

Francisco Montero

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8313967/publications.pdf>

Version: 2024-02-01

74
papers

1,638
citations

331670

21
h-index

302126

39
g-index

77
all docs

77
docs citations

77
times ranked

1421
citing authors

#	ARTICLE	IF	CITATIONS
1	METATOOL: for studying metabolic networks. <i>Bioinformatics</i> , 1999, 15, 251-257.	4.1	337
2	Singlet Oxygen-Mediated DNA Photocleavage with Ru(II) Polypyridyl Complexes. <i>Journal of Physical Chemistry B</i> , 2002, 106, 4010-4017.	2.6	103
3	Theoretical Approaches to the Evolutionary Optimization of Glycolysis. <i>Chemical Analysis. FEBS Journal</i> , 1997, 244, 527-543.	0.2	72
4	Theoretical Approaches to the Evolutionary Optimization of Glycolysis. Thermodynamic and Kinetic Constraints. <i>FEBS Journal</i> , 1997, 243, 191-201.	0.2	70
5	Optimization of Metabolism: The Evolution of Metabolic Pathways Toward Simplicity Through the Game of the Pentose Phosphate Cycle. <i>Journal of Theoretical Biology</i> , 1994, 166, 201-220.	1.7	54
6	A Simple Self-Maintaining Metabolic System: Robustness, Autocatalysis, Bistability. <i>PLoS Computational Biology</i> , 2010, 6, e1000872.	3.2	52
7	Structural studies on histones H1. Circular dichroism and difference spectroscopy of the histones H1 and their trypsin-resistant cores from calf thymus and from the fruit fly <i>Ceratitis capitata</i> . <i>Biochemistry</i> , 1980, 19, 4080-4087.	2.5	45
8	Generalization of the Theory of Transition Times in Metabolic Pathways: A Geometrical Approach. <i>Biophysical Journal</i> , 1999, 77, 23-36.	0.5	44
9	Condensation of DNA by the C-terminal domain of histone H1 A circular dichroism study. <i>Biophysical Chemistry</i> , 1985, 22, 125-129.	2.8	42
10	A Ruthenium Probe for Cell Viability Measurement Using Flow Cytometry, Confocal Microscopy and Time-resolved Luminescence. <i>Photochemistry and Photobiology</i> , 2000, 72, 28.	2.5	42
11	From prebiotic chemistry to cellular metabolism—The chemical evolution of metabolism before Darwinian natural selection. <i>Journal of Theoretical Biology</i> , 2008, 252, 505-519.	1.7	40
12	Structural analyses of a hypothetical minimal metabolism. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2007, 362, 1751-1762.	4.0	39
13	Purification of the histone H1 from the fruit fly <i>Ceratitis capitata</i> . <i>FEBS Letters</i> , 1977, 78, 317-320.	2.8	38
14	Optimization of glycolysis: A new look at the efficiency of energy coupling. <i>Biochemical Education</i> , 1997, 25, 204-205.	0.1	34
15	A SOM prototype-based cluster analysis methodology. <i>Expert Systems With Applications</i> , 2017, 88, 14-28.	7.6	34
16	A necessary and sufficient condition for the existence of Orlovsky's choice set. <i>Fuzzy Sets and Systems</i> , 1988, 26, 121-125.	2.7	30
17	Complex dynamics of a catalytic network having faulty replication into error-species. <i>Physica D: Nonlinear Phenomena</i> , 1993, 63, 21-40.	2.8	29
18	Optimization of glycolysis: new discussions. <i>Biochemical Education</i> , 1999, 27, 12-13.	0.1	29

