

# Vincenzo Manca

## List of Publications by Year in descending order

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Version: 2024-02-01

100  
papers

1,174  
citations

361296

20  
h-index

501076

28  
g-index

105  
all docs

105  
docs citations

105  
times ranked

307  
citing authors

#	ARTICLE	IF	CITATIONS
1	Biological networks in metabolic P systems. <i>BioSystems</i> , 2008, 91, 489-498.	0.9	56
2	Equational type logic. <i>Theoretical Computer Science</i> , 1990, 77, 131-159.	0.5	44
3	Dynamical aspects of P systems. <i>BioSystems</i> , 2003, 70, 85-93.	0.9	43
4	P SYSTEMS WITH REACTION MAPS. <i>International Journal of Foundations of Computer Science</i> , 2006, 17, 27-48.	0.8	43
5	Evolution and Oscillation in P Systems: Applications to Biological Phenomena. <i>Lecture Notes in Computer Science</i> , 2005, , 63-84.	1.0	42
6	The metabolic algorithm for P systems: Principles and applications. <i>Theoretical Computer Science</i> , 2008, 404, 142-155.	0.5	42
7	Infobiotics. <i>Emergence, Complexity and Computation</i> , 2013, , .	0.2	40
8	Discrete solutions to differential equations by metabolic P systems. <i>Theoretical Computer Science</i> , 2007, 372, 165-182.	0.5	39
9	Informational laws of genome structures. <i>Scientific Reports</i> , 2016, 6, 28840.	1.6	26
10	LOG-GAIN STOICHIOMETRIC STEPWISE REGRESSION FOR MP SYSTEMS. <i>International Journal of Foundations of Computer Science</i> , 2011, 22, 97-106.	0.8	25
11	Solving dynamical inverse problems by means of Metabolic P systems. <i>BioSystems</i> , 2012, 109, 78-86.	0.9	24
12	Superposition Based on Watson's "Crick-Like Complementarity. <i>Theory of Computing Systems</i> , 2006, 39, 503-524.	0.7	23
13	Modeling time-dependent transcription effects of HER2 oncogene and discovery of a role for E2F2 in breast cancer cell-matrix adhesion. <i>Bioinformatics</i> , 2014, 30, 3036-3043.	1.8	23
14	MP Modelling of Glucose-Insulin Interactions in the Intravenous Glucose Tolerance Test. <i>International Journal of Natural Computing Research</i> , 2011, 2, 13-24.	0.5	23
15	Metabolic approximation of real periodical functions. <i>The Journal of Logic and Algebraic Programming</i> , 2010, 79, 363-373.	1.4	22
16	Predator-prey dynamics in P systems ruled by metabolic algorithm. <i>BioSystems</i> , 2008, 91, 545-557.	0.9	21
17	A dictionary based informational genome analysis. <i>BMC Genomics</i> , 2012, 13, 485.	1.2	21
18	New computing paradigms suggested by DNA computing: computing by carving. <i>BioSystems</i> , 1999, 52, 47-54.	0.9	20

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19	Computing by polymerase chain reaction. <i>Mathematical Biosciences</i> , 2008, 211, 282-298.	0.9	20
20	Deterministic and stochastic P systems for modelling cellular processes. <i>Natural Computing</i> , 2010, 9, 457-473.	1.8	20
21	A photosynthetic process modelled by a metabolic P system. <i>Natural Computing</i> , 2009, 8, 847-864.	1.8	19
22	Algorithmic applications of XPCR. <i>Natural Computing</i> , 2011, 10, 805-819.	1.8	19
23	P Systems and the Modeling of Biochemical Oscillations. <i>Lecture Notes in Computer Science</i> , 2006, , 199-208.	1.0	19
24	Metabolic P systems for biochemical dynamics. <i>Progress in Natural Science: Materials International</i> , 2007, 17, 384-391.	1.8	18
25	MetaPlab: A Computational Framework for Metabolic P Systems. <i>Lecture Notes in Computer Science</i> , 2009, , 157-168.	1.0	18
26	Log-gain Principles for Metabolic P Systems. <i>Natural Computing Series</i> , 2009, , 585-605.	2.2	17
27	Psim: a simulator for biomolecular dynamics based on P systems. , 2007, , .		16
28	P Systems for Biological Dynamics. , 2006, , 83-128.		15
29	The principles of informational genomics. <i>Theoretical Computer Science</i> , 2017, 701, 190-202.	0.5	15
30	A Membrane System for the Leukocyte Selective Recruitment. <i>Lecture Notes in Computer Science</i> , 2004, , 181-190.	1.0	15
31	Goldbeter's Mitotic Oscillator Entirely Modeled by MP Systems. <i>Lecture Notes in Computer Science</i> , 2010, , 273-284.	1.0	14
32	Metabolic P systems. <i>Scholarpedia Journal</i> , 2010, 5, 9273.	0.3	14
33	PanDelos: a dictionary-based method for pan-genome content discovery. <i>BMC Bioinformatics</i> , 2018, 19, 437.	1.2	13
34	MP Systems Approaches to Biochemical Dynamics: Biological Rhythms and Oscillations. <i>Lecture Notes in Computer Science</i> , 2006, , 86-99.	1.0	13
35	A Methodology Based on MP Theory for Gene Expression Analysis. <i>Lecture Notes in Computer Science</i> , 2012, , 300-313.	1.0	13
36	Iterated sequential transducers as language generating devices. <i>Theoretical Computer Science</i> , 2006, 369, 67-81.	0.5	12

