Mario de JesÃºs PÃ©rez JimÃ©nez

List of Publications by Year
in descending order

245 papers	6,729 citations	57631 44 h-index	91712 69 g-index
273 all docs	273 docs citations	273 times ranked	1390 citing authors

#	Article	IF	Citations
1	AN OPTIMIZATION SPIKING NEURAL P SYSTEM FOR APPROXIMATELY SOLVING COMBINATORIAL OPTIMIZATION PROBLEMS. International Journal of Neural Systems, 2014, 24, 1440006.	3.2	261
2	Fault Diagnosis of Electric Power Systems Based on Fuzzy Reasoning Spiking Neural P Systems. IEEE Transactions on Power Systems, 2015, 30, 1182-1194.	4.6	193
3	Fuzzy reasoning spiking neural P system for fault diagnosis. Information Sciences, 2013, 235, 106-116.	4.0	170
4	Spiking neural P systems with neuron division and budding. Science China Information Sciences, 2011, 54, 1596-1607.	2.7	149
5	Tissue P systems with channel states. Theoretical Computer Science, 2005, 330, 101-116.	0.5	146
6	Complexity classes in models of cellular computing with membranes. Natural Computing, 2003, 2, 265-285.	1.8	132
7	Spiking Neural P Systems with Weights. Neural Computation, 2010, 22, 2615-2646.	1.3	132
8	Evolutionary membrane computing: A comprehensive survey and new results. Information Sciences, 2014, 279, 528-551.	4.0	126
9	Weighted Fuzzy Spiking Neural P Systems. IEEE Transactions on Fuzzy Systems, 2013, 21, 209-220.	6.5	124
10	Computational complexity of tissue-like P systems. Journal of Complexity, 2010, 26, 296-315.	0.7	121
11	SPIKE TRAINS IN SPIKING NEURAL P SYSTEMS. International Journal of Foundations of Computer Science, 2006, 17, 975-1002.	0.8	117
12	Real-life Applications with Membrane Computing. Emergence, Complexity and Computation, 2017, , .	0.2	112
13	Fault Diagnosis of Power Systems Using Intuitionistic Fuzzy Spiking Neural P Systems. IEEE Transactions on Smart Grid, 2018, 9, 4777-4784.	6.2	108
14	Uniform solutions to SAT and Subset Sum by spiking neural P systems. Natural Computing, 2009, 8, 681-702.	1.8	101
15	Dynamic threshold neural P systems. Knowledge-Based Systems, 2019, 163, 875-884.	4.0	95
16	Tissue P Systems with Cell Division. International Journal of Computers, Communications and Control, 2014, 3, 295.	1.2	95
17	Spiking neural P systems with structural plasticity. Neural Computing and Applications, 2015, 26, 1905-1917.	3.2	93
18	P systems with minimal parallelism. Theoretical Computer Science, 2007, 378, 117-130.	0.5	90

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19	Spiking neural P systems with extended rules: universality and languages. Natural Computing, 2008, 7, 147-166.	1.8	90
20	A weighted corrective fuzzy reasoning spiking neural P system for fault diagnosis in power systems with variable topologies. Engineering Applications of Artificial Intelligence, 2020, 92, 103680.	4.3	89
21	A Model of the Quorum Sensing System in <i>Vibrio fischeri</i> Using P Systems. Artificial Life, 2008, 14, 95-109.	1.0	76
22	A Complete Arithmetic Calculator Constructed from Spiking Neural P Systems and its Application to Information Fusion. International Journal of Neural Systems, 2021, 31, 2050055.	3.2	75
23	Spiking neural P systems with inhibitory rules. Knowledge-Based Systems, 2020, 188, 105064.	4.0	72
24	An unsupervised learning algorithm for membrane computing. Information Sciences, 2015, 304, 80-91.	4.0	71
25	Membrane computing: Brief introduction, recent results and applications. BioSystems, 2006, 85, 11-22.	0.9	68
26	Medical Image Fusion Method Based on Coupled Neural P Systems in Nonsubsampled Shearlet Transform Domain. International Journal of Neural Systems, 2021, 31, 2050050.	3.2	68
27	Simulation of P systems with active membranes on CUDA. Briefings in Bioinformatics, 2010, 11, 313-322.	3.2	67
28	Nonlinear Spiking Neural P Systems. International Journal of Neural Systems, 2020, 30, 2050008.	3.2	64
29	Multiobjective fuzzy clustering approach based on tissue-like membrane systems. Knowledge-Based Systems, 2017, 125, 74-82.	4.0	63
30	A uniform family of tissue P systems with cell division solving 3-COL in a linear time. Theoretical Computer Science, 2008, 404, 76-87.	0.5	62
31	A bio-inspired computing model as a new tool for modeling ecosystems: The avian scavengers as a case study. Ecological Modelling, 2011, 222, 33-47.	1.2	60
32	Modelling gene expression control using P systems: The Lac Operon, a case study. BioSystems, 2008, 91, 438-457.	0.9	55
33	Interval-valued fuzzy spiking neural P systems for fault diagnosis of power transmission networks. Engineering Applications of Artificial Intelligence, 2019, 82, 102-109.	4.3	53
34	Dendrite P systems. Neural Networks, 2020, 127, 110-120.	3.3	53
35	Monodirectional Tissue <i>P</i> Systems With Promoters. IEEE Transactions on Cybernetics, 2021, 51, 438-450.	6.2	53
36	Solving Problems in a DistributedWay in Membrane Computing: dP Systems. International Journal of Computers, Communications and Control, 2014, 5, 238.	1.2	53

