Tao Song

List of Publications by Year
in descending order

117 papers	3,312 citations	147566 31 h-index	168136 53 g-index
117 all docs	117 docs citations	117 times ranked	1240 citing authors

#	Article	IF	Citations
1	Asynchronous spiking neural P systems with local synchronization. Information Sciences, 2013, 219, 197-207.	4.0	163
2	Constant Electricity Generation in Nanostructured Silicon by Evaporation–Driven Water Flow. Angewandte Chemie - International Edition, 2020, 59, 10619-10625.	7.2	124
3	Spiking neural P systems with rules on synapses. Theoretical Computer Science, 2014, 529, 82-95.	0.5	121
4	Spiking Neural P Systems With Colored Spikes. IEEE Transactions on Cognitive and Developmental Systems, 2018, 10, 1106-1115.	2.6	116
5	Design of logic gates using spiking neural P systems with homogeneous neurons and astrocytes-like control. Information Sciences, 2016, 372, 380-391.	4.0	114
6	Spiking Neural P Systems with Thresholds. Neural Computation, 2014, 26, 1340-1361.	1.3	113
7	Spiking neural P systems with request rules. Neurocomputing, 2016, 193, 193-200.	3.5	109
8	Identifying potential treatments of COVID-19 from Traditional Chinese Medicine (TCM) by using a data-driven approach. Journal of Ethnopharmacology, 2020, 258, 112932.	2.0	98
9	Spiking neural P systems with structural plasticity. Neural Computing and Applications, 2015, 26, 1905-1917.	3.2	93
10	Spiking Neural P Systems With Rules on Synapses Working in Maximum Spiking Strategy. IEEE Transactions on Nanobioscience, 2015, 14, 465-477.	2.2	91
11	Spiking Neural P Systems With Learning Functions. IEEE Transactions on Nanobioscience, 2019, 18, 176-190.	2.2	85
12	Spiking Neural P Systems With Rules on Synapses Working in Maximum Spikes Consumption Strategy. IEEE Transactions on Nanobioscience, 2015, 14, 38-44.	2.2	78
13	A Parallel Image Skeletonizing Method Using Spiking Neural P Systems with Weights. Neural Processing Letters, 2019, 50, 1485-1502.	2.0	72
14	On the Computational Power of Spiking Neural P Systems with Self-Organization. Scientific Reports, 2016, 6, 27624.	1.6	70
15	Normal Forms of Spiking Neural P Systems With Anti-Spikes. IEEE Transactions on Nanobioscience, 2012, 11, 352-359.	2.2	69
16	Spiking Neural P Systems With White Hole Neurons. IEEE Transactions on Nanobioscience, 2016, 15, 666-673.	2.2	66
17	Asynchronous spiking neural P systems with rules on synapses. Neurocomputing, 2015, 151, 1439-1445.	3.5	65
18	Bioinspired Hierarchical Nanofabric Electrode for Silicon Hydrovoltaic Device with Record Power Output. ACS Nano, 2021, 15, 7472-7481.	7.3	65

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19	On the Universality and Non-Universality of Spiking Neural P Systems With Rules on Synapses. IEEE Transactions on Nanobioscience, 2015, 14, 960-966.	2.2	64
20	Performing Four Basic Arithmetic Operations With Spiking Neural P Systems. IEEE Transactions on Nanobioscience, 2012, 11, 366-374.	2.2	57
21	Normal Forms for Some Classes of Sequential Spiking Neural P Systems. IEEE Transactions on Nanobioscience, 2013, 12, 255-264.	2.2	57
22	A Novel Bio-Sensor Based on DNA Strand Displacement. PLoS ONE, 2014, 9, e108856.	1.1	56
23	A Parallel Workflow Pattern Modeling Using Spiking Neural P Systems With Colored Spikes. IEEE Transactions on Nanobioscience, 2018, 17, 474-484.	2.2	54
24	A Real-Time Fire Detection Method from Video with Multifeature Fusion. Computational Intelligence and Neuroscience, 2019, 2019, 1-17.	1.1	52
25	Application of Amino-Functionalized Nanosilica in Improving the Thermal Stability of Acrylamide-Based Polymer for Enhanced Oil Recovery. Energy & Fuels, 2018, 32, 246-254.	2.5	50
26	Time-free solution to SAT problem using P systems with active membranes. Theoretical Computer Science, 2014, 529, 61-68.	0.5	47
27	Construction of DNA nanotubes with controllable diameters and patterns using hierarchical DNA sub-tiles. Nanoscale, 2016, 8, 14785-14792.	2.8	43
28	Homogenous Spiking Neural P Systems with Inhibitory Synapses. Neural Processing Letters, 2015, 42, 199-214.	2.0	40
29	AMDE: a novel attention-mechanism-based multidimensional feature encoder for drug–drug interaction prediction. Briefings in Bioinformatics, 2022, 23, .	3.2	40
30	Small Universal Spiking Neural P Systems with Anti-Spikes. Journal of Computational and Theoretical Nanoscience, 2013, 10, 999-1006.	0.4	38
31	DeepFusion: A deep learning based multi-scale feature fusion method for predicting drug-target interactions. Methods, 2022, 204, 269-277.	1.9	33
32	SE-OnionNet: A Convolution Neural Network for Protein–Ligand Binding Affinity Prediction. Frontiers in Genetics, 2020, 11, 607824.	1.1	32
33	A time-free uniform solution to subset sum problem by tissue P systems with cell division. Mathematical Structures in Computer Science, 2017, 27, 17-32.	0.5	30
34	A Novel Dual Path Gated Recurrent Unit Model for Sea Surface Salinity Prediction. Journal of Atmospheric and Oceanic Technology, 2020, 37, 317-325.	0.5	30
35	Homogenous spiking neural P systems with anti-spikes. Neural Computing and Applications, 2014, 24, 1833-1841.	3.2	29
36	An Optimized Feedforward Decoupling PD Register Control Method of Roll-to-Roll Web Printing Systems. IEEE Transactions on Automation Science and Engineering, 2016, 13, 274-283.	3.4	29

