Erol Gelenbe

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/2245086/publications.pdf

Version: 2024-02-01

383 papers 13,418 citations

61 h-index 100 g-index

402 all docs 402 docs citations

times ranked

402

4146 citing authors

#	Article	IF	CITATIONS
1	Random Neural Networks with Negative and Positive Signals and Product Form Solution. Neural Computation, 1989, 1, 502-510.	2.2	533
2	A survey of autonomic communications. ACM Transactions on Autonomous and Adaptive Systems, 2006, 1, 223-259.	0.8	521
3	Energy-Efficient Cloud Computing. Computer Journal, 2010, 53, 1045-1051.	2.4	521
4	Product-form queueing networks with negative and positive customers. Journal of Applied Probability, 1991, 28, 656-663.	0.7	436
5	Learning in the Recurrent Random Neural Network. Neural Computation, 1993, 5, 154-164.	2.2	326
6	On Approximate Computer System Models. Journal of the ACM, 1975, 22, 261-269.	2.2	228
7	G-networks by triggered customer movement. Journal of Applied Probability, 1993, 30, 742-748.	0.7	227
8	Stability of the Random Neural Network Model. Neural Computation, 1990, 2, 239-247.	2.2	201
9	A Manifesto for Future Generation Cloud Computing. ACM Computing Surveys, 2019, 51, 1-38.	23.0	198
10	The impact of information technology on energy consumption and carbon emissions. Ubiquity, 2015, 2015, 1-15.	0.2	187
11	On the Optimum Checkpoint Interval. Journal of the ACM, 1979, 26, 259-270.	2.2	185
12	Steps toward self-aware networks. Communications of the ACM, 2009, 52, 66-75.	4.5	177
13	Stability and Optimal Control of the Packet Switching Broadcast Channel. Journal of the ACM, 1977, 24, 375-386.	2.2	176
14	G-Networks with Signals and Batch Removal. Probability in the Engineering and Informational Sciences, 1993, 7, 335-342.	0.8	163
15	Distributed Building Evacuation Simulator for Smart Emergency Management. Computer Journal, 2010, 53, 1384-1400.	2.4	162
16	Large scale simulation for human evacuation and rescue. Computers and Mathematics With Applications, 2012, 64, 3869-3880.	2.7	151
17	Queues with negative arrivals. Journal of Applied Probability, 1991, 28, 245-250.	0.7	143
18	A self-aware approach to denial of service defence. Computer Networks, 2007, 51, 1299-1314.	5.1	137

#	Article	IF	CITATIONS
19	Random Neural Networks with Synchronized Interactions. Neural Computation, 2008, 20, 2308-2324.	2.2	132
20	G-networks: a unifying model for neural and queueing networks. Annals of Operations Research, 1994, 48, 433-461.	4.1	129
21	G-networks with multiple classes of negative and positive customers. Theoretical Computer Science, 1996, 155, 141-156.	0.9	124
22	Self-aware networks and QoS. Proceedings of the IEEE, 2004, 92, 1478-1489.	21.3	123
23	The first decade of G-networks. European Journal of Operational Research, 2000, 126, 231-232.	5.7	119
24	Power-aware ad hoc cognitive packet networks. Ad Hoc Networks, 2004, 2, 205-216.	5.5	119
25	Performance of rollback recovery systems under intermittent failures. Communications of the ACM, 1978, 21, 493-499.	4.5	117
26	Random Neural Networks with Multiple Classes of Signals. Neural Computation, 1999, 11, 953-963.	2.2	116
27	G-networks by triggered customer movement. Journal of Applied Probability, 1993, 30, 742-748.	0.7	113
28	Contract Design for Traffic Offloading and Resource Allocation in Heterogeneous Ultra-Dense Networks. IEEE Journal on Selected Areas in Communications, 2017, 35, 2457-2467.	14.0	112
29	Stability of Product Form G-Networks. Probability in the Engineering and Informational Sciences, 1992, 6, 271-276.	0.8	111
30	G-networks with resets. Performance Evaluation, 2002, 49, 179-191.	1.2	111
31	Learning in the multiple class random neural network. IEEE Transactions on Neural Networks, 2002, 13, 1257-1267.	4.2	110
32	G-networks with multiple classes of signals and positive customers. European Journal of Operational Research, 1998, 108, 293-305.	5.7	107
33	A Unified Approach to the Evaluation of a Class of Replacement Algorithms. IEEE Transactions on Computers, 1973, C-22, 611-618.	3.4	105
34	Autonomous search by robots and animals: A survey. Robotics and Autonomous Systems, 1997, 22, 23-34.	5.1	105
35	A Framework for Energy-Aware Routing in Packet Networks. Computer Journal, 2011, 54, 850-859.	2.4	105
36	Probabilistic models of computer systems?Part I (exact results). Acta Informatica, 1976, 7, 35-60.	0.5	104