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37	A computational modeling for real ecosystems based on P systems. Natural Computing, 2011, 10, 39-53.	1.8	51
38	An automatic clustering algorithm inspired by membrane computing. Pattern Recognition Letters, 2015, 68, 34-40.	2.6	50
39	An Extended Membrane System with Active Membranes to Solve Automatic Fuzzy Clustering Problems. International Journal of Neural Systems, 2016, 26, 1650004.	3.2	49
40	RESEARCH FRONTIERS OF MEMBRANE COMPUTING: OPEN PROBLEMS AND RESEARCH TOPICS. International Journal of Foundations of Computer Science, 2013, 24, 547-623.	0.8	48
41	Simulating a P system based efficient solution to SAT by using GPUs. The Journal of Logic and Algebraic Programming, 2010, 79, 317-325.	1.4	47
42	Time-free solution to SAT problem using P systems with active membranes. Theoretical Computer Science, 2014, 529, 61-68.	0.5	47
43	Cell-like P systems with evolutional symport/antiport rules and membrane creation. Information and Computation, 2020, 275, 104542.	0.5	47
44	An Overview of P-Lingua 2.0. Lecture Notes in Computer Science, 2010, , 264-288.	1.0	46
45	A novel image thresholding method based on membrane computing and fuzzy entropy. Journal of Intelligent and Fuzzy Systems, 2013, 24, 229-237.	0.8	45
46	A fast P system for finding a balanced 2-partition. Soft Computing, 2005, 9, 673-678.	2.1	44
47	A uniform solution to SAT using membrane creation. Theoretical Computer Science, 2007, 371, 54-61.	0.5	44
48	Solving the Subset-Sum problem by P systems with active membranes. New Generation Computing, 2005, 23, 339-356.	2.5	43
49	A membrane parallel rapidly-exploring random tree algorithm for robotic motion planning. Integrated Computer-Aided Engineering, 2020, 27, 121-138.	2.5	43
50	A Survey of Nature-Inspired Computing. ACM Computing Surveys, 2022, 54, 1-31.	16.1	43
51	Population Dynamics P System (PDP) Models: A Standardized Protocol for Describing and Applying Novel Bio-Inspired Computing Tools. PLoS ONE, 2013, 8, e60698.	1.1	42
52	Fault diagnosis of power systems using fuzzy tissue-like P systems. Integrated Computer-Aided Engineering, 2017, 24, 401-411.	2.5	42
53	Uniform Solution of QSAT Using Polarizationless Active Membranes. Lecture Notes in Computer Science, 2007, , 122-133.	1.0	42
54	Spiking Neural P Systems with Delay on Synapses. International Journal of Neural Systems, 2021, 31, 2050042.	3.2	41

