Maria Soledad Diaz

List of Publications by Year
in descending order

55 papers	662 citations	759233 12 h-index	610901 24 g-index
55 all docs	55 docs citations	55 times ranked	803 citing authors

#	Article	IF	Citations
1	Simultaneous design of macroalgae-based integrated biorefineries and their heat exchanger network. Computers and Chemical Engineering, 2022, 164, 107885.	3.8	4
2	Simultaneous optimization and heat integration of a macroalgae-based biorefinery. Computer Aided Chemical Engineering, 2021, 50, 1581-1586.	0.5	3
3	Photosynthetic Bioplastics Production with Cyanobacteria by Coupled Growth-Production Mutants. Computer Aided Chemical Engineering, 2021, 50, 1917-1922.	0.5	1
4	Optimal design of ethylene and propylene coproduction plants with generalized disjunctive programming and state equipment network models. Computers and Chemical Engineering, 2021, 149, 107295.	3.8	8
5	Coproduction of Ethylene and Propylene based on Ethane and Propane Feedstocks. Computer Aided Chemical Engineering, 2020, , 907-912.	0.5	3
6	Sustainable and economic analysis of marine macroalgae based chemicals production - Process design and optimization. Journal of Cleaner Production, 2020, 276, 122792.	9.3	12
7	Integrated mathematical models for drinking water reservoirs and constructed wetlands as a tool for restoration planning. Journal of Hydrology, 2020, 586, 124867.	5.4	4
8	Surrogate-model based MILP for the optimal design of ethylene production from shale gas. Computers and Chemical Engineering, 2020, 141, 107015.	3.8	10
9	Design and optimization of poly(hydroxyalkanoate)s production plants using alternative substrates. Bioresource Technology, 2019, 289, 121699.	9.6	21
10	Bioethanol Production with Cyanobacteria by a Two-Stage Fermentation Strategy. Computer Aided Chemical Engineering, 2019, , 499-504.	0.5	2
11	Toward Economically and Environmentally Optimal Operations in Natural Gas Based Petrochemical Sites. Industrial & Engineering Chemistry Research, 2018, 57, 5999-6012.	3.7	6
12	Mathematical modelling for ecohydrological management of an endangered endorheic salt lake in the semiarid Pampean region, Argentina. Journal of Hydrology, 2018, 563, 778-789.	5.4	8
13	Nutraceuticals Production Under a Water-Food-Energy-Waste Integration Concept. Computer Aided Chemical Engineering, 2018, 44, 1933-1938.	0.5	3
14	Modelling and advanced dynamic optimisation strategies for hydrological and water quality management in continental water bodies. Computer Aided Chemical Engineering, 2018, 43, 271-277.	0.5	0
15	Design of stable metabolic networks. Engineering in Life Sciences, 2017, 17, 908-915.	3.6	0
16	Optimization of an integrated algae-based biorefinery for the production of biodiesel, astaxanthin and PHB. Energy, 2017, 139, 1159-1172.	8.8	89
17	Metabolic Network design of Synechocystis sp. PCC 6803 to obtain bioethanol under autotrophic conditions. Computer Aided Chemical Engineering, 2017, 40, 2857-2862.	0.5	1
18	Optimal Design of Poly (3-hydroxybutyrate) Production using alternative Carbon Sources. Computer Aided Chemical Engineering, 2017, , 877-882.	0.5	4