#	Article	IF	CITATIONS
37	Design and performance of cognitive packet networks. Performance Evaluation, 2001, 46, 155-176.	1.2	103
38	Measurement and performance of a cognitive packet network. Computer Networks, 2001, 37, 691-701.	5.1	102
39	Autonomous search for mines. European Journal of Operational Research, 1998, 108, 319-333.	5.7	97
40	An End-to-End Approach to the Resequencing Problem. Journal of the ACM, 1984, 31, 474-485.	2.2	95
41	Simulating autonomous agents in augmented reality. Journal of Systems and Software, 2005, 74, 255-268.	4.5	93
42	Probabilistic models of computer systems. Acta Informatica, 1979, 12, 285-303.	0.5	92
43	Global behavior of homogeneous random neural systems. Applied Mathematical Modelling, 1991, 15, 534-541.	4.2	90
44	Future Research on Cyber-Physical Emergency Management Systems. Future Internet, 2013, 5, 336-354.	3.8	90
45	Adaptive Dispatching of Tasks in the Cloud. IEEE Transactions on Cloud Computing, 2018, 6, 33-45.	4.4	90
46	Search in unknown random environments. Physical Review E, 2010, 82, 061112.	2.1	85
47	On the modeling of parallel access to shared data. Communications of the ACM, 1983, 26, 196-202.	4.5	84
48	Product-form queueing networks with negative and positive customers. Journal of Applied Probability, 1991, 28, 656-663.	0.7	84
49	Function approximation with spiked random networks. IEEE Transactions on Neural Networks, 1999, 10, 3-9.	4.2	83
50	Deep Learning with Dense Random Neural Network for Detecting Attacks against IoT-connected Home Environments. Procedia Computer Science, 2018, 134, 458-463.	2.0	83
51	Improved neural heuristics for multicast routing. IEEE Journal on Selected Areas in Communications, 1997, 15, 147-155.	14.0	79
52	Traffic and video quality with adaptive neural compression. Multimedia Systems, 1996, 4, 357-369.	4.7	77
53	A distributed decision support system for Building Evacuation. , 2009, , .		76
54	Simulation with learning agents. Proceedings of the IEEE, 2001, 89, 148-157.	21.3	75

#	Article	IF	CITATIONS
55	Sensible decisions based on QoS. Computational Management Science, 2003, 1, 1.	1.3	74
56	Neural network methods for volumetric magnetic resonance imaging of the human brain. Proceedings of the IEEE, 1996, 84, 1488-1496.	21.3	73
57	Video quality and traffic QoS in learning-based subsampled and receiver-interpolated video sequences. IEEE Journal on Selected Areas in Communications, 2000, 18, 150-167.	14.0	70
58	Opportunistic Communications for Emergency Support Systems. Procedia Computer Science, 2011, 5, 39-47.	2.0	70
59	Energy Packet Networks With Energy Harvesting. IEEE Access, 2016, 4, 1321-1331.	4.2	70
60	Low bit-rate video compression with neural networks and temporal subsampling. Proceedings of the IEEE, 1996, 84, 1529-1543.	21.3	69
61	Area-based results for mine detection. IEEE Transactions on Geoscience and Remote Sensing, 2000, 38, 12-24.	6.3	68
62	Steady-state solution of probabilistic gene regulatory networks. Physical Review E, 2007, 76, 031903.	2.1	68
63	Dealing with software viruses: A biological paradigm. Information Security Technical Report, 2007, 12, 242-250.	1.3	68
64	Energy packet networks. , 2012, , .		67
65	THE RANDOM NEURAL NETWORK MODEL FOR TEXTURE GENERATION. International Journal of Pattern Recognition and Artificial Intelligence, 1992, 06, 131-141.	1.2	63
66	Task assignment and transaction clustering heuristics for distributed systems. Information Sciences, 1997, 97, 199-219.	6.9	63
67	Genetic Algorithms for Route Discovery. IEEE Transactions on Systems, Man, and Cybernetics, 2006, 36, 1247-1254.	5.0	59
68	PARALLEL ALGORITHM FOR COLOUR TEXTURE GENERATION USING THE RANDOM NEURAL NETWORK MODEL. International Journal of Pattern Recognition and Artificial Intelligence, 1992, 06, 437-446.	1.2	57
69	Bandwidth allocation and call admission control in high-speed networks. , 1997, 35, 122-129.		56
70	Emergency Navigation without an Infrastructure. Sensors, 2014, 14, 15142-15162.	3.8	54
71	Big Data for Autonomic Intercontinental Overlays. IEEE Journal on Selected Areas in Communications, 2016, 34, 575-583.	14.0	53
72	Emergency Response Simulation Using Wireless Sensor Networks. , 2008, , .		53

#	Article	IF	CITATIONS
73	Choosing a Local or Remote Cloud. , 2012, , .		51
74	Synchronising Energy Harvesting and Data Packets in a Wireless Sensor. Energies, 2015, 8, 356-369.	3.1	51
75	Graph and Analytical Models for Emergency Evacuation. Future Internet, 2013, 5, 46-55.	3.8	49
76	Availability of a distributed computer system with failures. Acta Informatica, 1986, 23, 643-655.	0.5	47
77	Towards Networks with Cognitive Packets. , 2001, , 3-17.		47
78	A diffusion model for packet travel time in a random multihop medium. ACM Transactions on Sensor Networks, 2007, 3, 10.	3.6	46
79	Analysis of single and networked auctions. ACM Transactions on Internet Technology, 2009, 9, 1-24.	4.4	44
80	Deep learning with random neural networks. , 2016, , .		44
81	Modeling and Analysis of RRC-Based Signalling Storms in 3G Networks. IEEE Transactions on Emerging Topics in Computing, 2016, 4, 113-127.	4.6	42
82	Top-\$k\$ Query Result Completeness Verification in Tiered Sensor Networks. IEEE Transactions on Information Forensics and Security, 2014, 9, 109-124.	6.9	41
83	Optimum checkpoints with age dependent failures. Acta Informatica, 1990, 27, 519.	0.5	40
84	Managing Crowds in Hazards With Dynamic Grouping. IEEE Access, 2015, 3, 1060-1070.	4.2	40
85	A sensor node with energy harvesting. Performance Evaluation Review, 2014, 42, 37-39.	0.6	39
86	An Analytic Evaluation of the Performance of the "Send and Wait" Protocol. IRE Transactions on Communications Systems, 1978, 26, 313-319.	0.6	38
87	Autonomous smart routing for network QoS. , 0, , .		38
88	Adaptive QoS routing for significant events in wireless sensor networks. , 2008, , .		38
89	Fast Distributed Near-Optimum Assignment of Assets to Tasks. Computer Journal, 2010, 53, 1360-1369.	2.4	38
90	Energy–QoS Trade-Offs in Mobile Service Selection. Future Internet, 2013, 5, 128-139.	3.8	38

