

# Jose A Egea

## List of Publications by Citations

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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.

54  
papers

1,413  
citations

19  
h-index

37  
g-index

59  
ext. papers

1,786  
ext. citations

4.2  
avg, IF

4.73  
L-index

#	Paper	IF	Citations
54	Novel metaheuristic for parameter estimation in nonlinear dynamic biological systems. <i>BMC Bioinformatics</i> , <b>2006</b> , 7, 483	3.6	191
53	Scatter search for chemical and bio-process optimization. <i>Journal of Global Optimization</i> , <b>2007</b> , 37, 481-503	3.6	129
52	Extended ant colony optimization for non-convex mixed integer nonlinear programming. <i>Computers and Operations Research</i> , <b>2009</b> , 36, 2217-2229	4.6	117
51	Developments in microbial fuel cell modeling. <i>Chemical Engineering Journal</i> , <b>2015</b> , 271, 50-60	14.7	105
50	An evolutionary method for complex-process optimization. <i>Computers and Operations Research</i> , <b>2010</b> , 37, 315-324	4.6	93
49	Dynamic Optimization of Nonlinear Processes with an Enhanced Scatter Search Method. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2009</b> , 48, 4388-4401	3.9	88
48	MEIGO: an open-source software suite based on metaheuristics for global optimization in systems biology and bioinformatics. <i>BMC Bioinformatics</i> , <b>2014</b> , 15, 136	3.6	87
47	Parameter estimation in large-scale systems biology models: a parallel and self-adaptive cooperative strategy. <i>BMC Bioinformatics</i> , <b>2017</b> , 18, 52	3.6	84
46	A Tabu search-based algorithm for mixed-integer nonlinear problems and its application to integrated process and control system design. <i>Computers and Chemical Engineering</i> , <b>2008</b> , 32, 1877-1894	4.6	46
45	Fuzzy finite element analysis of heat conduction problems with uncertain parameters. <i>Journal of Food Engineering</i> , <b>2011</b> , 103, 38-46	6	44
44	A cooperative strategy for parameter estimation in large scale systems biology models. <i>BMC Systems Biology</i> , <b>2012</b> , 6, 75	3.5	42
43	Improved scatter search for the global optimization of computationally expensive dynamic models. <i>Journal of Global Optimization</i> , <b>2009</b> , 43, 175-190	1.5	33
42	Bioinactivation: Software for modelling dynamic microbial inactivation. <i>Food Research International</i> , <b>2017</b> , 93, 66-74	7	32
41	An Extended Ant Colony Optimization Algorithm for Integrated Process and Control System Design. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2009</b> , 48, 6723-6738	3.9	32
40	Identifiability and robust parameter estimation in food process modeling: Application to a drying model. <i>Journal of Food Engineering</i> , <b>2007</b> , 83, 374-383	6	27
39	Optimization of geometric parameters in a welded joint through response surface methodology. <i>Construction and Building Materials</i> , <b>2017</b> , 154, 105-114	6.7	24
38	Deterministic global optimization algorithm based on outer approximation for the parameter estimation of nonlinear dynamic biological systems. <i>BMC Bioinformatics</i> , <b>2012</b> , 13, 90	3.6	24

