Rahul Vaze

List of Publications by Year
in descending order

69 papers	1,428 citations	623734 14 h-index	454955 30 g-index
70 all docs	70 docs citations	70 times ranked	1323 citing authors

#	Article	IF	Citations
1	Analysis of Blockage Effects on Urban Cellular Networks. IEEE Transactions on Wireless Communications, 2014, 13, 5070-5083.	9.2	506
2	On the Capacity and Diversity-Multiplexing Tradeoff of the Two-Way Relay Channel. IEEE Transactions on Information Theory, 2011, 57, 4219-4234.	2.4	160
3	Transmission Capacity of Ad-hoc Networks With Multiple Antennas Using Transmit Stream Adaptation and Interference Cancellation. IEEE Transactions on Information Theory, 2012, 58, 780-792.	2.4	96
4	Using random shape theory to model blockage in random cellular networks. , 2012, , .		72
5	Throughput-Delay-Reliability Tradeoff with ARQ in Wireless Ad Hoc Networks. IEEE Transactions on Wireless Communications, 2011, 10, 2142-2149.	9.2	47
6	Two-Way Transmission Capacity of Wireless Ad-hoc Networks. IEEE Transactions on Wireless Communications, 2011, 10, 1966-1975.	9.2	37
7	Competitive ratio analysis of online algorithms to minimize packet transmission time in energy harvesting communication system. , 2013, , .		33
8	Optimally Approximating the Coverage Lifetime of Wireless Sensor Networks. IEEE/ACM Transactions on Networking, 2017, 25, 98-111.	3.8	30
9	Dynamic Power Allocation for Maximizing Throughput in Energy-Harvesting Communication System. IEEE/ACM Transactions on Networking, 2014, 22, 1621-1630.	3.8	29
10	Transmission Capacity of Spectrum Sharing Ad Hoc Networks with Multiple Antennas. IEEE Transactions on Wireless Communications, 2011, 10, 2334-2340.	9.2	26
11	Throughput Maximization With an Average Age of Information Constraint in Fading Channels. IEEE Transactions on Wireless Communications, 2021, 20, 481-494.	9.2	26
12	Transmission capacity of ad-hoc networks with multiple antennas using transmit stream adaptation and interference cancelation. , 2009, , .		25
13	Sub-Modularity and Antenna Selection in MIMO Systems. IEEE Communications Letters, 2012, 16, 1446-1449.	4.1	25
14	Not Just Age but Age and Quality of Information. IEEE Journal on Selected Areas in Communications, 2021, 39, 1325-1338.	14.0	21
15	Critical database size for effective caching. , 2015, , .		19
16	Online Energy-Efficient Packet Scheduling for a Common Deadline With and Without Energy Harvesting. IEEE Journal on Selected Areas in Communications, 2016, 34, 3661-3674.	14.0	17
17	Minimization of Age of Information in Fading Multiple Access Channels. IEEE Journal on Selected Areas in Communications, 2021, 39, 1471-1484.	14.0	17
18	To Code in Space and Time or Not in Multihop Relay Channels. IEEE Transactions on Signal Processing, 2009, 57, 2736-2747.	5.3	16

#	Article	IF	Citations
19	Percolation and connectivity on the signal to interference ratio graph. , 2012, , .		16
20	Transmission capacity of wireless ad hoc networks with energy harvesting nodes. , 2013, , .		11
21	Optimal Offline and Competitive Online Strategies for Transmitter–Receiver Energy Harvesting. IEEE Transactions on Information Theory, 2016, 62, 4674-4695.	2.4	11
22	Minimizing the Sum of Age of Information and Transmission Cost under Stochastic Arrival Model. , 2021, , .		11
23	Game of Ages in a Distributed Network. IEEE Journal on Selected Areas in Communications, 2021, 39, 1240-1249.	14.0	10
24	Combinatorial Resource Allocation Using Submodularity of Waterfilling. IEEE Transactions on Wireless Communications, 2016, 15, 206-216.	9.2	9
25	Game of Ages. , 2020, , .		9
26	Long term throughput and approximate capacity of transmitter-receiver energy harvesting channel with fading. , 2014, , .		8
27	Multiple Transmitter Localization and Whitespace Identification Using Randomly Deployed Binary Sensors. IEEE Transactions on Cognitive Communications and Networking, 2016, 2, 358-369.	7.9	7
28	Capacity of cellular wireless network. , 2017, , .		7
29	Finite-horizon optimal transmission policies for energy harvesting sensors. , 2014, , .		6
30	Opportunistic scheduling in two-way wireless communication with energy harvesting. , 2017, , .		6
31	Multiple Server SRPT With Speed Scaling Is Competitive. IEEE/ACM Transactions on Networking, 2020, 28, 1739-1751.	3.8	6
32	Energy Harvesting Communications With Batteries Having Cycle Constraints. IEEE Transactions on Green Communications and Networking, 2020, 4, 263-276.	5.5	6
33	Flag Manifold-Based Precoder Interpolation Techniques for MIMO-OFDM Systems. IEEE Transactions on Communications, 2021, 69, 4347-4359.	7.8	6
34	Online Budgeted Truthful Matching. Performance Evaluation Review, 2017, 44, 3-6.	0.6	6
35	Online Algorithms for Basestation Allocation. IEEE Transactions on Wireless Communications, 2014, 13, 2966-2975.	9.2	5
36	Age of Information Minimization in Fading Multiple Access Channels. , 2020, , .		5