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37	Forecasting tropical cyclones wave height using bidirectional gated recurrent unit. Ocean Engineering, 2021, 234, 108795.	1.9	29
38	VGG16-T: A Novel Deep Convolutional Neural Network with Boosting to Identify Pathological Type of Lung Cancer in Early Stage by CT Images. International Journal of Computational Intelligence Systems, 2020, 13, 771.	1.6	28
39	Freestanding silicon nanowires mesh for efficient electricity generation from evaporation-induced water capillary flow. Nano Energy, 2022, 94, 106917.	8.2	28
40	*De novo* molecular design with deep molecular generative models for PPI inhibitors. Briefings in Bioinformatics, 2022, 23, .	3.2	27
41	U-Next: A Novel Convolution Neural Network With an Aggregation U-Net Architecture for Gallstone Segmentation in CT Images. IEEE Access, 2019, 7, 166823-166832.	2.6	26
42	A Deep Learning Method With Merged LSTM Neural Networks for SSHA Prediction. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2020, 13, 2853-2860.	2.3	26
43	KG-DTI: a knowledge graph based deep learning method for drug-target interaction predictions and Alzheimer's disease drug repositions. Applied Intelligence, 2022, 52, 846-857.	3.3	26
44	SDNN-PPI: self-attention with deep neural network effect on protein-protein interaction prediction. BMC Genomics, 2022, 23, .	1.2	26
45	Asynchronous Spiking Neural P Systems with Anti-Spikes. Neural Processing Letters, 2015, 42, 633-647.	2.0	25
46	Adaptive control of manipulator based on neural network. Neural Computing and Applications, 2021, 33, 4077-4085.	3.2	23
47	Time-free solution to SAT problem by P systems with active membranes and standard cell division rules. Natural Computing, 2015, 14, 673-681.	1.8	22
48	Universality of sequential spiking neural P systems based on minimum spike number. Theoretical Computer Science, 2013, 499, 88-97.	0.5	21
49	NDFTC: A New Detection Framework of Tropical Cyclones from Meteorological Satellite Images with Deep Transfer Learning. Remote Sensing, 2021, 13, 1860.	1.8	19
50	Solving Subset Sum Problems by Time-free Spiking Neural P Systems. Applied Mathematics and Information Sciences, 2014, 8, 327-332.	0.7	19
51	Size-controllable DNA nanoribbons assembled from three types of reusable brick single-strand DNA tiles. Soft Matter, 2015, 11, 8484-8492.	1.2	18
52	ATDNNS: An adaptive time–frequency decomposition neural network-based system for tropical cyclone wave height real-time forecasting. Future Generation Computer Systems, 2022, 133, 297-306.	4.9	15
53	A Hygroscopic Janus Heterojunction for Continuous Moisture-Triggered Electricity Generators. ACS Applied Materials & Interfaces, 2022, 14, 19569-19578.	4.0	15
54	Integrating hydrovoltaic device with triboelectric nanogenerator to achieve simultaneous energy harvesting from water droplet and vapor. Nano Energy, 2022, 100, 107495.	8.2	15