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55	3-Col problem modelling using simple kernel P systems. International Journal of Computer Mathematics, 2013, 90, 816-830.	1.0	38
56	Hybrid Networks of Evolutionary Processors. Lecture Notes in Computer Science, 2003, , 401-412.	1.0	36
57	Modeling Fault Propagation Paths in Power Systems: A New Framework Based on Event SNP Systems With Neurotransmitter Concentration. IEEE Access, 2019, 7, 12798-12808.	2.6	35
58	A Linearâ€“time Tissue P System Based Solution for the 3â€“coloring Problem. Electronic Notes in Theoretical Computer Science, 2007, 171, 81-93.	0.9	34
59	Optimal multi-level thresholding with membrane computing. , 2015, 37, 53-64.		33
60	A P-Lingua Programming Environment for Membrane Computing. Lecture Notes in Computer Science, 2009, , 187-203.	1.0	33
61	Simulating P Systems on GPU Devices: A Survey. Fundamenta Informaticae, 2015, 136, 269-284.	0.3	32
62	An Optimal Frontier of the Efficiency of Tissue P Systems with Cell Separation. Fundamenta Informaticae, 2015, 138, 45-60.	0.3	32
63	Sequential spiking neural P systems with structural plasticity based on max/min spike number. Neural Computing and Applications, 2016, 27, 1337-1347.	3.2	32
64	A P System Based Model of an Ecosystem of Some Scavenger Birds. Lecture Notes in Computer Science, 2010, , 182-195.	1.0	32
65	MeCoSim: A general purpose software tool for simulating biological phenomena by means of P systems. , 2010, , .		31
66	A Fault Analysis Method for Three-Phase Induction Motors Based on Spiking Neural P Systems. Complexity, 2021, 2021, 1-19.	0.9	31
67	Modeling Ecosystems Using P Systems: The Bearded Vulture, a Case Study. Lecture Notes in Computer Science, 2009, , 137-156.	1.0	31
68	Small universal simple spiking neural P systems with weights. Science China Information Sciences, 2014, 57, 1-11.	2.7	30
69	Cell-Like P Systems With Channel States and Symport/Antiport Rules. IEEE Transactions on Nanobioscience, 2016, 15, 555-566.	2.2	30
70	A New Characterization of NP, P, and PSPACE withÂAccepting Hybrid Networks of Evolutionary Processors. Theory of Computing Systems, 2010, 46, 174-192.	0.7	29
71	The GPU on the simulation of cellular computing models. Soft Computing, 2012, 16, 231-246.	2.1	29
72	Computing with viruses. Theoretical Computer Science, 2016, 623, 146-159.	0.5	28

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73	Membrane Computing Models: Implementations. , 2021, , .		28
74	An Approach to Computational Complexity in Membrane Computing. Lecture Notes in Computer Science, 2005, , 85-109.	1.0	27
75	Simulating FAS-induced apoptosis by using P systems. Progress in Natural Science: Materials International, 2007, 17, 424-431.	1.8	27
76	Computational efficiency of dissolution rules in membrane systems. International Journal of Computer Mathematics, 2006, 83, 593-611.	1.0	26
77	Computing with Spiking Neural P Systems: Traces and Small Universal Systems. Lecture Notes in Computer Science, 2006, , 1-16.	1.0	26
78	Solving Subset Sum in Linear Time by Using Tissue P Systems with Cell Division. Lecture Notes in Computer Science, 2007, , 170-179.	1.0	26
79	Minimal cooperation as a way to achieve the efficiency in cell-like membrane systems. Journal of Membrane Computing, 2019, 1, 85-92.	1.0	25
80	Tissue P Systems With Channel States Working in the Flat Maximally Parallel Way. IEEE Transactions on Nanobioscience, 2016, 15, 645-656.	2.2	24
81	Matrix Representation of Spiking Neural P Systems. Lecture Notes in Computer Science, 2010, , 377-391.	1.0	24
82	The framework of P systems applied to solve optimal watermarking problem. Signal Processing, 2014, 101, 256-265.	2.1	23
83	Efficient solutions to hard computational problems by P systems with symport/antiport rules and membrane division. BioSystems, 2015, 130, 51-58.	0.9	23
84	Membrane fission: A computational complexity perspective. Complexity, 2016, 21, 321-334.	0.9	23
85	P-Lingua in two steps: flexibility and efficiency. Journal of Membrane Computing, 2019, 1, 93-102.	1.0	23
86	An efficient time-free solution to SAT problem by P systems with proteins on membranes. Journal of Computer and System Sciences, 2016, 82, 1090-1099.	0.9	22
87	Cell-like P systems with polarizations and minimal rules. Theoretical Computer Science, 2020, 816, 1-18.	0.5	22
88	Spiking Neural P Systems with Extended Channel Rules. International Journal of Neural Systems, 2021, 31, 2050049.	3.2	22
89	A Computational Complexity Theory in Membrane Computing. Lecture Notes in Computer Science, 2010, , 125-148.	1.0	22
90	A Pâ€"Lingua Based Simulator for Spiking Neural P Systems. Lecture Notes in Computer Science, 2012, , 257-281.	1.0	22

