Christopher Rose

List of Publications by Year
in descending order

47 papers	1,299 citations	567281 15 h-index	414414 32 g-index
50 all docs	50 docs citations	50 times ranked	683 citing authors

#	ARTICLE	IF	CITATIONS
1	Minimizing the average cost of paging under delay constraints. Wireless Networks, 1995, 1, 211-219.	3.0	271
2	Wireless systems and interference avoidance. IEEE Transactions on Wireless Communications, 2002, 1, 415-428.	9.2	177
3	Inscribed matter as an energy-efficient means of communication with an extraterrestrial civilization. Nature, 2004, 431, 47-49.	27.8	124
4	CDMA codeword optimization: interference avoidance and convergence via class warfare. IEEE Transactions on Information Theory, 2001, 47, 2368-2382.	2.4	74
5	State-based paging/registration: a greedy technique. IEEE Transactions on Vehicular Technology, 1999, 48, 166-173.	6.3	60
6	Mean internodal distance in regular and random multihop networks. IEEE Transactions on Communications, 1992, 40, 1310-1318.	7.8	47
7	Simultaneous Water Filling in Mutually Interfering Systems. IEEE Transactions on Wireless Communications, 2007, 6, 1102-1113.	9.2	47
8	Ensemble polling strategies for increased paging capacity in mobile communication networks. Wireless Networks, 1997, 3, 159-167.	3.0	46
9	Genetic algorithms applied to cellular call admission: local policies. IEEE Transactions on Vehicular Technology, 1997, 46, 72-79.	6.3	44
10	Multicomponent molecular memory. Nature Communications, 2020, 11, 691.	12.8	40
11	Inscribed Matter Communication: Part I. IEEE Transactions on Molecular, Biological, and Multi-Scale Communications, 2016, 2, 209-227.	2.1	32
12	Minimum distance automata in parallel networks for optimum classification. Neural Networks, 1989, 2, 127-132.	5.9	23
13	Spatiotemporal information preservation in turbulent vapor plumes. Applied Physics Letters, 2018, 112, 264103.	3.3	19
14	Encoding information in synthetic metabolomes. PLoS ONE, 2019, 14, e0217364.	2.5	18
15	Principles of Information Storage in Small-Molecule Mixtures. IEEE Transactions on Nanobioscience, 2020, 19, 378-384.	3.3	17
16	Analysis of a mobile-assisted adaptive location management strategy. Mobile Networks and Applications, 1996, 1, 105-112.	3.3	16
17	A fundamental framework for molecular communication channels: Timing & payload. , 2015, , .		16
18	Interference Avoidance and Multiaccess Vector Channels. IEEE Transactions on Communications, 2007, 55, 1466-1471.	7.8	15

#	Article	IF	Citations
19	Signaling with identical tokens: Lower bounds with energy constraints. , 2013, , .		15
20	Inscribed Matter Communication: Part II. IEEE Transactions on Molecular, Biological, and Multi-Scale Communications, 2016, 2, 228-239.	2.1	15
21	Capacity of molecular channels with imperfect particle-intensity modulation and detection. , 2017, , .		14
22	Correlated Transmission and Detection of Concentration-Modulated Chemical Vapor Plumes. IEEE Sensors Journal, 2018, 18, 6504-6509.	4.7	14
23	Heterogeneity in susceptibility dictates the order of epidemic models. Journal of Theoretical Biology, 2021, 528, 110839.	1.7	14
24	Capacities and Optimal Input Distributions for Particle-Intensity Channels. IEEE Transactions on Molecular, Biological, and Multi-Scale Communications, 2020, 6, 220-232.	2.1	14
25	Maximizing the determinant for a special class of block-partitioned matrices. Mathematical Problems in Engineering, 2004, 2004, 49-61.	1.1	13
26	Signaling with identical tokens: Upper bounds with energy constraints. , 2014, , .		12
27	High Speed Chemical Vapor Communication Using Photoionization Detectors. , 2018, , .		12
28	Greedy SINR Maximization in Collaborative Multibase Wireless Systems. Eurasip Journal on Wireless Communications and Networking, 2004, 2004, 1.	2.4	11
29	Capacity Bounds on Point-to-Point Communication Using Molecules. Proceedings of the IEEE, 2019, 107, 1342-1355.	21.3	11
30	High-Dimensional Time Series Feature Extraction for Low-Cost Machine Olfaction. IEEE Sensors Journal, 2020, , 1-1.	4.7	11
31	Genetic algorithms and call admission to telecommunications networks. Computers and Operations Research, 1996, 23, 485-499.	4.0	9
32	An additive exponential noise channel with a transmission deadline. , 2011, , .		8
33	Parallelized Linear Classification with Volumetric Chemical Perceptrons. , 2018, , .		7
34	High Speed Chemical Vapor Communication Using Photoionization Detectors in Turbulent Flow. IEEE Transactions on Molecular, Biological, and Multi-Scale Communications, 2018, 4, 160-170.	2.1	7
35	Interference avoidance and multiuser MIMO systems. International Journal of Satellite Communications and Networking, 2003, 21, 143-161.	1.8	5
36	Coping with Uncertainty in Mobile Wireless Networks. , 2005, , 189-204.		4

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37	Leveraging autocatalytic reactions for chemical domain image classification. Chemical Science, 2021, 12, 5464-5472.	7.4	4
38	Scheduling arrivals to queues for minimum average blocking: The S(n)/M/C/C system. Computers and Operations Research, 1995, 22, 793-806.	4.0	3
39	Channel Probing under a Power Budget. , 2006, , .		3
40	Computing with Chemicals: Perceptrons Using Mixtures of Small Molecules. , 2018, , .		2
41	MIMO power strategies for limited transmitter CSI. , 2010, , .		1
42	Time Series Feature Extraction for Machine Olfaction. , 2019, , .		1
43	Implementing parallel arithmetic via acetylation and its application to chemical image processing. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2021, 477, .	2.1	1
44	Secret messaging with endogenous chemistry. Scientific Reports, 2021, 11, 13960.	3.3	1
45	Guest Editorial Series on Molecular, Biological, and Multiscale Communication (First Issue). IEEE Journal on Selected Areas in Communications, 2014, 32, 2313-2314.	14.0	0
46	State estimation, wireless tropes, demons and uncertainty. , 2016, , .		0
47	A General Upper Bound on Point-to-Point Particle Timing Channel Capacity Under Constant Particle Emission Intensity. , 2019, , .		0