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55	Extending Simulation of Asynchronous Spiking Neural P Systems in P–Lingua. Fundamenta Informaticae, 2015, 136, 253-267.	0.3	14
56	A Parallel Bioinspired Framework for Numerical Calculations Using Enzymatic P System With an Enzymatic Environment. IEEE Access, 2018, 6, 65548-65556.	2.6	14
57	Small Universal Bacteria and Plasmid Computing Systems. Molecules, 2018, 23, 1307.	1.7	14
58	An Improved Convolutional Network Architecture Based on Residual Modeling for Person Re-Identification in Edge Computing. IEEE Access, 2019, 7, 106748-106759.	2.6	14
59	A deep model method for recognizing activities of workers on offshore drilling platform by multistage convolutional pose machine. Journal of Loss Prevention in the Process Industries, 2020, 64, 104043.	1.7	14
60	CSConv2d: A 2-D Structural Convolution Neural Network with a Channel and Spatial Attention Mechanism for Protein-Ligand Binding Affinity Prediction. Biomolecules, 2021, 11, 643.	1.8	14
61	Highly Biocompatible Drug-Delivery Systems Based on DNA Nanotechnology. Journal of Biomedical Nanotechnology, 2017, 13, 747-757.	0.5	14
62	A P_Lingua Based Simulator for P Systems with Symport/Antiport Rules. Fundamenta Informaticae, 2015, 139, 211-227.	0.3	13
63	Electron–Selective Passivation Contacts for High–Efficiency Nanostructured Silicon Hydrovoltaic Devices. Advanced Materials Interfaces, 2021, 8, 2101213.	1.9	13
64	Homogeneous spiking neural P systems working in sequential mode induced by maximum spike number. International Journal of Computer Mathematics, 2013, 90, 831-844.	1.0	12
65	A novel membrane-inspired algorithm for optimizing solid waste transportation. Optik, 2015, 126, 3883-3888.	1.4	12
66	Neural-like P systems with plasmids. Information and Computation, 2021, 281, 104766.	0.5	12
67	Reversible spiking neural P systems. Frontiers of Computer Science, 2013, 7, 350-358.	1.6	11
68	A Universal Fast Colorimetric Method for DNA Signal Detection with DNA Strand Displacement and Gold Nanoparticles. Journal of Nanomaterials, 2015, 2015, 1-9.	1.5	11
69	Double Layers Self-Organized Spiking Neural P Systems With Anti-Spikes for Fingerprint Recognition. IEEE Access, 2019, 7, 177562-177570.	2.6	11
70	Intelligent human hand gesture recognition by local–global fusing quality-aware features. Future Generation Computer Systems, 2021, 115, 298-303.	4.9	11
71	Multi-TransDTI: Transformer for Drug–Target Interaction Prediction Based on Simple Universal Dictionaries with Multi-View Strategy. Biomolecules, 2022, 12, 644.	1.8	11
72	Time-Free Solution to Hamilton Path Problems Using P Systems withd-Division. Journal of Applied Mathematics, 2013, 2013, 1-7.	0.4	10

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73	Application of deep learning technique to the sea surface height prediction in the South China Sea. Acta Oceanologica Sinica, 2021, 40, 68-76.	0.4	10
74	Solving Vertex Cover Problem by Tissue P Systems with Cell Division. Applied Mathematics and Information Sciences, 2014, 8, 333-337.	0.7	10
75	Server Consolidation Energy-Saving Algorithm Based on Resource Reservation and Resource Allocation Strategy. IEEE Access, 2019, 7, 171452-171460.	2.6	9
76	Inversion of Ocean Subsurface Temperature and Salinity Fields Based on Spatio-Temporal Correlation. Remote Sensing, 2022, 14, 2587.	1.8	9
77	MRPGA: Motif Detecting by Modified Random Projection Strategy and Genetic Algorithm. Journal of Computational and Theoretical Nanoscience, 2013, 10, 1209-1214.	0.4	8
78	IMGG: Integrating Multiple Single-Cell Datasets through Connected Graphs and Generative Adversarial Networks. International Journal of Molecular Sciences, 2022, 23, 2082.	1.8	8
79	Network–Based Approaches for Drug Repositioning. Molecular Informatics, 2021, , 2100200.	1.4	8
80	A membrane-inspired algorithm with a memory mechanism for knapsack problems. Journal of Zhejiang University: Science C, 2013, 14, 612-622.	0.7	7
81	Spiking neural P systems with anti-spikes and without annihilating priority as number acceptors. Journal of Systems Engineering and Electronics, 2014, 25, 464-469.	1.1	7
82	On the Computational Power of Asynchronous Axon Membrane Systems. IEEE Transactions on Emerging Topics in Computational Intelligence, 2020, 4, 696-704.	3.4	7
83	Stable DNA Sequence Over Close-Ending and Pairing Sequences Constraint. Frontiers in Genetics, 2021, 12, 644484.	1.1	7
84	A normal form of spiking neural P systems with structural plasticity. International Journal of Swarm Intelligence, 2015, 1, 344.	0.2	6
85	A Novel Computational Method to Reduce Leaky Reaction in DNA Strand Displacement. Journal of Analytical Methods in Chemistry, 2015, 2015, 1-10.	0.7	6
86	Repositioning Molecules of Chinese Medicine to Targets of SARS-Cov-2 by Deep Learning Method. , 2020, , .		6
87	LDCNN-DTI: A Novel Light Deep Convolutional Neural Network for Drug-Target Interaction Predictions. , 2020, , .		6
88	A programming triangular DNA origami for doxorubicin loading and delivering to target ovarian cancer cells. Oncotarget, 2017, .	0.8	6
89	An improved YOLOv3 model for detecting location information of ovarian cancer from CT images. Intelligent Data Analysis, 2021, 25, 1565-1578.	0.4	6
90	Keypoint-based passive method for image manipulation detection. Cogent Engineering, 2018, 5, 1523346.	1.1	5