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91	COMPUTATION OF RAMSEY NUMBERS BY P SYSTEMS WITH ACTIVE MEMBRANES. International Journal of Foundations of Computer Science, 2011, 22, 29-38.	0.8	21
92	The Computational Complexity of Tissue P Systems with Evolutional Symport/Antiport Rules. Complexity, 2018, 2018, 1-21.	0.9	21
93	Towards Probabilistic Model Checking on P Systems Using PRISM. Lecture Notes in Computer Science, 2006, , 477-495.	1.0	21
94	An Overview of Hardware Implementation of Membrane Computing Models. ACM Computing Surveys, 2021, 53, 1-38.	16.1	21
95	REPRESENTATIONS AND CHARACTERIZATIONS OF LANGUAGES IN CHOMSKY HIERARCHY BY MEANS OF INSERTION-DELETION SYSTEMS. International Journal of Foundations of Computer Science, 2008, 19, 859-871.	0.8	20
96	P systems with proteins: a new frontier when membrane division disappears. Journal of Membrane Computing, 2019, 1, 29-39.	1.0	20
97	Solving Knapsack Problems in a Sticker Based Model. Lecture Notes in Computer Science, 2002, , 161-171.	1.0	20
98	Fuzzy Membrane Computing: Theory and Applications. International Journal of Computers, Communications and Control, 2015, 10, 144.	1.2	20
99	Comparing simulation algorithms for multienvironment probabilistic P systems over a standard virtual ecosystem. Natural Computing, 2012, 11, 369-379.	1.8	19
100	Weighted Fuzzy Reasoning Spiking Neural P Systems: Application to Fault Diagnosis in Traction Power Supply Systems of High-Speed Railways. Journal of Computational and Theoretical Nanoscience, 2015, 12, 1103-1114.	0.4	19
101	Tissue P Systems with Protein on Cells. Fundamenta Informaticae, 2016, 144, 77-107.	0.3	19
102	Computational Efficiency of Minimal Cooperation and Distribution in Polarizationless P Systems with Active Membranes. Fundamenta Informaticae, 2017, 153, 147-172.	0.3	19
103	Efficient simulation of tissue-like P systems by transition cell-like P systems. Natural Computing, 2009, 8, 797-806.	1.8	18
104	A P-Lingua based simulator for tissue P systems. The Journal of Logic and Algebraic Programming, 2010, 79, 374-382.	1.4	18
105	Spiking Neural dP Systems. Fundamenta Informaticae, 2011, 111, 423-436.	0.3	17
106	Automatic Design of Deterministic and Non-Halting Membrane Systems by Tuning Syntactical Ingredients. IEEE Transactions on Nanobioscience, 2014, 13, 363-371.	2.2	17
107	Application of Neural-Like P Systems With State Values for Power Coordination of Photovoltaic/Battery Microgrids. IEEE Access, 2018, 6, 46630-46642.	2.6	17
108	Attacking the Common Algorithmic Problem by Recognizer P Systems. Lecture Notes in Computer Science, 2005, , 304-315.	1.0	17

