

Pedro de Atauri

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6106446/publications.pdf>

Version: 2024-02-01

53
papers

1,967
citations

361296

20
h-index

254106

43
g-index

55
all docs

55
docs citations

55
times ranked

3478
citing authors

#	ARTICLE	IF	CITATIONS
1	A data integration methodology for systems biology. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 17296-17301.	3.3	293
2	Metabolic control analysis in drug discovery and disease. Nature Biotechnology, 2002, 20, 243-249.	9.4	270
3	From correlation to causation: analysis of metabolomics data using systems biology approaches. Metabolomics, 2018, 14, 37.	1.4	151
4	A data integration methodology for systems biology: Experimental verification. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 17302-17307.	3.3	124
5	Oncogenic regulation of tumor metabolic reprogramming. Oncotarget, 2016, 7, 62726-62753.	0.8	116
6	Dual feedback loops in the GAL regulon suppress cellular heterogeneity in yeast. Nature Genetics, 2006, 38, 1082-1087.	9.4	86
7	Metabolic Reprogramming and Dependencies Associated with Epithelial Cancer Stem Cells Independent of the Epithelial-Mesenchymal Transition Program. Stem Cells, 2016, 34, 1163-1176.	1.4	77
8	Multicriteria optimization of biochemical systems by linear programming: Application to production of ethanol by <i>Saccharomyces cerevisiae</i> . Biotechnology and Bioengineering, 2003, 83, 335-343.	1.7	70
9	Relevance of the MEK/ERK Signaling Pathway in the Metabolism of Activated Macrophages: A Metabolomic Approach. Journal of Immunology, 2012, 188, 1402-1410.	0.4	66
10	PhenoMeNal: processing and analysis of metabolomics data in the cloud. GigaScience, 2019, 8, .	3.3	60
11	Metabolomics: The Stethoscope for the Twenty-First Century. Medical Principles and Practice, 2021, 30, 301-310.	1.1	46
12	<i>De novo</i> MYC addiction as an adaptive response of cancer cells to CDK4/6 inhibition. Molecular Systems Biology, 2017, 13, 940.	3.2	43
13	ChainRank, a chain prioritisation method for contextualisation of biological networks. BMC Bioinformatics, 2016, 17, 17.	1.2	38
14	Mathematical modelling of the urea cycle. FEBS Journal, 2003, 270, 3953-3961.	0.2	37
15	Metabolic control analysis aimed at the ribose synthesis pathways of tumor cells: a new strategy for antitumor drug development. Molecular Biology Reports, 2002, 29, 7-12.	1.0	33
16	Evolution of design principles in biochemical networks. IET Systems Biology, 2004, 1, 28-40.	2.0	30
17	Transcriptional noise and cellular heterogeneity in mammalian macrophages. Philosophical Transactions of the Royal Society B: Biological Sciences, 2006, 361, 495-506.	1.8	29
18	Effects of Cadmium and Mercury on the Upper Part of Skeletal Muscle Glycolysis in Mice. PLoS ONE, 2014, 9, e80018.	1.1	28