37	Bioinactivation FE: A free web application for modelling isothermal and dynamic microbial inactivation. <i>Food Research International</i> , <b>2018</b> , 112, 353-360	7	20
36	Global optimization in systems biology: stochastic methods and their applications. <i>Advances in Experimental Medicine and Biology</i> , <b>2012</b> , 736, 409-24	3.6	20
35	Global Optimization for Integrated Design and Control of Computationally Expensive Process Models. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2007</b> , 46, 9148-9157	3.9	18
34	Tail or artefact? Illustration of the impact that uncertainty of the serial dilution and cell enumeration methods has on microbial inactivation. <i>Food Research International</i> , <b>2019</b> , 119, 76-83	7	17
33	Mathematical quantification of the induced stress resistance of microbial populations during non-isothermal stresses. <i>International Journal of Food Microbiology</i> , <b>2018</b> , 266, 133-141	5.8	16
32	Quality Changes and Shelf-Life Prediction of a Fresh Fruit and Vegetable Purple Smoothie. <i>Food and Bioprocess Technology</i> , <b>2017</b> , 10, 1892-1904	5.1	14
31	Parallel Metaheuristics in Computational Biology: An Asynchronous Cooperative Enhanced Scatter Search Method. <i>Procedia Computer Science</i> , <b>2015</b> , 51, 630-639	1.6	10
30	Compressibility, isothermal titration calorimetry and dynamic light scattering analysis of the aggregation of the amphiphilic phenothiazine drug thioridazine hydrochloride in water/ethanol mixed solvent. <i>Chemical Physics</i> , <b>2007</b> , 336, 157-164	2.3	9
29	Evaluation of Multicriteria Decision Analysis Algorithms in Food Safety: A Case Study on Emerging Zoonoses Prioritization. <i>Risk Analysis</i> , <b>2020</b> , 40, 336-351	3.9	9
28	Reducing the uncertainty on chilling requirements for endodormancy breaking of temperate fruits by data-based parameter estimation of the dynamic model: a test case in apricot. <i>Tree Physiology</i> , <b>2021</b> , 41, 644-656	4.2	9
27	Mathematical modelling of the stress resistance induced in <i>Listeria monocytogenes</i> during dynamic, mild heat treatments. <i>Food Microbiology</i> , <b>2019</b> , 84, 103238	6	8
26	A Hybrid Enhanced Scatter Search-Composite I-Distance Indicator (eSS-CIDI) Optimization Approach for Determining Weights Within Composite Indicators. <i>Social Indicators Research</i> , <b>2019</b> , 144, 497-537	2.7	8
25	Optimal characterization of thermal microbial inactivation simulating non-isothermal processes. <i>Food Research International</i> , <b>2018</b> , 107, 267-274	7	7
24	Chemical risks associated with ready-to-eat vegetables: quantitative analysis to estimate formation and/or accumulation of disinfection byproducts during washing. <i>EFSA Journal</i> , <b>2019</b> , 17, e170913	2.3	7
23	Relevance of the Induced Stress Resistance When Identifying the Critical Microorganism for Microbial Risk Assessment. <i>Frontiers in Microbiology</i> , <b>2018</b> , 9, 1663	5.7	6
22	A multi-pollutant methodology to locate a single air quality monitoring station in small and medium-size urban areas. <i>Environmental Pollution</i> , <b>2020</b> , 266, 115279	9.3	5
21	Agroclimatic requirements and phenological responses to climate change of local apple cultivars in northwestern Spain. <i>Scientia Horticulturae</i> , <b>2021</b> , 283, 110093	4.1	5
20	Improving the EFMs quality by augmenting their representativeness in LP methods. <i>BMC Systems Biology</i> , <b>2018</b> , 12, 101	3.5	5

19	Dynamic Multiobjective Global Optimization of a Waste Water Treatment Plant for Nitrogen Removal. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2012</b> , 45, 374-379		4
18	Guidelines for the design of (optimal) isothermal inactivation experiments. <i>Food Research International</i> , <b>2019</b> , 126, 108714	7	4
17	On the use of in-silico simulations to support experimental design: A case study in microbial inactivation of foods. <i>PLoS ONE</i> , <b>2019</b> , 14, e0220683	3.7	4
16	The influence of natural vs anthropogenic factors on trace metal(loid) levels in the Mussel Watch programme: Two decades of monitoring in the Spanish Mediterranean sea. <i>Marine Environmental Research</i> , <b>2021</b> , 169, 105382	3.3	3
15	Multiplicity of solutions in model-based multiobjective optimization of wastewater treatment plants. <i>Optimization and Engineering</i> , <b>2021</b> , 22, 1-16	2.1	2
14	Representativeness of a Set of Metabolic Pathways. <i>Lecture Notes in Computer Science</i> , <b>2017</b> , 659-667	0.9	1
13	Response to the letter to Editor for "Bioinactivation FE: A free web application for modelling isothermal and dynamic microbial inactivation". <i>Food Research International</i> , <b>2019</b> , 122, 692-694	7	1
12	Application of High Hydrostatic Pressure in fresh purple smoothie: Microbial inactivation kinetic modelling and qualitative studies.. <i>Food Science and Technology International</i> , <b>2022</b> , 10820132221095607	2.6	1
11	Vertical concentration gradients of volatile organic compounds in two NS-oriented street canyons. <i>Environmental Monitoring and Assessment</i> , <b>2012</b> , 184, 7353-64	3.1	0
10	Inference of Transcriptional Control Design of Metabolic Networks. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2011</b> , 44, 10448-10453		
9	Global warming and breaking dormancy in apricot: some interesting related aspects. <i>Acta Horticulturae</i> , <b>2020</b> , 213-216	0.3	
8	A Heuristic Method to Optimize High-Dimensional Expensive Problems: Application to the Dynamic Optimization of a Waste Water Treatment Plant. <i>Mathematics in Industry</i> , <b>2017</b> , 625-631	0.2	
7	Calculating Elementary Flux Modes with Variable Neighbourhood Search. <i>Lecture Notes in Computer Science</i> , <b>2016</b> , 304-314	0.9	
6	On the use of in-silico simulations to support experimental design: A case study in microbial inactivation of foods <b>2019</b> , 14, e0220683		
5	On the use of in-silico simulations to support experimental design: A case study in microbial inactivation of foods <b>2019</b> , 14, e0220683		
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- 1 On the use of in-silico simulations to support experimental design: A case study in microbial inactivation of foods **2019**, 14, e0220683