#	Article	IF	Citations
91	Detecting Denial of Service Attacks with Bayesian Classifiers and the Random Neural Network. IEEE International Conference on Fuzzy Systems, 2007, , .	0.0	37
92	Time and energy in team-based search. Physical Review E, 2013, 87, .	2.1	37
93	Deep Learning with Dense Random Neural Networks for Detecting Attacks Against IoT-Connected Home Environments. Communications in Computer and Information Science, 2018, , 79-89.	0.5	37
94	Self-Aware Networks That Optimize Security, QoS, and Energy. Proceedings of the IEEE, 2020, 108, 1150-1167.	21.3	37
95	Interconnected Wireless Sensors with Energy Harvesting. Lecture Notes in Computer Science, 2015, , 87-99.	1.3	37
96	Stochastic Gene Expression Modeling with Hill Function for Switch-Like Gene Responses. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2012, 9, 973-979.	3.0	33
97	What IS Can Do for Environmental Sustainability: A Report from CAiSE'11 Panel on Green and Sustainable IS. Communications of the Association for Information Systems, 0, 30, .	0.9	33
98	An OpenNCP-based Solution for Secure eHealth Data Exchange. Journal of Network and Computer Applications, 2018, 116, 65-85.	9.1	33
99	Admission of QoS aware users in a smart network. ACM Transactions on Autonomous and Adaptive Systems, 2008, 3, 1-28.	0.8	32
100	Synchronized Interactions in Spiked Neuronal Networks. Computer Journal, 2008, 51, 723-730.	2.4	32
101	Energy Packet Networks: ICT Based Energy Allocation and Storage. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2012, , 186-195.	0.3	32
102	Reducing power consumption in wired networks. , 2009, , .		31
103	Signalling storms in 3G mobile networks. , 2014, , .		31
104	Optimizing Secure SDN-Enabled Inter-Data Centre Overlay Networks through Cognitive Routing. , 2016, , .		31
105	Towards a cognitive routing engine for software defined networks. , 2016, , .		31
106	The European cross-border health data exchange roadmap: Case study in the Italian setting. Journal of Biomedical Informatics, 2019, 94, 103183.	4.3	31
107	A probability model of uncertainty in data bases. , 1986, , .		30
108	Queues with negative arrivals. Journal of Applied Probability, 1991, 28, 245-250.	0.7	30

#	Article	IF	CITATIONS
109	Queues with Slowly Varying Arrival and Service Processes. Management Science, 1990, 36, 928-937.	4.1	29
110	Static Analysis-Based Approaches forÂSecure Software Development. Communications in Computer and Information Science, 2018, , 142-157.	0.5	29
111	Double Auction Mechanism Design for Video Caching in Heterogeneous Ultra-Dense Networks. IEEE Transactions on Wireless Communications, 2019, 18, 1669-1683.	9.2	29
112	Natural Computation. Computer Journal, 2012, 55, 848-851.	2.4	28
113	Cognitive Packet Network for Bilateral Asymmetric Connections. IEEE Transactions on Industrial Informatics, 2014, 10, 1717-1725.	11.3	28
114	Mobile Network Anomaly Detection and Mitigation: The NEMESYS Approach. Lecture Notes in Electrical Engineering, 2013, , 429-438.	0.4	28
115	Diffusion based statistical call admission control in ATM. Performance Evaluation, 1996, 27-28, 411-436.	1.2	27
116	An Autonomic Approach to Denial of Service Defence., 0,,.		27
117	Comprehensive user requirements engineering methodology for secure and interoperable health data exchange. BMC Medical Informatics and Decision Making, 2018, 18, 85.	3.0	27
118	On G-networks and resource allocation in multimedia systems. European Journal of Operational Research, 2000, 126, 308-318.	5.7	26
119	Flow equivalence and stochastic equivalence in G-networks. Computational Management Science, 2004, 1, 179.	1.3	26
120	An Energy Packet Network model for mobile networks with energy harvesting. Nonlinear Theory and Its Applications IEICE, 2018, 9, 322-336.	0.6	26
121	Oscillatory corticothalamic response to somatosensory input. BioSystems, 1998, 48, 67-75.	2.0	25
122	Network of interacting synthetic molecules in steady state. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2008, 464, 2219-2228.	2.1	25
123	NEMESYS: Enhanced Network Security for Seamless Service Provisioning in the Smart Mobile Ecosystem. Lecture Notes in Electrical Engineering, 2013, , 369-378.	0.4	25
124	Central or distributed energy storage for processors with energy harvesting., 2015,,.		24
125	A Survey of Algorithms and Systems for Evacuating People in Confined Spaces. Electronics (Switzerland), 2019, 8, 711.	3.1	24
126	QoS and Routing in the Cognitive Packet Network. , 0, , .		23