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109	Reaching efficiency through collaboration in membrane systems: Dissolution, polarization and cooperation. Theoretical Computer Science, 2017, 701, 226-234.	0.5	16
110	An efficient time-free solution to QSAT problem using P systems with proteins on membranes. Information and Computation, 2017, 256, 287-299.	0.5	16
111	An interactive timeline of simulators in membrane computing. Journal of Membrane Computing, 2019, 1, 209-222.	1.0	16
112	A Tissue P Systems Based Uniform Solution to Tripartite Matching Problem. Fundamenta Informaticae, 2011, 109, 179-188.	0.3	15
113	Membrane fission versus cell division: When membrane proliferation is not enough. Theoretical Computer Science, 2015, 608, 57-65.	0.5	15
114	Application of Fuzzy Reasoning Spiking Neural P Systems to Fault Diagnosis. International Journal of Computers, Communications and Control, 2014, 9, 786.	1.2	15
115	Simulation of Rapidly-Exploring Random Trees in Membrane Computing with P-Lingua and Automatic Programming. International Journal of Computers, Communications and Control, 2018, 13, 1007-1031.	1.2	15
116	SPIKING NEURAL P SYSTEMS: AN EARLY SURVEY. International Journal of Foundations of Computer Science, 2007, 18, 435-455.	0.8	14
117	A polynomial alternative to unbounded environment for tissue P systems with cell division. International Journal of Computer Mathematics, 2013, 90, 760-775.	1.0	14
118	Extending Simulation of Asynchronous Spiking Neural P Systems in Pâ€“Lingua. Fundamenta Informaticae, 2015, 136, 253-267.	0.3	14
119	Cascading Failures Analysis Considering Extreme Virus Propagation of Cyber-Physical Systems in Smart Grids. Complexity, 2019, 2019, 1-15.	0.9	14
120	The P Versus NP Problem Through Cellular Computing with Membranes. Lecture Notes in Computer Science, 2003, , 338-352.	1.0	14
121	Population Dynamics P Systems on CUDA. Lecture Notes in Computer Science, 2012, , 247-266.	1.0	14
122	Spiking Neural P Systems with Several Types of Spikes. International Journal of Computers, Communications and Control, 2014, 6, 647.	1.2	14
123	A software tool for verification of Spiking Neural P Systems. Natural Computing, 2008, 7, 485-497.	1.8	13
124	Complexity aspects of polarizationless membrane systems. Natural Computing, 2009, 8, 703-717.	1.8	13
125	A SIMULATION ALGORITHM FOR MULTIENVIRONMENT PROBABILISTIC P SYSTEMS: A FORMAL VERIFICATION. International Journal of Foundations of Computer Science, 2011, 22, 107-118.	0.8	13
126	Computational efficiency and universality of timed P systems with membrane creation. Soft Computing, 2015, 19, 3043-3053.	2.1	13

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127	A P_Lingua Based Simulator for P Systems with Symport/Antiport Rules. Fundamenta Informaticae, 2015, 139, 211-227.	0.3	13
128	A path to computational efficiency through membrane computing. Theoretical Computer Science, 2019, 777, 443-453.	0.5	13
129	Available Membrane Computing Software. , 2006, , 411-436.		13
130	Spiking Neural P Systems. Recent Results, Research Topics. Natural Computing Series, 2009, , 273-291.	2.2	13
131	Gated Spiking Neural P Systems for Time Series Forecasting. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 6227-6236.	7.2	13
132	A Prolog simulator for deterministic P systems with active membranes. New Generation Computing, 2004, 22, 349-363.	2.5	12
133	Solving the 0-1 Knapsack Problem by Using Tissue P System With Cell Division. IEEE Access, 2019, 7, 66055-66067.	2.6	12
134	Adaptative parallel simulators for bioinspired computing models. Future Generation Computer Systems, 2020, 107, 469-484.	4.9	12
135	Modeling Signal Transduction Using P Systems. Lecture Notes in Computer Science, 2006, , 100-122.	1.0	12
136	â€œSecond Brainstorming week on Membrane Computingâ€•in Sevilla 2004. Soft Computing, 2005, 9, 629-630.	2.1	11
137	On spiking neural P systems. Natural Computing, 2010, 9, 475-491.	1.8	11
138	Parallel simulation of Population Dynamics P systems: updates and roadmap. Natural Computing, 2016, 15, 565-573.	1.8	11
139	Adjacent Graph Based Vulnerability Assessment for Electrical Networks Considering Fault Adjacent Relationships Among Branches. IEEE Access, 2019, 7, 88927-88936.	2.6	11
140	Hebbian Learning from Spiking Neural P Systems View. Lecture Notes in Computer Science, 2009, , 217-230.	1.0	11
141	Dendrite P Systems Toolbox: Representation, Algorithms and Simulators. International Journal of Neural Systems, 2021, 31, 2050071.	3.2	11
142	Towards a Programming Language in Cellular Computing. Electronic Notes in Theoretical Computer Science, 2005, 123, 93-110.	0.9	10
143	Towards bridging two cell-inspired models: P systems and R systems. Theoretical Computer Science, 2012, 429, 258-264.	0.5	10
144	An infinite hierarchy of languages defined by dP systems. Theoretical Computer Science, 2012, 431, 4-12.	0.5	10