#	ARTICLE	IF	CITATIONS
19	Network organization of cell metabolism: monosaccharide interconversion. <i>Biochemical Journal</i> , 1997, 324, 103-111.	3.7	28
20	Simulating a Model of Metabolic Closure. <i>Biological Theory</i> , 2013, 8, 383-390.	1.5	24
21	Viability Conditions for a Compartmentalized Protometabolic System: A Semi-Empirical Approach. <i>PLoS ONE</i> , 2012, 7, e39480.	2.5	23
22	The relationship between the error catastrophe, survival of the flattest, and natural selection. <i>BMC Evolutionary Biology</i> , 2011, 11, 2.	3.2	22
23	The Metabolic Productivity of the Cell Factory. <i>Journal of Theoretical Biology</i> , 1996, 182, 317-325.	1.7	21
24	A model of an autocatalytic network formed by error-prone self-replicative species. <i>Bulletin of Mathematical Biology</i> , 1993, 55, 385-415.	1.9	20
25	Effect of lethality on the extinction and on the error threshold of quasispecies. <i>Journal of Theoretical Biology</i> , 2010, 262, 733-741.	1.7	20
26	Solving gap metabolites and blocked reactions in genome-scale models: application to the metabolic network of <i>Blattabacterium cuenoti</i> . <i>BMC Systems Biology</i> , 2013, 7, 114.	3.0	20
27	Cooperative interaction of the C-terminal domain of histone H1 with DNA. <i>Biophysical Chemistry</i> , 1991, 39, 145-152.	2.8	19
28	The structural design of glycolysis: an evolutionary approach. <i>Biochemical Society Transactions</i> , 1999, 27, 294-298.	3.4	19
29	Influence of the hypercycle on the error threshold: A stochastic approach. <i>Journal of Theoretical Biology</i> , 1988, 134, 431-443.	1.7	18
30	Theories of Lethal Mutagenesis: From Error Catastrophe to Lethal Defection. <i>Current Topics in Microbiology and Immunology</i> , 2015, 392, 161-179.	1.1	18
31	Influence of the hypercyclic organization on the error threshold. <i>Journal of Theoretical Biology</i> , 1987, 127, 393-402.	1.7	17
32	Metabolic Complementation in Bacterial Communities: Necessary Conditions and Optimality. <i>Frontiers in Microbiology</i> , 2016, 7, 1553.	3.5	17
33	C1 Proteins: a Class of High-Mobility-Group Non-histone Chromosomal Proteins from the Fruit Fly <i>Ceratitis capitata</i> . <i>FEBS Journal</i> , 1982, 123, 165-170.	0.2	16
34	Histones from the Fruit Fly <i>Ceratitis capitata</i> . Isolation and Characterization. <i>FEBS Journal</i> , 1974, 48, 53-61.	0.2	15
35	Influence of External Fluctuations on a Hypercycle Formed by Two Kinetically Indistinguishable Species. <i>Journal of Theoretical Biology</i> , 1993, 165, 553-575.	1.7	15
36	Rearrangement of nucleosomal components by modification of histone amino groups. Structural role of lysine residues. <i>Biochemistry</i> , 1984, 23, 4280-4284.	2.5	14

#	ARTICLE	IF	CITATIONS
37	Interaction with DNA of Photoactive Viologens Based on the 6-(2-Pyridinium)phenanthridinium Structure. <i>Journal of Biomolecular Structure and Dynamics</i> , 1995, 12, 827-846.	3.5	14
38	Size matters: Influence of stochasticity on the self-maintenance of a simple model of metabolic closure. <i>Journal of Theoretical Biology</i> , 2012, 300, 143-151.	1.7	12
39	Studies on evolutionary and selective properties of hypercycles using a Monte Carlo method. <i>Journal of Molecular Evolution</i> , 1987, 26, 294-300.	1.8	11
40	DNA photocleavage by novel intercalating 6-(2-pyridinium)phenanthridinium viologens. <i>FEBS Letters</i> , 1995, 374, 426-428.	2.8	11
41	Contribution of histones H2A and H2B to the folding of nucleosomal DNA. <i>Biochemistry</i> , 1984, 23, 4285-4289.	2.5	10
42	Influence of the N- and C-terminal tails on the structure of the globular head of histone H1. <i>Biochemical and Biophysical Research Communications</i> , 1982, 107, 842-847.	2.1	8
43	Nature lessons: The whitefly bacterial endosymbiont is a minimal amino acid factory with unusual energetics. <i>Journal of Theoretical Biology</i> , 2016, 407, 303-317.	1.7	8
44	Stoichiometric analysis of self-maintaining metabolisms. <i>Journal of Theoretical Biology</i> , 2008, 252, 427-432.	1.7	7
45	Tools-4-Metatool (T4M): Online suite of web-tools to process stoichiometric network analysis data from Metatool. <i>BioSystems</i> , 2011, 105, 169-172.	2.0	7
46	Consistency Analysis of Genome-Scale Models of Bacterial Metabolism: A Metamodel Approach. <i>PLoS ONE</i> , 2015, 10, e0143626.	2.5	7
47	Effects of sodium dodecyl sulfate on the structure of histones H1. <i>The Protein Journal</i> , 1984, 3, 455-463.	1.1	6
48	Study of an error-prone hypercycle formed from two kinetically distinguishable species. <i>Biophysical Chemistry</i> , 1991, 40, 43-57.	2.8	6
49	Stereospecific DNA Binding of Luminescent Atropisomeric Viologens. <i>Biochemical and Biophysical Research Communications</i> , 1995, 214, 716-722.	2.1	6
50	Determinism and Contingency Shape Metabolic Complementation in an Endosymbiotic Consortium. <i>Frontiers in Microbiology</i> , 2017, 8, 2290.	3.5	5
51	Dissociation of single-stranded DNA from nucleosomes following modification with acetic anhydride. <i>Biochemical and Biophysical Research Communications</i> , 1984, 121, 907-914.	2.1	4
52	An algorithm to study the evolution and selection of auto replicative molecules. <i>Computers & Chemistry</i> , 1984, 8, 303-307.	1.2	3
53	Relaxation of chromatin structure upon removal of histones H2A and H2B. <i>FEBS Letters</i> , 1984, 172, 70-74.	2.8	3
54	Kinetic analysis of $\dot{\gamma}$ -DNA structure formation induced by histone H1 and its C-terminal domain. <i>Biophysical Chemistry</i> , 1989, 33, 133-141.	2.8	3