#	Article	IF	CITATIONS
127	Emergency Cyber-Physical-Human Systems. , 2012, , .		23
128	Energy harvesting communication networks: Optimization and demonstration (the E-CROPS project). , 2013, , .		23
129	An analysis of parallel-read sequential-write systems. Performance Evaluation, 1981, 1, 62-69.	1.2	22
130	Adaptive workload distribution for local and remote Clouds. , 2016, , .		22
131	Performance Optimization With Energy Packets. IEEE Systems Journal, 2019, 13, 3770-3780.	4.6	22
132	A class of genetic algorithms with analytical solution. Robotics and Autonomous Systems, 1997, 22, 59-64.	5.1	21
133	Wafer surface reconstruction from top–down scanning electron microscope images. Microelectronic Engineering, 2004, 75, 216-233.	2.4	21
134	Adaptive Random Re-Routing for Differentiated QoS in Sensor Networks. Computer Journal, 2010, 53, 1052-1061.	2.4	21
135	G-Networks with Adders. Future Internet, 2017, 9, 34.	3.8	21
136	Block loss reduction in ATM networks. Computer Communications, 1996, 19, 1077-1091.	5.1	20
137	Packet Delay and Energy Consumption in Non-homogeneous Networks. Computer Journal, 2012, 55, 950-964.	2.4	20
138	Product-Form Solution for Cascade Networks With Intermittent Energy. IEEE Systems Journal, 2019, 13, 918-927.	4.6	20
139	Neural network architectures for the detection of SYN flood attacks in IoT systems. , 2020, , .		20
140	Reconstruction of Large-Scale Gene Regulatory Networks Using Bayesian Model Averaging. IEEE Transactions on Nanobioscience, 2012, 11, 259-265.	3.3	19
141	Identifying disease candidate genes via large-scale gene network analysis. International Journal of Data Mining and Bioinformatics, 2014, 10, 175.	0.1	19
142	Performance evaluation of the HDLC protocol. Computer Networks (1976), 1978, 2, 409-415.	0.3	18
143	FLEXSIM: A flexible manufacturing system simulator. European Journal of Operational Research, 1991, 53, 149-165.	5.7	18
144	A Sustainable Model for Integrating Current Topics in Machine Learning Research Into the Undergraduate Curriculum. IEEE Transactions on Education, 2009, 52, 503-512.	2.4	18

#	Article	IF	Citations
145	Information-aware traffic reduction for wireless sensor networks. , 2009, , .		18
146	Demonstrating cognitive packet network resilience to worm attacks. , 2010, , .		18
147	Security for Internet of Things: The SerloT Project. , 2018, , .		18
148	Energy Life-Time of Wireless Nodes with Network Attacks and Mitigation. , 2018, , .		18
149	Optimum checkpoints for programs with loops. Simulation Modelling Practice and Theory, 2019, 97, 101951.	3.8	18
150	Biological Metaphors for Agent Behavior. Lecture Notes in Computer Science, 2004, , 667-675.	1.3	18
151	MINIMUM GRAPH VERTEX COVERING WITH THE RANDOM NEURAL NETWORK. , 1992, , 139-147.		18
152	Random Injection Control of Multiprogramming in Virtual Memory. IEEE Transactions on Software Engineering, 1978, SE-4, 2-17.	5.6	17
153	Hyperion Next-Generation Battlespace Information Services. Computer Journal, 2007, 50, 632-645.	2.4	17
154	Anomaly detection in gene expression via stochastic models of gene regulatory networks. BMC Genomics, 2009, 10, S26.	2.8	17
155	Routing and G-Networks to Optimise Energy and Quality of Service in Packet Networks. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2011, , 163-173.	0.3	17
156	Storms in mobile networks. , 2014, , .		17
157	A Diffusion Model for Energy Harvesting Sensor Nodes. , 2016, , .		17
158	Research and Innovation Action forÂtheÂSecurity of the Internet of Things: The SerIoT Project. Communications in Computer and Information Science, 2018, , 101-118.	0.5	17
159	Peer Prediction-Based Trustworthiness Evaluation and Trustworthy Service Rating in Social Networks. IEEE Transactions on Information Forensics and Security, 2019, 14, 1582-1594.	6.9	17
160	Intelligent Navigation Systems for Building Evacuation., 2011,, 339-345.		17
161	Adaptive Allocation of Central Processing Unit Quanta. Journal of the ACM, 1976, 23, 97-102.	2.2	16
162	Power Savings in Packet Networks via Optimised Routing. Mobile Networks and Applications, 2012, 17, 152-159.	3.3	16

#	Article	lF	CITATIONS
163	Spatial Computers for Emergency Support. Computer Journal, 2013, 56, 1399-1416.	2.4	16
164	Search in the universe of big networks and data. IEEE Network, 2014, 28, 20-25.	6.9	16
165	Single-cell based random neural network for deep learning. , 2017, , .		16
166	Disruption tolerant communications for large scale emergency evacuation., 2013,,.		15
167	Routing diverse evacuees with Cognitive Packets. , 2014, , .		15
168	Efficient Feature Selection for Static Analysis Vulnerability Prediction. Sensors, 2021, 21, 1133.	3.8	15
169	Networking with Cognitive Packets. Lecture Notes in Computer Science, 2002, , 259-264.	1.3	15
170	Deep Learning with Dense Random Neural Networks. Advances in Intelligent Systems and Computing, 2018, , 3-18.	0.6	15
171	KONFIDO: An OpenNCP-Based Secure eHealth Data Exchange System. Communications in Computer and Information Science, 2018, , 11-27.	0.5	15
172	MIRAI Botnet Attack Detection with Auto-Associative Dense Random Neural Network., 2021,,.		15
173	On the size of projections: I. Information Processing Letters, 1982, 14, 18-21.	0.6	14
174	Load sharing in distributed systems with failures. Acta Informatica, 1988, 25, 677-689.	0.5	14
175	Defending networks against denial-of-service attacks. , 2004, , .		14
176	Quality of information: An empirical approach. , 2008, , .		14
177	Robotic wireless network connection of civilians for emergency response operations. , 2008, , .		14
178	Packet transmission with K energy packets in an energy harvesting sensor. , 2016, , .		14
179	IoT Network Attack Detection and Mitigation. , 2020, , .		14
180	Analysis of Automated Auctions. Lecture Notes in Computer Science, 2006, , 1-12.	1.3	14