#	Article	IF	Citations
19	Multi-Objective Optimisation in a Petrochemical Complex with LCA considerations. Computer Aided Chemical Engineering, 2016, , 1497-1502.	0.5	2
20	Modeling phytoplankton community in reservoirs. A comparison between taxonomic and functional groups-based models. Journal of Environmental Management, 2016, 165, 31-52.	7.8	12
21	Simultaneous Parameters Identifiability and Estimation of anE. coliMetabolic Network Model. BioMed Research International, 2015, 2015, 1-21.	1.9	5
22	Water Resources Management with Dynamic Optimization Strategies and Integrated Models of Lakes and Artificial Wetlands. Computer Aided Chemical Engineering, 2015, , 2543-2548.	0.5	3
23	Dynamic Flux Balance Analysis in Cyanobacteria for Ethanol Production with Simultaneous Optimization Approaches. Computer Aided Chemical Engineering, 2014, 33, 1165-1170.	0.5	2
24	Design of Optimal Reactive Distillation Processes for ETBE Production using Rigorous Thermodynamic Models. Computer Aided Chemical Engineering, 2014, , 1591-1596.	0.5	1
25	Parameter estimation in kinetic models for large scale biotechnological systems with advanced mathematical programming techniques. Biochemical Engineering Journal, 2014, 83, 104-115.	3.6	8
26	Dynamic Modeling and Parameter Estimation for Unit Operations in Lignocellulosic Bioethanol Production. Industrial & Engineering Chemistry Research, 2013, 52, 4146-4160.	3.7	13
27	Multiscale strategic planning model for the design of integrated ethanol and gasoline supply chain. AICHE Journal, 2013, 59, 4655-4672.	3.6	26
28	Accelerating the parameters identifiability procedure: Set by set selection. Computers and Chemical Engineering, 2013, 55, 181-197.	3.8	9
29	Biological Wastewater Treatment. Computer Aided Chemical Engineering, 2012, 30, 212-216.	0.5	6
30	Minimizing Costs in Near-Critical Bioethanol Extraction and Dehydration Processes. Energy & Fuels, 2012, 26, 3785-3795.	5.1	11
31	Optimal design and planning of biodiesel supply chain with land competition. Computers and Chemical Engineering, 2012, 47, 170-182.	3.8	56
32	Optimizing cyanobacteria metabolic network for ethanol production. Computer Aided Chemical Engineering, 2011, 29, 1366-1370.	0.5	3
33	Determination of biorestoration strategies in eutrophic water bodies through the formulation of an optimal control problem based on a 3D ecological model. Computer Aided Chemical Engineering, 2011, 29, 1281-1285.	0.5	0
34	Dynamic optimization of an Intensive Energetically Integrated Large-Scale Process. Computer Aided Chemical Engineering, 2010, 28, 469-474.	0.5	1
35	Global sensitivity analysis in the development of first principle-based eutrophication models. Environmental Modelling and Software, 2010, 25, 1539-1551.	4.5	31
36	Global sensitivity analysis in dynamic metabolic networks. Computers and Chemical Engineering, 2010, 34, 770-781.	3.8	16

#	Article	IF	Citations
37	Parameter Estimation in Kinetic Models for Large Scale Metabolic Networks with Advanced Mathematical Programming Techniques. Computer Aided Chemical Engineering, 2010, , 355-360.	0.5	6
38	Energy Consumption Minimization in Bioethanol Dehydration with Supercritical Fluids. Computer Aided Chemical Engineering, 2009, 27, 1833-1838.	0.5	2
39	Determination of biogeochemical parameters in eutrophication models with simultaneous dynamic optimization approaches. Computers and Chemical Engineering, 2009, 33, 1760-1769.	3.8	23
40	Addressing the control problem of algae growth in water reservoirs with advanced dynamic optimization approaches. Computers and Chemical Engineering, 2009, 33, 2063-2074.	3.8	19
41	Cost Minimization in Noncatalytic Biodiesel Production Plants. Computer Aided Chemical Engineering, 2009, 27, 861-866.	0.5	2
42	Global Sensitivity Analysis in dynamic metabolic networks. Computer Aided Chemical Engineering, 2009, , 1075-1080.	0.5	3
43	Middle term optimal control problem in eutrophic lakes through advanced mathematical programming approaches. Computer Aided Chemical Engineering, 2009, , 1153-1158.	0.5	1
44	Addressing Long-Term Biorestoration in Eutrophic Lakes as an Optimal Control Problem, Under Different Scenarios. Computer Aided Chemical Engineering, 2009, 27, 1749-1754.	0.5	2
45	Design of Stable Large-Scale Metabolic Networks. Computer Aided Chemical Engineering, 2009, 27, 1755-1760.	0.5	0
46	Developing a lake eutrophication model and determining biogeochemical parameters: A large scale parameter estimation problem. Computer Aided Chemical Engineering, 2008, 25, 1113-1118.	0.5	3
47	Dynamic modelling and optimisation of cryogenic systems. Applied Thermal Engineering, 2007, 27, 1182-1190.	6.0	23
48	Optimal Shutdown Policy for Maintenance of Cracking Furnaces in Ethylene Plants. Industrial & Engineering Chemistry Research, 2006, 45, 2748-2757.	3.7	41
49	Process optimization and scheduling of parallel furnaces shutdown in large-scale plants. Computer Aided Chemical Engineering, 2006, , 1833-1838.	0.5	1
50	Large-scale dynamic optimization of an integrated cryogenic process. Computer Aided Chemical Engineering, 2006, , 1477-1482.	0.5	0
51	Citrus peel oil deterpenation with supercritical fluids. Journal of Supercritical Fluids, 2005, 35, 49-61.	3.2	65
52	An MPEC formulation for dynamic optimization of distillation operations. Computers and Chemical Engineering, 2004, 28, 2037-2052.	3.8	76
53	Supply chain optimisation in a petrochemical complex. Computer Aided Chemical Engineering, 2004, 18, 997-1002.	0.5	3
54	Modeling and simulation tools for supercritical fluid processes. Computer Aided Chemical Engineering, 2000, 8, 319-324.	0.5	8

#	Article	IF	Citations
55	Sustainable longâ€term mitigation of floods and droughts in semiarid regions: Integrated optimal management strategies for a salt lake basin. Ecohydrology, 0, , .	2.4	0