuous mixtures using an equation of state and group contribution methods. Chemical Engineering Journal, 2000, 77, 179-187.	12.7	6
38	Phase rule calculations and the thermodynamics of reactive systems under chemical equilibrium. Brazilian Journal of Chemical Engineering, 1999, 16, 247-265.	1.3	6