#	Article	IF	CITATIONS
181	A queue with server of walking type (autonomous service). Advances in Applied Probability, 1978, 10, 317-317.	0.7	13
182	Queueing performance under Network Coding. , 2009, , .		13
183	Energy loss through standby and leakage in energy harvesting wireless sensors. , 2015, , .		13
184	Auction-Based Data Transaction in Mobile Networks: Data Allocation Design and Performance Analysis. IEEE Transactions on Mobile Computing, 2020, 19, 1040-1055.	5.8	13
185	Learning neural networks for detection and classification of synchronous recurrent transient signals. Signal Processing, 1998, 64, 233-247.	3.7	12
186	Performance considerations in totally mobile wireless. Performance Evaluation, 1999, 36-37, 387-399.	1.2	12
187	Recursive Routing in the Cognitive Packet Network. , 2007, , .		12
188	Fast message dissemination for emergency communications. , 2010, , .		12
189	Capacity based evacuation with dynamic exit signs. , 2014, , .		12
190	Data Transaction Modeling in Mobile Networks: Contract Mechanism and Performance Analysis. , 2017, , .		12
191	Minimum Graph Covering with the Random Neural Network Model. , 1992, , 215-222.		12
192	Stationary deterministic flows in discrete systems 1. Theoretical Computer Science, 1983, 23, 107-127.	0.9	11
193	Controlling Access to Preserve QoS in a Self-Aware Network. , 2007, , .		11
194	Autonomous navigation systems for emergency management in buildings., 2011,,.		11
195	Security for smart mobile networks: The NEMESYS approach. , 2013, , .		11
196	Cognitive users with useful vacations. , 2013, , .		11
197	Security for smart mobile networks: The NEMESYS approach. , 2013, , .		11
198	A Software Defined Self-Aware Network: The Cognitive Packet Network. , 2014, , .		11

#	Article	IF	Citations
199	Errors and Power When Communicating With Spins. IEEE Transactions on Emerging Topics in Computing, 2015, 3, 483-488.	4.6	11
200	The Random Neural Network with Deep Learning Clusters in Smart Search. Neurocomputing, 2020, 396, 394-405.	5.9	11
201	Time-Dependent Performance of a Multi-Hop Software Defined Network. Applied Sciences (Switzerland), 2021, 11, 2469.	2.5	11
202	Smart SDN Management of Fog Services to Optimize QoS and Energy. Sensors, 2021, 21, 3105.	3.8	11
203	Design of a Mobile Agent-Based Adaptive Communication Middleware for Federations of Critical Infrastructure Simulations. Lecture Notes in Computer Science, 2010, , 34-49.	1.3	11
204	The distribution of a program in primary and fast buffer storage. Communications of the ACM, 1973, 16, 431-434.	4.5	10
205	Analysis of a conveyor queue in a flexible manufacturing system. European Journal of Operational Research, 1988, 35, 382-392.	5 . 7	10
206	Optimum power level for communications with interference., 2013,,.		10
207	Reactive and proactive congestion management for emergency building evacuation. , 2013, , .		10
208	Error and energy when communicating with spins. , 2014, , .		10
209	Multi-layer neural networks for quality of service oriented server-state classification in cloud servers. , 2017, , .		10
210	Investigating the Interaction between Energy Consumption, Quality of Service, Reliability, Security, and Maintainability of Computer Systems and Networks. SN Computer Science, 2021, 2, 23.	3.6	10
211	A hierarchical model for quantifying software security based on static analysis alerts and software metrics. Software Quality Journal, 2021, 29, 431-507.	2.2	10
212	Routing Emergency Evacuees with Cognitive Packet Networks. Lecture Notes in Electrical Engineering, 2013, , 295-303.	0.4	10
213	An Approximate Model for Bidders in Sequential Automated Auctions. Lecture Notes in Computer Science, 2009, , 70-79.	1.3	10
214	G-Networks Based Two Layer Stochastic Modeling of Gene Regulatory Networks with Post-Translational Processes. Interdisciplinary Bio Central, 2011, 3, 1-6.	0.1	10
215	Distributed associative memory and the computation of membership functions. Information Sciences, 1991, 57-58, 171-180.	6.9	9
216	Guest editorial: intelligent techniques in high speed networks. IEEE Journal on Selected Areas in Communications, 2000, 18, 145-149.	14.0	9

#	Article	IF	Citations
217	CPN and QoS Driven Smart Routing in Wired and Wireless Networks. Lecture Notes in Computer Science, 2004, , 68-87.	1.3	9
218	Oscillations in a Bio-Inspired Routing Algorithm. , 2007, , .		9
219	Ubiquity symposium: Natural Computation. Ubiquity, 2011, 2011, .	0.2	9
220	Wireless networks in emergency management. , 2012, , .		9
221	Resilience and security of opportunistic communications for emergency evacuation. , 2012, , .		9
222	Investigating the Tradeoffs between Power Consumption and Quality of Service in a Backbone Network. Future Internet, 2013, 5, 268-281.	3.8	9
223	Experiments with Smart Workload Allocation to Cloud Servers. , 2015, , .		9
224	Demonstrating Voice over an Autonomic Network. , 2015, , .		9
225	The Random Neural Network in a neurocomputing application for Web search. Neurocomputing, 2018, 280, 123-134.	5.9	9
226	Optimisation of Power Consumption in Wired Packet Networks. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2009, , 717-729.	0.3	9
227	Stationary deterministic flows: II. The single-server queue. Theoretical Computer Science, 1987, 52, 269-280.	0.9	8
228	Modelling Large Scale Autonomous Systems. , 2006, , .		8
229	Performance Trade-Offs in a Network Coding Router. , 2010, , .		8
230	Self-Aware Networks., 2011,,.		8
231	Cognitive and self-selective routing for sensor networks. Computational Management Science, 2011, 8, 237-258.	1.3	8
232	Graph and analytical models for emergency evacuation. , 2013, , .		8
233	Transient Behaviour of a Network Router. , 2020, , .		8
234	Self-Aware Networks and Quality of Service. Lecture Notes in Computer Science, 2003, , 901-908.	1.3	8