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145	The Efficiency of Tissue P Systems with Cell Separation Relies on the Environment. Lecture Notes in Computer Science, 2013, , 243-256.	1.0	10
146	Kernel P Systems: Applications and Implementations. Advances in Intelligent Systems and Computing, 2013, , 1081-1089.	0.5	10
147	On the degree of parallelism in membrane systems. Theoretical Computer Science, 2007, 372, 183-195.	0.5	9
148	A Linear Time Solution to the Partition Problem in a Cellular Tissue-Like Model. Journal of Computational and Theoretical Nanoscience, 2010, 7, 884-889.	0.4	9
149	A new simulation algorithm for multienvironment probabilistic P systems. , 2010, , .		9
150	The P versus NP Problem from the Membrane Computing View. European Review, 2014, 22, 18-33.	0.4	9
151	Spiking Neural P Systems with Functional Astrocytes. Lecture Notes in Computer Science, 2013, , 228-242.	1.0	9
152	Temporal Fuzzy Reasoning Spiking Neural P Systems with Real Numbers for Power System Fault Diagnosis. Journal of Computational and Theoretical Nanoscience, 2016, 13, 3804-3814.	0.4	9
153	Cellular modelling using P systems and process algebra. Progress in Natural Science: Materials International, 2007, 17, 375-383.	1.8	8
154	P automata revisited. Theoretical Computer Science, 2012, 454, 222-230.	0.5	8
155	Implementing in Prolog an Effective Cellular Solution to the Knapsack Problem. Lecture Notes in Computer Science, 2004, , 140-152.	1.0	8
156	On Descriptive Complexity of P Systems. Lecture Notes in Computer Science, 2005, , 320-330.	1.0	8
157	Implementing Enzymatic Numerical P Systems for AI Applications by Means of Graphic Processing Units. Topics in Intelligent Engineering and Informatics, 2013, , 137-159.	0.4	8
158	Accelerated Simulation of P Systems on the GPU: A Survey. Communications in Computer and Information Science, 2014, , 308-312.	0.4	8
159	COMPUTING MORPHISMS BY SPIKING NEURAL P SYSTEMS. International Journal of Foundations of Computer Science, 2007, 18, 1371-1382.	0.8	7
160	A uniform framework for modeling based on P systems. , 2010, , .		7
161	P systems based computing polynomials: design and formal verification. Natural Computing, 2016, 15, 591-596.	1.8	7
162	P Systems with Tables of Rules. Lecture Notes in Computer Science, 2004, , 235-249.	1.0	7

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163	Membrane Dissolution and Division in P. Lecture Notes in Computer Science, 2009, , 262-276.	1.0	7
164	On P systems with bounded parallelism. , 2005, , .		6
165	Notes on spiking neural P systems and finite automata. Natural Computing, 2016, 15, 533-539.	1.8	6
166	Membrane Creation in Polarizationless P Systems with Active Membranes. Fundamenta Informaticae, 2019, 171, 297-311.	0.3	6
167	P systems with symport/antiport rules: When do the surroundings matter?. Theoretical Computer Science, 2020, 805, 206-217.	0.5	6
168	A MzScheme Implementation of Transition P Systems. Lecture Notes in Computer Science, 2003, , 58-73.	1.0	6
169	Exploring Computation Trees Associated with P Systems. Lecture Notes in Computer Science, 2005, , 278-286.	1.0	6
170	Trading Polarization for Bi-stable Catalysts in P Systems with Active Membranes. Lecture Notes in Computer Science, 2005, , 373-388.	1.0	6
171	Spiking Neural P Systems. , 2009, , 60-73.		6
172	Tuning Frontiers of Efficiency in Tissue P Systems with Evolutional Communication Rules. Complexity, 2021, 2021, 1-14.	0.9	5
173	Probabilistic Guarded P Systems, A New Formal Modelling Framework. Lecture Notes in Computer Science, 2014, , 194-214.	1.0	5
174	Fault Diagnosis Models for Electric Locomotive Systems Based on Fuzzy Reasoning Spiking Neural P Systems. Lecture Notes in Computer Science, 2014, , 385-395.	1.0	5
175	Spiking Neural P System Simulations on a High Performance GPU Platform. Lecture Notes in Computer Science, 2011, , 99-108.	1.0	5
176	ON A PARTIAL AFFIRMATIVE ANSWER FOR A PÄ‚UN'S CONJECTURE. International Journal of Foundations of Computer Science, 2011, 22, 55-64.	0.8	4
177	Heterotic Computing Examples with Optics, Bacteria, and Chemicals. Lecture Notes in Computer Science, 2012, , 198-209.	1.0	4
178	Membrane Algorithms. Emergence, Complexity and Computation, 2017, , 33-115.	0.2	4
179	Evolutionary response of a native butterfly to concurrent plant invasions: Simulation of population dynamics. Ecological Modelling, 2017, 360, 410-424.	1.2	4
180	Cooperation in Transport of Chemical Substances: A Complexity Approach within Membrane Computing. Fundamenta Informaticae, 2017, 154, 373-385.	0.3	4