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37	Hybrid Functional Petri Nets as MP systems. <i>Natural Computing</i> , 2010, 9, 61-81.	1.8	12
38	MP-GeneticSynth: inferring biological network regulations from time series. <i>Bioinformatics</i> , 2015, 31, 785-787.	1.8	12
39	Logical string rewriting. <i>Theoretical Computer Science</i> , 2001, 264, 25-51.	0.5	11
40	An algebraic formulation of inverse problems in MP dynamics. <i>International Journal of Computer Mathematics</i> , 2013, 90, 845-856.	1.0	11
41	From time series to biological network regulations: an evolutionary approach. <i>Molecular BioSystems</i> , 2013, 9, 225-233.	2.9	10
42	Mitotic Oscillators as MP Graphs. <i>Lecture Notes in Computer Science</i> , 2006, , 382-394.	1.0	10
43	A Clause String DNA Algorithm for SAT. <i>Lecture Notes in Computer Science</i> , 2002, , 172-181.	1.0	10
44	Iterated GSM Mappings: A Collapsing Hierarchy. , 1999, , 182-193.		9
45	Toward a Representation of Hybrid Functional Petri Nets by MP Systems. <i>Proceedings in Information and Communications Technology</i> , 2009, , 28-37.	0.2	9
46	State Transition Dynamics. <i>Advances in Web Services Research Series</i> , 0, , 32-55.	0.0	9
47	Reaction-Driven Membrane Systems. <i>Lecture Notes in Computer Science</i> , 2005, , 1155-1158.	1.0	9
48	Learning regulation functions of metabolic systems by artificial neural networks. , 2009, , .		8
49	Morphogenesis through moving membranes. <i>Natural Computing</i> , 2014, 13, 403-419.	1.8	8
50	MpTheory Java library: a multi-platform Java library for systems biology based on the Metabolic P theory. <i>Bioinformatics</i> , 2015, 31, 1328-1330.	1.8	8
51	Metabolic computing. <i>Journal of Membrane Computing</i> , 2019, 1, 223-232.	1.0	8
52	Discrete Simulations of Biochemical Dynamics. , 2007, , 231-235.		7
53	DNA Extraction by XPCR. <i>Lecture Notes in Computer Science</i> , 2005, , 104-112.	1.0	6
54	An algorithmic analysis of DNA structure. <i>Soft Computing</i> , 2005, 9, 761-768.	2.1	6

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55	From P to MP Systems. Lecture Notes in Computer Science, 2010, , 74-94.	1.0	6
56	Information Theory in Genome Analysis. Lecture Notes in Computer Science, 2015, , 3-18.	1.0	5
57	An Informational Test for Random Finite Strings. Entropy, 2018, 20, 934.	1.1	5
58	Spectral concepts in genome informational analysis. Theoretical Computer Science, 2021, 894, 23-30.	0.5	5
59	MP Modelling for Systems Biology: Two Case Studies. Emergence, Complexity and Computation, 2014, , 223-245.	0.2	5
60	Soundness and completeness of the Birkhoff equational calculus for many-sorted algebras with possibly empty carrier sets. Theoretical Computer Science, 1992, 94, 101-124.	0.5	4
61	A Marvelous Accident: The Birth of Life. Journal of Proteomics and Bioinformatics, 2018, 11, .	0.4	4
62	From biopolymer duplication to membrane duplication and beyond. Journal of Membrane Computing, 2019, 1, 292-303.	1.0	4
63	Grammars for Discrete Dynamics. Lecture Notes in Computer Science, 2016, , 37-58.	1.0	4
64	Equational calculi for many-sorted algebras with empty carrier sets. , 1990, , 423-429.		4
65	An Algorithm for Initial Fluxes of Metabolic P Systems. International Journal of Computers, Communications and Control, 2014, 4, 263.	1.2	4
66	Splicing Normalization and Regularity. , 2000, , 199-215.		4
67	Encoding-Decoding Transitional Systems for Classes of P Systems. Lecture Notes in Computer Science, 2006, , 134-143.	1.0	4
68	Computing with Multi-membranes. Lecture Notes in Computer Science, 2012, , 282-299.	1.0	4
69	XML Representation of Metabolic P Systems. , 2009, , .		3
70	Towards an MP Model for B Lymphocytes Maturation. Lecture Notes in Computer Science, 2014, , 80-92.	1.0	3
71	Regulation and Covering Problems in MP Systems. Lecture Notes in Computer Science, 2010, , 242-251.	1.0	3
72	MP Systems and Hybrid Petri Nets. Studies in Computational Intelligence, 2008, , 53-62.	0.7	3