#	Article	IF	CITATIONS
235	Machine Learning to Predict Toxicity of Compounds. Lecture Notes in Computer Science, 2018, , 335-345.	1.3	8
236	Real-Time Traffic over the Cognitive Packet Network. Communications in Computer and Information Science, 2016, , 3-21.	0.5	8
237	Performance of Auctions and Sealed Bids. Lecture Notes in Computer Science, 2009, , 30-43.	1.3	8
238	Randomization of Data Generation Times Improves Performance of Predictive IoT Networks. , 2021, , .		8
239	Diffusion Analysis Improves Scalability of IoT Networks to Mitigate the Massive Access Problem. , 2021, , .		8
240	On the availability of a distributed computer system with failing components. Performance Evaluation Review, 1985, 13, 6-13.	0.6	7
241	Virus tests to maximize availability of software systems. Theoretical Computer Science, 1994, 125, 131-147.	0.9	7
242	<title>Random neural network recognition of shaped objects in strong clutter</title> ., 1998, 3307, 22.		7
243	Enabling Simulation with Augmented Reality. Lecture Notes in Computer Science, 2004, , 290-310.	1.3	7
244	CAM04-1: Admission Control in Self Aware Networks. , 2006, , .		7
245	Fusing terrain and goals: agent control in urban environments. , 2006, 6242, 71.		7
246	Adaptive prefetching algorithm in disk controllers. Performance Evaluation, 2008, 65, 382-395.	1.2	7
247	Spatial Computers for Emergency Management. , 2011, , .		7
248	Directional Navigation Improves Opportunistic Communication for Emergencies. Sensors, 2014, 14, 15387-15399.	3.8	7
249	Detection and mitigation of signaling storms in mobile networks. , 2016, , .		7
250	Intelligent search with deep learning clusters. , 2017, , .		7
251	Optimum Interval for Application-level Checkpoints., 2019,,.		7
252	Smart SDN Management of Fog Services. , 2020, , .		7

#	Article	IF	CITATIONS
253	G-Network Modelling Based Abnormal Pathway Detection in Gene Regulatory Networks., 2011,, 257-263.		7
254	Using Energy Criteria to Admit Flows in a Wired Network., 2013,, 63-72.		7
255	MULTIPLE CLASS G-NETWORKS., 1992,, 149-157.		7
256	Control policies in CSMA local area networks. Performance Evaluation Review, 1982, 11, 233-240.	0.6	7
257	Countering Mobile Signaling Storms with Counters. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2016, , 199-209.	0.3	7
258	<title>Autonomous search for mines</title> ., 1997,,.		6
259	Biologically inspired autonomous systems. Robotics and Autonomous Systems, 1997, 22, 1-2.	5.1	6
260	<title>Random neural network texture model</title> ., 2000, 3962, 104.		6
261	Adaptive control of pre-fetching. Performance Evaluation, 2001, 46, 177-192.	1.2	6
262	Link quality-aware routing., 2004,,.		6
263	Information Quality aware sensor network services. , 2008, , .		6
264	A random neural network approach to an assets to tasks assignment problem. Proceedings of SPIE, 2010, , .	0.8	6
265	Search in non-homogenous random environments?. Performance Evaluation Review, 2011, 39, 37-39.	0.6	6
266	Scalable optimization in grid, cloud, and intelligent network computing – foreword. Concurrency Computation Practice and Experience, 2013, 25, 1719-1721.	2.2	6
267	Deep Learning Clusters in the Cognitive Packet Network. Neurocomputing, 2020, 396, 406-428.	5.9	6
268	Mitigating for Signalling Attacks in UMTS Networks. , 2014, , 159-165.		6
269	Performance of an Autonomous Energy Harvesting Wireless Sensor. Lecture Notes in Electrical Engineering, 2016, , 35-43.	0.4	6
270	The Deep Learning Random Neural Network with a Management Cluster. Smart Innovation, Systems and Technologies, 2018, , 185-195.	0.6	6

#	Article	IF	CITATIONS
271	Analysing Bidder Performance in Randomised and Fixed-Deadline Automated Auctions. Lecture Notes in Computer Science, 2010, , 42-51.	1.3	6
272	G-Nets and Learning Recurrent Random Networks. , 1992, , 943-946.		6
273	Reconstruction of Large-Scale Gene Regulatory Networks Using Bayesian Model Averaging. , 2011, , .		6
274	Dependable execution of distributed programs. Simulation Modelling Practice and Theory, 1995, 3, 1-16.	0.3	5
275	Optimal Policies for ATM Cell Scheduling and Rejection. Telecommunication Systems, 2001, 18, 331-358.	2.5	5
276	A mathematical approach for mission planning and rehearsal. , 2006, , .		5
277	Admission of Packet Flows in a Self-Aware Network. , 2007, , .		5
278	Adaptive Packet Prioritisation for Wireless Sensor Networks. , 2009, , .		5
279	Pervasive emergency support systems for building evacuation. , 2012, , .		5
280	Energy packet model optimisation with approximate matrix inversion. , 2016, , .		5
281	Improve cybersecurity of C-ITS Road Side Infrastructure Installations: the SerIoT - Secure and Safe IoT approach. , 2019, , .		5
282	Random Neural Network for Lightweight Attack Detection in the IoT. Lecture Notes in Computer Science, 2021, , 79-91.	1.3	5
283	G-Networks: Multiple Classes of Positive Customers, Signals, and Product Form Results. Lecture Notes in Computer Science, 2002, , 1-16.	1.3	5
284	Optimal Fog Services Placement in SDN IoT Network Using Random Neural Networks and Cognitive Network Map. Lecture Notes in Computer Science, 2020, , 78-89.	1.3	5
285	An Implementation of Voice Over IP in the Cognitive Packet Network. , 2014, , 33-40.		5
286	A Cooperative Emergency Navigation Framework Using Mobile Cloud Computing., 2014,, 41-48.		5
287	Self-aware Computing Systems: Open Challenges and Future Research Directions. , 2017, , 709-722.		5
288	Deep Learning with Random Neural Networks. Lecture Notes in Networks and Systems, 2018, , 450-462.	0.7	5