#	Article	IF	Citations
37	Deadline Constrained Packet Scheduling in the Presence of an Energy Harvesting Jammer. IEEE Transactions on Green Communications and Networking, 2021, 5, 278-290.	5.5	5
38	Online Energy Minimization Under A Peak Age of Information Constraint. , 2021, , .		5
39	Two-way transmission capacity of wireless ad-hoc networks. , 2010, , .		4
40	Transmission capacity of spectrum sharing ad-hoc networks with multiple antennas. , 2011, , .		4
41	Bounds on minimum number of anchors for iterative localization and its connections to bootstrap percolation. , 2012, , .		4
42	The online disjoint set cover problem and its applications. , 2015, , .		4
43	Online knapsack problem and budgeted truthful bipartite matching. , 2017, , .		4
44	Asymptotically Optimal Uncoordinated Power Control Policies for Energy Harvesting Multiple Access Channels With Decoding Costs. IEEE Transactions on Communications, 2019, 67, 2420-2435.	7.8	4
45	Percolation on the information theoretic secure SINR graph: Upper and lower bounds. , 2014, , .		3
46	Achieving nonzero information velocity in wireless networks. Annals of Applied Probability, 2017, 27, .	1.3	3
47	Predictive Quantization and Joint Time-Frequency Interpolation Technique for MIMO-OFDM Precoding. , 2019, , .		3
48	Distributed Algorithms for Efficient Learning and Coordination in Ad Hoc Networks. , 2019, , .		3
49	Achieving non-zero information velocity in wireless networks. , 2015, , .		2
50	Autoregressive cascades on random networks. Physica A: Statistical Mechanics and Its Applications, 2016, 447, 345-354.	2.6	2
51	When to arrive in a congested system: Achieving equilibrium via learning algorithm. , 2017, , .		2
52	Capacity of Cellular Wireless Networks. IEEE Transactions on Wireless Communications, 2019, 18, 1490-1503.	9.2	2
53	Throughput Maximization with an Average Age of Information Constraint in Fading Channels. , 2020, , .		2
54	Network speed scaling. Performance Evaluation, 2020, 144, 102145.	1.2	2

#	Article	IF	Citations
55	Mutual Information Based Output Dimensionality Reduction. , 2014, , .		1
56	On white-space detection, localization and coverage. , 2014, , .		1
57	Social optimum in social groups with give‑and‑take criterion. International Journal of Communication Systems, 2016, 29, 1219-1234.	2.5	1
58	Online energy efficient packet scheduling with a common deadline. , 2016, , .		1
59	On distributed power control for uncoordinated dual energy harvesting links: Performance bounds and near-optimal policies. , 2017, , .		1
60	On Optimal Scheduling and Power Control for Uncoordinated Multiple Access by Energy Harvesting Nodes. , 2018, , .		1
61	Energy-Delay-Distortion Problem. , 2018, , .		1
62	Energy Harvesting Communications with Batteries Having Full-Cycle Constraints. , 2019, , .		1
63	Speed Scaling with Multiple Servers under a Sum-Power Constraint. Performance Evaluation Review, 2022, 49, 45-50.	0.6	1
64	Communicating under channel phase uncertainty. , 2013, , .		0
65	Percolation on the Information-Theoretically Secure Signal to Interference Ratio Graph. Journal of Applied Probability, 2014, 51, 910-920.	0.7	0
66	Paging with multiple caches. , 2016, , .		0
67	Online Energy Harvesting Problem Over an Arbitrary Directed Acyclic Graph Network. IEEE Transactions on Green Communications and Networking, 2019, 3, 1106-1116.	5.5	0
68	Network Speed Scaling. Performance Evaluation Review, 2021, 48, 61-62.	0.6	0
69	Speed Scaling on Parallel Servers With MapReduce Type Precedence Constraints. IEEE/ACM Transactions on Networking, 2022, 30, 1509-1524.	3.8	0