#	ARTICLE	IF	CITATIONS
55	Thermal denaturation profiles of deoxypolynucleotide-destabilizer ligand complexes: Semiempirical studies. Archives of Biochemistry and Biophysics, 1991, 290, 133-142.	3.0	3
56	Channelling and evolution of metabolism. Journal of Theoretical Biology, 1991, 152, 77-79.	1.7	3
57	Periodic Signal Transmission through Metabolic Pathways with Michaelian Kinetics. Journal of Physical Chemistry B, 2002, 106, 5536-5542.	2.6	3
58	Stoichiometric properties of the non oxidative phase of the pentose phosphate cycle. Nonlinear Analysis: Theory, Methods & Applications, 1997, 30, 1865-1874.	1.1	2
59	Kinetic and thermodynamic constraints for the structural design of glycolysis. Nonlinear Analysis: Theory, Methods & Applications, 1997, 30, 1793-1804.	1.1	2
60	A Ruthenium Probe for Cell Viability Measurement Using Flow Cytometry, Confocal Microscopy and Time-resolved Luminescence Å¶. Photochemistry and Photobiology, 2000, 72, 28-34.	2.5	2
61	Characteristic time in quasispecies evolution. Journal of Theoretical Biology, 2012, 303, 25-32.	1.7	2
62	High mobility group non-histone chromosomal proteins from the fruit fly Ceratitis capitata. Comparative Biochemistry and Physiology Part B: Comparative Biochemistry, 1982, 72, 531-535.	0.2	1
63	Modification of the lysine residues of histones H1 and H5: Effects on structure and on the binding to chromatin. Molecular Biology Reports, 1985, 10, 147-151.	2.3	1
64	Aggregation of the histone h1 from the fruit fly Ceratitis capitata through disulphide bridges. Studies on their complexes with DNA. International Journal of Biochemistry & Cell Biology, 1985, 17, 665-675.	0.5	1
65	Compositional and structural studies of a fraction of the fruit fly Ceratitis capitata mononucleosomes, highly enriched in non-histone proteins. International Journal of Biochemistry & Cell Biology, 1986, 18, 901-908.	0.5	1
66	Transition state of the glycolytic pathway under fdp saturating conditions: Experimental studies and a theoretical model. International Journal of Biochemistry & Cell Biology, 1988, 20, 421-426.	0.5	1
67	Thermal denaturation profiles of deoxypolynucleotide-ligand complexes: Semiempirical studies. Archives of Biochemistry and Biophysics, 1989, 268, 426-437.	3.0	1
68	Transient times in linear metabolic pathways under constant affinity constraints. Biochemical Journal, 1997, 327, 493-498.	3.7	1
69	Sequence distribution and intercooperativity detection for two ligands simultaneously binding to DNA. Biopolymers, 2001, 58, 562-576.	2.4	1
70	Phenomenological Definition of Response Times with Application to Metabolic Reactions. Journal of Theoretical Biology, 2003, 221, 475-489.	1.7	1
71	The Advantage of Arriving First: Characteristic Times in Finite Size Populations of Error-Prone Replicators. PLoS ONE, 2013, 8, e83142.	2.5	1
72	Interactions of the high-mobility-group-like Ceratitis capitata C1 proteins with DNA. FEBS Journal, 1987, 165, 309-314.	0.2	0

#	ARTICLE	IF	CITATIONS
73	Interaction of the c-terminal domain of the histone H1 with DNA. <i>Biochemical Pharmacology</i> , 1988, 37, 1841-1842.	4.4	0
74	Equivalence of branched and unbranched Michaelian pathways concerning periodic signal transmission. <i>Molecular Biology Reports</i> , 2002, 29, 63-66.	2.3	0