#	Article	IF	CITATIONS
289	A Framework for Autonomic Networked Auctions. , 2007, , .		5
290	On the availability of a distributed computer system with failing components. , 1985, , .		4
291	G-networks. , 1995, , .		4
292	Call establishment overload in large ATM networks. Performance Evaluation, 1997, 31, 33-49.	1.2	4
293	Execution of compute-intensive applications into parallel machines. Information Sciences, 1997, 97, 83-124.	6.9	4
294	<title>Image processing with the random neural network</title> ., 1998, 3307, 38.		4
295	Approximate analysis of coupled queueing in ATM networks. IEEE Communications Letters, 1999, 3, 31-33.	4.1	4
296	Review of Experiments in Self-Aware Networks. Lecture Notes in Computer Science, 2003, , 1-8.	1.3	4
297	Towards autonomic networks. , 2006, , .		4
298	Analytical Solution of Gene Regulatory Networks. IEEE International Conference on Fuzzy Systems, 2007, , .	0.0	4
299	A platform for pervasive combinatorial trading with opportunistic self-aggregation. , 2008, , .		4
300	A distributed admission control mechanism for multi-criteria QoS. , 2010, , .		4
301	Distributed networked emergency evacuation and rescue. , 2012, , .		4
302	The Random Neural Network as a Bonding Model for Software Vulnerability Prediction. Lecture Notes in Computer Science, 2021, , 102-116.	1.3	4
303	Developing an infrastructure for secure patient summary exchange in the EU context: Lessons learned from the KONFIDO project. Health Informatics Journal, 2021, 27, 146045822110214.	2.1	4
304	Interoperating Infrastructures in Emergencies. , 2013, , 123-130.		4
305	Energy-Aware Admission Control for Wired Networks. Lecture Notes in Electrical Engineering, 2013, , 117-125.	0.4	4
306	Adaptive Routing for Equitable Load Balancing. Teletraffic Science and Engineering, 1994, 1, 1465-1474.	0.4	4

#	Article	IF	CITATIONS
307	Optimum Checkpoints for Time and Energy. , 2020, , .		4
308	Function Approximation by Random Neural Networks with a Bounded Number of Layers. Advances in Computer Science and Engineering, 2006, , 35-58.	0.2	4
309	G-networks with resets. Performance Evaluation Review, 2001, 29, 19-20.	0.6	4
310	Adaptive Random Re-Routing for Differentiated QoS in Sensor Networks. , 0, , .		4
311	Learning in the Recurrent Random Neural Network. , 1992, , 1-12.		3
312	G-networks. Performance Evaluation Review, 1995, 23, 58-59.	0.6	3
313	Random neural network recognition of shaped objects in strong clutter. Lecture Notes in Computer Science, 1997, , 961-966.	1.3	3
314	Sensor fusion for mine detection with the RNN. Lecture Notes in Computer Science, 1997, , 937-942.	1.3	3
315	<title>Video compression with wavelets and random neural network approximations $<$ /title>., 2001, , .		3
316	A Distributed Simulation Platform for Urban Security. , 2012, , .		3
317	Top-k query result completeness verification in sensor networks., 2013,,.		3
318	Quality of information and energy provisioning (invited paper). , 2013, , .		3
319	Cognitive packet network for QoS adaptation of asymmetric connections. , 2014, , .		3
320	Ubiquity symposium: The science in computer science: natural computation. Ubiquity, 2014, 2014, 1-9.	0.2	3
321	Networked Data Transaction in Mobile Networks: A Prediction-based Approach Using Auction. , 2018, , .		3
322	A Reinforcement Learning Approach toÂAdaptive Forwarding in Named Data Networking. Communications in Computer and Information Science, 2018, , 211-219.	0.5	3
323	Non-negative Autoencoder with Simplified Random Neural Network. , 2019, , .		3
324	ACCURATE, ENERGY-EFFICIENT CLASSIFICATION WITH SPIKING RANDOM NEURAL NETWORK. Probability in the Engineering and Informational Sciences, 2021, 35, 51-61.	0.8	3

#	Article	IF	CITATIONS
325	Minimizing Energy and Computation in Long-Running Software. Applied Sciences (Switzerland), 2021, 11, 1169.	2.5	3
326	Autonomous Search for Information in an Unknown Environment. Lecture Notes in Computer Science, 1999, , 47-60.	1.3	3
327	Stochastic Gene Expression Model Base Gene Regulatory Networks. Springer Proceedings in Physics, 2010, , 235-244.	0.2	3
328	Users and Services in Intelligent Networks. Lecture Notes in Computer Science, 2005, , 30-45.	1.3	3
329	A Data Plane Approach for Detecting Control Plane Anomalies in Mobile Networks. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2016, , 210-221.	0.3	3
330	Botnet Attack Detection withÂlncremental Online Learning. Communications in Computer and Information Science, 2022, , 51-60.	0.5	3
331	Scheduling of distributed tasks for survivability of the application. Information Sciences, 1997, 97, 179-198.	6.9	2
332	A multiple criteria, measurement-based admission control mechanism for Self-Aware Networks. , 2008, , .		2
333	Discussant Contributions for the Computer Journal Lecture by Erol Gelenbe. Computer Journal, 2008, 51, 731-734.	2.4	2
334	Adaptive packet prioritisation for large wireless sensor networks. Telecommunication Systems, 2011, 48, 125-150.	2.5	2
335	Near-optimal emergency evacuation with rescuer allocation. , 2014, , .		2
336	Search in Random Media with Lévy Flights. , 2014, , 366-389.		2
337	Emergency Navigation in Confined Spaces Using Dynamic Grouping. , 2015, , .		2
338	Cloud enabled emergency navigation using faster-than-real-time simulation. , 2015, , .		2
339	Sharing Energy for Optimal Edge Performance. Lecture Notes in Computer Science, 2020, , 24-36.	1.3	2
340	Self-aware Networks: The Cognitive Packet Network and Its Performance., 2017,, 659-668.		2
341	Modelling Gene Regulatory Networks. Lecture Notes in Computer Science, 2008, , 19-32.	1.3	2
342	Gradient Optimisation for Network Power Consumption. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2012, , 125-134.	0.3	2