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91	Detecting Motifs in DNA Sequences by Branching from Neighbors of Qualified Potential Motifs. Journal of Computational and Theoretical Nanoscience, 2013, 10, 2201-2206.	0.4	4
92	A Novel Thermodynamic Model and Temperature Control Method of Laser Soldering Systems. Mathematical Problems in Engineering, 2015, 2015, 1-10.	0.6	4
93	Discriminative Correlation Filter for Long-Time Tracking. Computer Journal, 2020, 63, 460-468.	1.5	4
94	Cyclone Identify using Two-Branch Convolutional Neural Network from Global Forecasting System Analysis. , 2021, , .		4
95	Simulating Tropical Cyclone Passive Microwave Rainfall Imagery Using Infrared Imagery via Generative Adversarial Networks. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	1.4	4
96	Spiking Neural P Systems for Arithmetic Operations. , 2011, , .		3
97	Spiking neural P systems with anti-spikes and without annihilating priority working in a 'flip-flop' way. International Journal of Computing Science and Mathematics, 2013, 4, 152.	0.2	3
98	Solving Vertex Cover Problem Using DNA Tile Assembly Model. Journal of Applied Mathematics, 2013, 2013, 1-7.	0.4	3
99	A Novel Approach to Identify Protein Coding Domains by Sampling Binary Profiles from Genome. Journal of Computational and Theoretical Nanoscience, 2014, 11, 147-152.	0.4	3
100	A Spectral Rotation Method with Triplet Periodicity Property for Planted Motif Finding Problems. Combinatorial Chemistry and High Throughput Screening, 2020, 22, 683-693.	0.6	3
101	Visual Prediction of Tropical Cyclones with Deep Convolutional Generative Adversarial Networks. , 2021, , .		3
102	Unsupervised Machine Learning for Improved Delaunay Triangulation. Journal of Marine Science and Engineering, 2021, 9, 1398.	1.2	3
103	WormStep: An Improved Compact Graphical Representation of DNA Sequences Based on Worm Curve. Journal of Computational and Theoretical Nanoscience, 2013, 10, 189-193.	0.4	2
104	Use Ensemble Learning to Estimate the Population and Assets Exposed to Tropical Cyclones. , 2021, , .		2
105	Mesh2Measure: A Novel Body Dimensions Measurement Based on 3D Human Model. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2022, , 80-99.	0.2	2
106	MMDA: Disease Analysis Model Based on Anthropometric Measurement. , 2021, , .		2
107	A Bio-Inspired Algorithm for the Fleet Size and Mix Vehicle Routing Problem. Journal of Computational and Theoretical Nanoscience, 2014, 11, 2085-2090.	0.4	1
108	NES-REBS: A novel nuclear export signal prediction method using regular expressions and biochemical properties. Journal of Bioinformatics and Computational Biology, 2016, 14, 1650013.	0.3	1

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109	Guest Editorial: Bio-Inspired Computing Models and Algorithms. IEEE Transactions on Nanobioscience, 2020, 19, 100-101.	2.2	1
110	Artificial intelligence technology based on deep learning in digestive endoscopy imaging diagnosis. Personal and Ubiquitous Computing, 0, , 1.	1.9	1
111	Learning hierarchical face representation to enhance HCI among medical robots. Future Generation Computer Systems, 2021, 118, 180-186.	4.9	1
112	Analysis of Gene Logic Networks for Arabidopsis. Current Bioinformatics, 2013, 8, 244-252.	0.7	1
113	P Systems with 2D Picture Grammars. , 2011, , .		0
114	Disjointed Cycle Time Assignment for Minâ€"Max Systems Using an Output Feedback. Journal of Computational and Theoretical Nanoscience, 2014, 11, 772-775.	0.4	0
115	<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
116	DNA Computing. International Journal of Nanotechnology and Molecular Computation, 2010, 2, 12-37.	0.3	0
117	Parallel Solution to the Dominating Set Problem by Tile Assembly System. Applied Mathematics and Information Sciences, 2014, 8, 345-349.	0.7	0