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73	Recombination Patterns for Natural Syntax. Lecture Notes in Computer Science, 2009, , 315-324.	1.0	3
74	Automatic Translation of MP $\{+\}$ V Systems to Register Machines. Lecture Notes in Computer Science, 2015, , 185-199.	1.0	3
75	Symbolic generation and representation of complex oscillations. International Journal of Computer Mathematics, 2006, 83, 549-568.	1.0	2
76	Relational state transition dynamics. The Journal of Logic and Algebraic Programming, 2008, 76, 130-144.	1.4	2
77	An Informational Proof of H-Theorem. Open Access Library Journal (oalib), 2017, 04, 1-15.	0.1	2
78	A Relational View of Recurrence and Attractors in State Transition Dynamics. Lecture Notes in Computer Science, 2006, , 358-372.	1.0	2
79	Metabolic P System Flux Regulation by Artificial Neural Networks. Lecture Notes in Computer Science, 2010, , 196-209.	1.0	2
80	Arithmetical Metabolic P Systems. Lecture Notes in Computer Science, 2011, , 284-294.	1.0	2
81	Algorithmic Models of Biochemical Dynamics:. International Journal of Nanotechnology and Molecular Computation, 2011, 3, 24-37.	0.3	2
82	An Outline of MP Modeling Framework. Lecture Notes in Computer Science, 2013, , 47-55.	1.0	2
83	Logical splicing in natural languages. Studies in Functional and Structural Linguistics, 1999, , 131.	0.1	2
84	A genetic approach for synthesizing metabolic models from time series. , 2012, , .		1
85	On the inference of deterministic chaos: Evolutionary algorithm and metabolic P system approaches. , 2014, , .		1
86	An evolutionary procedure for inferring MP systems regulation functions of biological networks. Natural Computing, 2015, 14, 375-391.	1.8	1
87	A Brief Philosophical Note on Information. Lecture Notes in Computer Science, 2017, , 146-149.	1.0	1
88	String Models and String Theories. Studies in Fuzziness and Soft Computing, 2004, , 439-456.	0.6	1
89	Toward an MP Model of Non-Photochemical Quenching. Lecture Notes in Computer Science, 2009, , 299-310.	1.0	1
90	Enumerating Membrane Structures. Lecture Notes in Computer Science, 2009, , 292-298.	1.0	1

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91	An Analysis of Correlative and Static Causality in P Systems. Lecture Notes in Computer Science, 2013, , 323-341.	1.0	1
92	Computational Formalism: Abstract Combinatory View-Point and Related First Order Logical Framework. Fundamenta Informaticae, 1981, 4, 3-18.	0.3	1
93	Symbolic representations of biological oscillations. , 2005, , .		0
94	A symbolic approach to the simulation of biochemical models: application to circadian rhythms. , 0, , .		0
95	A Note on the Entropy of Computation. Lecture Notes in Computer Science, 2018, , 192-203.	1.0	0
96	Editorial: New Trends on Genome and Transcriptome Characterizations. Frontiers in Genetics, 2018, 9, 322.	1.1	0
97	Emergence of random selections in evolution of biological populations. Theoretical Computer Science, 2021, 862, 130-143.	0.5	0
98	A Recurrent Enumeration of Free Hypermultisets. Lecture Notes in Computer Science, 2011, , 16-23.	1.0	0
99	Towards an Evolutionary Procedure for Reverse-Engineering Biological Networks. Lecture Notes in Computer Science, 2012, , 271-285.	1.0	0
100	MP Modelling of Glucose-Insulin Interactions in the Intravenous Glucose Tolerance Test. , 2014, , 171-183.		0