

# Alejandro Vignoni

## List of Publications by Year in descending order

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32  
papers

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citations

1162367

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docs citations

36  
times ranked

338  
citing authors

#	ARTICLE	IF	CITATIONS
1	Multi-Objective Optimization Tuning Framework for Kinetic Parameter Selection and Estimation. <i>Methods in Molecular Biology</i> , 2022, 2385, 65-89.	0.4	1
2	Modeling and Optimization of a Molecular Biocontroller for the Regulation of Complex Metabolic Pathways. <i>Frontiers in Molecular Biosciences</i> , 2022, 9, 801032.	1.6	1
3	Stochastic Differential Equations for Practical Simulation of Gene Circuits. <i>Methods in Molecular Biology</i> , 2021, 2229, 41-90.	0.4	2
4	Alkylation of a hydrophilic photosensitizer enhances the contact-dependent photo-induced oxidation of phospholipid membranes. <i>Dyes and Pigments</i> , 2021, 187, 109131.	2.0	9
5	Gene Expression Space Shapes the Bioprocess Trade-Offs among Titer, Yield and Productivity. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 5859.	1.3	1
6	RBS and Promoter Strengths Determine the Cell-Growth-Dependent Protein Mass Fractions and Their Optimal Synthesis Rates. <i>ACS Synthetic Biology</i> , 2021, 10, 3290-3303.	1.9	11
7	Automated code evaluation of computer programming sessions with MATLAB Grader. , 2021, , .		1
8	Multiobjective Identification of a Feedback Synthetic Gene Circuit. <i>IEEE Transactions on Control Systems Technology</i> , 2020, 28, 208-223.	3.2	6
9	Robust estimation of bacterial cell count from optical density. <i>Communications Biology</i> , 2020, 3, 512.	2.0	86
10	Extended Metabolic Biosensor Design for Dynamic Pathway Regulation of Cell Factories. <i>IScience</i> , 2020, 23, 101305.	1.9	30
11	Characterization of Gene Circuit Parts Based on Multiobjective Optimization by Using Standard Calibrated Measurements. <i>ChemBioChem</i> , 2019, 20, 2653-2665.	1.3	10
12	Biomolecular signal tracker with fast time response.. <i>IFAC-PapersOnLine</i> , 2019, 52, 1-6.	0.5	2
13	Model mismatch in multi-objective optimisation and preservation of trade-off order.. <i>IFAC-PapersOnLine</i> , 2019, 52, 249-254.	0.5	2
14	Fluorescence calibration and color equivalence for quantitative synthetic biology.. <i>IFAC-PapersOnLine</i> , 2019, 52, 129-134.	0.5	2
15	Multi-objective identification from fluorescence recovery after photobleaching experiments: Understanding morphogenetic regulation of epithelial polarity. <i>IFAC-PapersOnLine</i> , 2018, 51, 8-11.	0.5	1
16	Host-circuit interactions explain unexpected behavior of a gene circuit.. <i>IFAC-PapersOnLine</i> , 2018, 51, 86-89.	0.5	5
17	<a href="#">Multi-objective optimization for gene expression noise reduction in a synthetic gene circuit</a> * *This work is partially supported by Spanish government and European Union (FEDER-CICYT) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50	0.5	3
18	thanks the support from the Ayudas para movilidad dentro del Programa para la Formaci3n de Personal Investigador (FPI) de la UPV para estancias 2016. A.V. thanks the Max Planck Society, the CSBD and the MPI-CBG. The authors are. <a href="#">IFAC-PapersOnLine</a> , 2017, 50, 4472-4477. Multi-objective identification of synthetic circuits stochastic models using flow fcytometry data. , 2017, , .		1

#	ARTICLE	IF	CITATIONS
19	Engineered Control of Genetic Variability Reveals Interplay among Quorum Sensing, Feedback Regulation, and Biochemical Noise. ACS Synthetic Biology, 2017, 6, 1903-1912. Parameter identification in synthetic biological circuits using multi-objective optimization * *This work is partially supported by Spanish government and European Union (FEDER-CICYT) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 712 Td (DF	1.9	22
20	ValÃancia and Becas IberoamÃ©rica of Santander Group, Spain 2015. G.R.M. thanks the partial support provided by the postdoctoral fellowship BJT-304804/2014-2 from the National Council of Scientific and Technologic Developm. IFAC-PapersOnLine, 2016, 49, 77-82.	0.5	2
21	Contractivity of a genetic circuit with internal feedback and cell-to-cell communication * *This research was partially funded by grant FEDER-CICYT DPI2014-55276-C5-1-R. Yadira Boada thanks grant FPI/2013-3242 of the Universitat PolitÃ©cnica de Valencia.. IFAC-PapersOnLine, 2016, 49, 213-218. Optimization Alternatives for Robust Model-based Design of Synthetic Biological Circuits * *The research leading to these results has received funding from the European Union (FP7/2007-2013 under) Tj ETQq0 0 0 rgBT /Overlock 10	0.5	1
22	Development of Brazil (BJT-304804/2014-2). Yadira Boada thanks also grant FPI/2013-3242 of the Universitat PolitÃ©cnica de Valencia.. IFAC-PapersOnLine, 2016, 49, 821-826.	0.5	3
23	Multi-objective optimization framework to obtain model-based guidelines for tuning biological synthetic devices: an adaptive network case. BMC Systems Biology, 2016, 10, 27.	3.0	35
24	Improvement of a CLE stochastic simulation of gene synthetic network with quorum sensing and feedback in a cell population. , 2015, , .		7
25	Stability preserving maps for finite-time convergence: Super-twisting sliding-mode algorithm. Automatica, 2013, 49, 534-539.	3.0	50
26	Second-order sliding mode observer for multiple kinetic rates estimation in bioprocesses. Control Engineering Practice, 2013, 21, 1259-1265.	3.2	26
27	Sliding Mode Reference Coordination of Constrained Feedback Systems. Mathematical Problems in Engineering, 2013, 2013, 1-11.	0.6	0
28	Specific Kinetic Rates Regulation in Multi-Substrate Fermentation Processes. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 42-47.	0.4	0
29	UAV reference conditioning for formation control via set invariance and sliding modes*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 317-322.	0.4	2
30	Dynamical Systems Coordination via Sliding Mode Reference Conditioning*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 11086-11091.	0.4	3
31	Specific growth rate estimation in (fed-)batch bioreactors using second-order sliding observers. Journal of Process Control, 2011, 21, 1049-1055.	1.7	28
32	Specific Growth Rate Estimation in Bioreactors Using Second-Order Sliding Observers*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 251-256.	0.4	0