#	Article	IF	CITATIONS
343	An Approach to Quality of Service. Lecture Notes in Computer Science, 2004, , 1-10.	1.3	2
344	Approximate Analysis of a Round Robin Scheduling Scheme for Network Coding. Lecture Notes in Computer Science, 2009, , 212-217.	1.3	2
345	Secure Cross-Border Exchange of Health Related Data: The KONFIDO Approach. Lecture Notes in Computer Science, 2019, , 318-327.	1.3	2
346	The IoTAC Software Security-by-Design Platform: Concept, Challenges, and Preliminary Overview., 2022,,.		2
347	Autonomous search for mines: II. Hierarchical search using sensory data. , 1998, , .		1
348	Learning in genetic algorithms. Lecture Notes in Computer Science, 1998, , 268-279.	1.3	1
349	<title>Learning and generating color textures with recurrent multiple class random neural networks</title> ., 2001, 4305, 49.		1
350	Editorial: Building Adaptivity into Computer Networks. Computer Journal, 2006, 49, 136-136.	2.4	1
351	Packets travelling in non-homogeneous networks. , 2011, , .		1
352	Identifying Critical Sub-systems in the Simulation of Cyber-physical Systems. , 2012, , .		1
353	A Software Defined Self-Aware Network: The Cognitive Packet Network. , 2013, , .		1
354	Directional enhancements for emergency navigation. , 2014, , .		1
355	Supply Chains for Perishable Goods and G-networks. , 2019, , .		1
356	Software Defined Network Dynamics via Diffusions. Lecture Notes in Computer Science, 2021, , 29-47.	1.3	1
357	Analysis of an Automated Auction with Concurrent Multiple Unit Acceptance Capacity. Lecture Notes in Computer Science, 2010, , 382-396.	1.3	1
358	A Parametric Study of CPN's Convergence Process. , 2014, , 13-20.		1
359	Dependable Execution of Distributed Programs. , 1994, , 171-178.		1
360	Markov and Non-Markov Probabilistic Models of Interacting Flows of Annihilating Particles. Communications in Computer and Information Science, 2016, , 281-291.	0.5	1

#	Article	IF	CITATIONS
361	SDK4ED: One-click platform for Energy-aware, Maintainable and Dependable Applications. , 2022, , .		1
362	Recent results on queues with time variations. Stochastic Processes and Their Applications, 1987, 26, 220-221.	0.9	0
363	<title>Feature-based RNN target recognition</title> ., 1998, 3370, 508.		0
364	<title>Optimum cell duplication or replication for multicast applications</title> ., 1998, 3530, 346.		0
365	Radial signatures and their application to target recognition. , 1999, , .		O
366	< title>Evaluating neural network reconstruction of wafer profile from electron microscopy $<$ /title>. , 2001, , .		0
367	Advanced Performance Modeling. Performance Evaluation, 2001, 46, 63-64.	1.2	O
368	<title>Simulating autonomous agents wtih augmented reality</title> ., 2002, 4716, 116.		0
369	Editorial: Introduction to the Special Issue. Computer Journal, 2007, 50, 630-631.	2.4	O
370	Travel Time and Energy in Wireless Networks with Duplicate Packets. , 2007, , .		0
371	Introduction. Stochastic networks: from theory to practice. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2008, 464, 2151-2152.	2.1	O
372	Stochastic gene expression modeling with hill function for switch-like gene responses. , 2010, , .		O
373	Contrastive Learning in Random Neural Networks and its Relation to Gradient-Descent Learning. , 2011, , 511-517.		0
374	Cognitive Packets in Large Virtual Networks. , 2013, , 13-20.		0
375	Introduction to the Special Issue on the French–Polish Collaboration in Mathematical Models of Computer Systems, Networks and Bioinformatics. SN Computer Science, 2020, 1, 1.	3.6	O
376	Reinforcement Learning and Energy-Aware Routing. , 2021, , .		0
377	ENERGY AWARENESS AND AD HOC ROUTING. , 2003, , .		0
378	Cognitive Routing in Packet Networks. Lecture Notes in Computer Science, 2004, , 625-632.	1.3	0

#	Article	IF	CITATIONS
379	User Cooperation and Search in Intelligent Networks. Lecture Notes in Computer Science, 2006, , 41-56.	1.3	0
380	Hopfield Energy of Random Nets. , 1994, , 401-404.		0
381	Autonomous Search in Complex Spaces. Lecture Notes in Computer Science, 1998, , 13-28.	1.3	0
382	Incentive mechanism for collective coordination in an urban intelligent transportation system using G-networks. , 2020, , .		0
383	Assessing And Evaluating Our Crcd Experiences At The University Of Central Florida: An Nsf Project. , 0, , .		0