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181	P Systems-Based Computing Polynomials With Integer Coefficients: Design and Formal Verification. IEEE Transactions on Nanobioscience, 2018, 17, 272-280.	2.2	4
182	A Review of Membrane Computing Models for Complex Ecosystems and a Case Study on a Complex Giant Panda System. Complexity, 2020, 2020, 1-26.	0.9	4
183	From NP-Completeness to DP-Completeness: A Membrane Computing Perspective. Complexity, 2020, 2020, 1-10.	0.9	4
184	Simulating FRSN P Systems with Real Numbers in P-Lingua on sequential and CUDA platforms. Lecture Notes in Computer Science, 2015, , 262-276.	1.0	4
185	Simulating the Bitonic Sort Using P Systems. , 2007, , 172-192.		4
186	A Logarithmic Bound for Solving Subset Sum with P Systems. , 2007, , 257-270.		4
187	Maximum Schemes in Arithmetic. Mathematical Logic Quarterly, 1994, 40, 425-430.	0.2	3
188	ON SIMULATING A CLASS OF PARALLEL ARCHITECTURES. International Journal of Foundations of Computer Science, 2006, 17, 91-110.	0.8	3
189	A fast solution to the partition problem by using tissue-like P systems. , 2008, , .		3
190	Generating Diophantine Sets by Virus Machines. Communications in Computer and Information Science, 2015, , 331-341.	0.4	3
191	Data Modeling with Membrane Systems: Applications to Real Ecosystems. Emergence, Complexity and Computation, 2017, , 259-355.	0.2	3
192	Fault diagnosis for multi-energy flows of energy internet: Framework and prospects. , 2017, , .		3
193	From distribution to replication in cooperative systems with active membranes: A frontier of the efficiency. Theoretical Computer Science, 2018, 736, 15-24.	0.5	3
194	The role of integral membrane proteins in computational complexity theory. International Journal of Advances in Engineering Sciences and Applied Mathematics, 2018, 10, 193-202.	0.7	3
195	Design of Specific P Systems Simulators on GPUs. Lecture Notes in Computer Science, 2019, , 202-207.	1.0	3
196	When object production tunes the efficiency of membrane systems. Theoretical Computer Science, 2020, 805, 218-231.	0.5	3
197	Generation of Diophantine Sets by Computing P Systems with External Output. Lecture Notes in Computer Science, 2002, , 176-190.	1.0	3
198	A Bioinspired Computing Approach to Model Complex Systems. Lecture Notes in Computer Science, 2014, , 20-34.	1.0	3

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199	Characterizing tractability with membrane creation. , 2005, , .		2
200	How to express tumours using membrane systems. Progress in Natural Science: Materials International, 2007, 17, 449-457.	1.8	2
201	On the efficiency of cell-like and tissue-like recognizing membrane systems. International Journal of Intelligent Systems, 2009, 24, 747-765.	3.3	2
202	Simulating tritrophic interactions by means of P systems. , 2010, , .		2
203	Bridging Membrane and Reaction Systems â€" Further Results and Research Topics. Fundamenta Informaticae, 2013, 127, 99-114.	0.3	2
204	Robot path planning using rapidly-exploring random trees: A membrane computing approach. , 2018, , .		2
205	Membrane Computing - Key Concepts and Definitions. Emergence, Complexity and Computation, 2017, , 1-9.	0.2	2
206	Implementing P Systems Parallelism by Means of GPUs. Lecture Notes in Computer Science, 2010, , 227-241.	1.0	2
207	Formal Verification of P Systems with Active Membranes through Model Checking. Lecture Notes in Computer Science, 2012, , 215-225.	1.0	2
208	Cellular Solutions to Some Numerical NP-Complete Problems. Advances in Web Services Research Series, 0, , 115-149.	0.0	2
209	dP Automata versus Right-Linear Simple Matrix Grammars. Lecture Notes in Computer Science, 2012, , 376-387.	1.0	2
210	Linear Time Solution to Prime Factorization by Tissue P Systems with Cell Division. , 2014, , 207-220.		2
211	P systems with evolutional symport and membrane creation rules solving QSAT. Theoretical Computer Science, 2022, 908, 56-63.	0.5	2
212	Basic Arithmetic Calculations Through Virus-Based Machines. Lecture Notes in Computer Science, 2022, , 403-412.	1.0	2
213	Simulation of P Systems with Active Membranes on CUDA. , 2009, , .		1
214	Searching Previous Configurations in Membrane Computing. Lecture Notes in Computer Science, 2010, , 301-315.	1.0	1
215	Fuzzy reasoning spiking neural P systems revisited: A formalization. Theoretical Computer Science, 2017, 701, 216-225.	0.5	1
216	Counting Membrane Systems. Lecture Notes in Computer Science, 2018, , 74-87.	1.0	1