#	ARTICLE	IF	CITATIONS
19	Metabolic network adaptations in cancer as targets for novel therapies. <i>Biochemical Society Transactions</i> , 2010, 38, 1302-1306.	1.6	27
20	Network modules uncover mechanisms of skeletal muscle dysfunction in COPD patients. <i>Journal of Translational Medicine</i> , 2018, 16, 34.	1.8	22
21	Interoperable and scalable data analysis with microservices: applications in metabolomics. <i>Bioinformatics</i> , 2019, 35, 3752-3760.	1.8	22
22	Strategies for structuring interdisciplinary education in Systems Biology: an European perspective. <i>Npj Systems Biology and Applications</i> , 2016, 2, 16011.	1.4	21
23	In silico strategy to rationally engineer metabolite production: A case study for threonine in <i>Escherichia coli</i> . <i>Biotechnology and Bioengineering</i> , 2009, 103, 609-620.	1.7	18
24	Carbon metabolism and the sign of control coefficients in metabolic adaptations underlying K-ras transformation. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2011, 1807, 746-754.	0.5	18
25	A method for estimating stochastic noise in large genetic regulatory networks. <i>Bioinformatics</i> , 2005, 21, 208-217.	1.8	15
26	HepatoDyn: A Dynamic Model of Hepatocyte Metabolism That Integrates 13C Isotopomer Data. <i>PLoS Computational Biology</i> , 2016, 12, e1004899.	1.5	14
27	Cysteine and Folate Metabolism Are Targetable Vulnerabilities of Metastatic Colorectal Cancer. <i>Cancers</i> , 2021, 13, 425.	1.7	14
28	Untargeted metabolomics reveals distinct metabolic reprogramming in endothelial cells co-cultured with CSC and non-CSC prostate cancer cell subpopulations. <i>PLoS ONE</i> , 2018, 13, e0192175.	1.1	13
29	Dynamic simulation of pollutant effects on the threonine pathway in <i>Escherichia coli</i> . <i>Comptes Rendus - Biologies</i> , 2003, 326, 501-508.	0.1	12
30	Characterization of the first described mutation of human red blood cell phosphoglycerate mutase. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2005, 1740, 403-410.	1.8	12
31	Tracing metabolic fluxes using mass spectrometry: Stable isotope-resolved metabolomics in health and disease. <i>TrAC - Trends in Analytical Chemistry</i> , 2019, 120, 115371.	5.8	12
32	Occurrence of paradoxical or sustained control by an enzyme when overexpressed: necessary conditions and experimental evidence with regard to hepatic glucokinase. <i>Biochemical Journal</i> , 2001, 355, 787-793.	1.7	11
33	Enzymatic and metabolic characterization of the phosphoglycerate kinase deficiency associated with chronic hemolytic anemia caused by the PGK-Barcelona mutation. <i>Blood Cells, Molecules, and Diseases</i> , 2011, 46, 206-211.	0.6	11
34	Workforce preparation: the Biohealth computing model for Master and PhD students. <i>Journal of Translational Medicine</i> , 2014, 12, S11.	1.8	11
35	Sampling with poling-based flux balance analysis: optimal versus sub-optimal flux space analysis of <i>Actinobacillus succinogenes</i> . <i>BMC Bioinformatics</i> , 2015, 16, 49.	1.2	11
36	Advantages and disadvantages of aggregating fluxes into synthetic and degradative fluxes when modelling metabolic pathways. <i>FEBS Journal</i> , 1999, 265, 671-679.	0.2	10

#	ARTICLE	IF	CITATIONS
37	Glycerol metabolic conversion to succinic acid using <i>Actinobacillus succinogenes</i> . <i>Computer Aided Chemical Engineering</i> , 2011, 29, 1421-1425.	0.3	10
38	In-silico gene essentiality analysis of polyamine biosynthesis reveals APRT as a potential target in cancer. <i>Scientific Reports</i> , 2017, 7, 14358.	1.6	10
39	Analysis and prediction of the effect of uncertain boundary values in modeling a metabolic pathway. , 2000, 68, 18-30.		9
40	Is the regulation of galactose 1-phosphate tuned against gene expression noise?. <i>Biochemical Journal</i> , 2005, 387, 77-84.	1.7	9
41	Feedback control of stochastic noise in the yeast galactose utilization pathway. <i>Physica D: Nonlinear Phenomena</i> , 2006, 217, 64-76.	1.3	9
42	p13CMFA: Parsimonious 13C metabolic flux analysis. <i>PLoS Computational Biology</i> , 2019, 15, e1007310.	1.5	9
43	Metabolomics in systems medicine: an overview of methods and applications. <i>Current Opinion in Systems Biology</i> , 2019, 15, 91-99.	1.3	9
44	Metabolic homeostasis in the human erythrocyte: In silico analysis. <i>BioSystems</i> , 2006, 83, 118-124.	0.9	6
45	The changes in the energy metabolism of human muscle induced by training. <i>Journal of Theoretical Biology</i> , 2008, 252, 402-410.	0.8	6
46	Fluxomics. , 2014, , 237-250.		3
47	Thermodynamically constrained Flux and Control Analysis of <i>Escherichia coli</i> . <i>Computer Aided Chemical Engineering</i> , 2012, 30, 1377-1381.	0.3	3
48	Software Supporting a Workflow of Quantitative Dynamic Flux Maps Estimation in Central Metabolism from SIRM Experimental Data. <i>Methods in Molecular Biology</i> , 2020, 2088, 271-298.	0.4	3
49	Effects of feedback inhibition on transit time in a linear pathway of Michaelis-Menten-type reactions. <i>BioSystems</i> , 1998, 45, 221-235.	0.9	2
50	Integrating systemic and molecular levels to infer key drivers sustaining metabolic adaptations. <i>PLoS Computational Biology</i> , 2021, 17, e1009234.	1.5	2
51	Dependence of Control Coefficient Distribution on the Boundaries of a Metabolic System: A Generalized Analysis of the Effects of Additional Input and Output reactions to a Linear Pathway. <i>Journal of Theoretical Biology</i> , 2002, 215, 239-251.	0.8	1
52	Characterization of the transit and transition times for a pathway unit of Michaelis-Menten mechanism. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2003, 1623, 6-12.	1.1	1
53	An Escape-Room about Krebs cycle prepared for Chemical Students. <i>International Journal on Engineering, Science and Technology</i> , 2022, 3, 155-164.	0.2	1