#	Article	IF	Citations
217	The Relevance of the Environment on the Efficiency of Tissue P Systems. Lecture Notes in Computer Science, 2014, , 308-321.	1.0	1
218	Results on Computational Complexity in Bio-inspired Computing. , 2019, , 33-73.		1
219	Linear Time Solution to Prime Factorization by Tissue P Systems with Cell Division. International Journal of Natural Computing Research, 2011, 2, 49-60.	0.5	1
220	A Modeling Approach Based on P Systems with Bounded Parallelism. Lecture Notes in Computer Science, 2006, , 49-65.	1.0	1
221	Classifying States of a Finite Markov Chain with Membrane Computing. Lecture Notes in Computer Science, 2006, , 266-278.	1.0	1
222	P Systems with Evolutional Communication and Division Rules. Axioms, 2021, 10, 327.	0.9	1
223	Efficient computation in rational-valued P systems. Mathematical Structures in Computer Science, 2009, 19, 1125-1139.	0.5	0
224	A Uniform Solution to Common Algorithmic Problem by Tissue P Systems with Cell Division. , 2011, , .		0
225	Looking for Small Efficient P Systems. Fundamenta Informaticae, 2011, 110, 295-308.	0.3	0
226	<I>A Special Issue on</I> Bio-Inspired Computing: Theories and Applications. Journal of Computational and Theoretical Nanoscience, 2015, 12, 1101-1102.	0.4	0
227	Engineering Optimization with Membrane Algorithms. Emergence, Complexity and Computation, 2017, , 117-158.	0.2	0
228	Fundamentals of Evolutionary Computation. Emergence, Complexity and Computation, 2017, , 11-32.	0.2	0
229	Electric Power System Fault Diagnosis with Membrane Systems. Emergence, Complexity and Computation, 2017, , 159-212.	0.2	0
230	Preface of the special issue for Gheorghe PÇŽunâ€™s 70th anniversary. Journal of Membrane Computing, 2020, 2, 227-229.	1.0	0
231	Proof techniques in Membrane Computing. Theoretical Computer Science, 2021, 862, 236-249.	0.5	0
232	P Systems Implementation on GPUs. , 2021, , 163-215.		0
233	P Systems Implementation on P-Lingua Framework. , 2021, , 11-30.		0
234	Applications of Software Implementations of P Systems. , 2021, , 31-69.		0

#	Article	IF	Citations
235	Applications of Hardware Implementation of P Systems. , 2021, , 245-276.		0
236	Molecular Physics and Chemistry in Membranes: The Java Environment for Nature-Inspired Approaches (JENA). , 2021, , 101-161.		0
237	An Agent Based Approach of Collective Foraging. Lecture Notes in Computer Science, 2003, , 638-645.	1.0	0
238	Computing Partial Recursive Functions by Transition P Systems. Lecture Notes in Computer Science, 2004, , 320-340.	1.0	0
239	Using Automated Reasoning Systems on Molecular Computing. Lecture Notes in Computer Science, 2005, , 128-137.	1.0	0
240	Descriptional Complexity of Tissue-Like P Systems with Cell Division. Lecture Notes in Computer Science, 2009, , 168-178.	1.0	0
241	Local Search with P Systems. , 2014, , 139-148.		0
242	Robot Control with Membrane Systems. Emergence, Complexity and Computation, 2017, , 213-258.	0.2	0
243	Correction to: Membrane Computing Models: Implementations. , 2021, , C1-C1.		0
244	Bio-inspired modelling as a practical tool to manage giant panda population dynamics in captivity. Natural Computing, 0, , .	1.8	0
245	Estimation of minimum viable population for giant panda ecosystems with membrane computing models. Natural Computing, 0, , .	1.8	0