Natarajan Gautam

List of Publications by Year
in descending order

35 papers	806 citations	759233 12 h-index	526287 27 g-index
39 all docs	39 docs citations	39 times ranked	854 citing authors

#	Article	IF	Citations
1	Age of Information for Single Buffer Systems With Vacation Server. IEEE Transactions on Network Science and Engineering, 2022, 9, 1198-1214.	6.4	5
2	Peak Age of Information in Priority Queuing Systems. IEEE Transactions on Information Theory, 2021, 67, 373-390.	2.4	29
3	On competitive analysis for polling systems. Naval Research Logistics, 2020, 67, 404-419.	2.2	2
4	Condition-Based Maintenance for Queues With Degrading Servers. IEEE Transactions on Automation Science and Engineering, 2019, 16, 1750-1762.	5.2	7
5	Joint production and maintenance operations in smart custom-manufacturing systems. IISE Transactions, 2019, 51, 406-421.	2.4	12
6	Demand Response in Data Centers: Integration of Server Provisioning and Power Procurement. IEEE Transactions on Smart Grid, 2019, 10, 4928-4938.	9.0	40
7	Optimizing for Tail Sojourn Times of Cloud Clusters. IEEE Transactions on Cloud Computing, 2018, 6, 156-167.	4.4	5
8	Meeting Inelastic Demand in Systems With Storage and Renewable Sources. IEEE Transactions on Smart Grid, 2017, 8, 1619-1629.	9.0	36
9	Optimal Day-Ahead Power Procurement With Renewable Energy and Demand Response. IEEE Transactions on Power Systems, 2017, 32, 3924-3933.	6.5	56
10	Optimal Scheduling and Beamforming in Relay Networks With Energy Harvesting Constraints. IEEE Transactions on Wireless Communications, 2016, 15, 1226-1238.	9.2	31
11	Guaranteeing performance based on time-stability for energy-efficient data centers. IIE Transactions, 2016, 48, 812-825.	2.1	9
12	Time-Stable Performance in Parallel Queues With Non-Homogeneous and Multi-Class Workloads. IEEE/ACM Transactions on Networking, 2016, 24, 1322-1335.	3.8	7
13	Obtaining Optimal Thresholds for Processors with Speed-Scaling. Electronic Notes in Theoretical Computer Science, 2015, 310, 135-155.	0.9	0
14	Efficiently Operating Wireless Nodes Powered by Renewable Energy Sources. IEEE Journal on Selected Areas in Communications, 2015, , 1-1.	14.0	6
15	Stochastic models for plant microtubule self-organization and structure. Journal of Mathematical Biology, 2015, 71, 1353-1385.	1.9	2
16	Opportunities for Network Coding: To Wait or Not to Wait. IEEE/ACM Transactions on Networking, 2015, 23, 1876-1889.	3.8	9
17	Multipath Wireless Network Coding: An Augmented Potential Game Perspective. IEEE/ACM Transactions on Networking, 2014, 22, 217-229.	3.8	5
18	Network Coding Decisions for Wireless Transmissions With Delay Consideration. IEEE Transactions on Communications, 2014, 62, 2965-2976.	7.8	13

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19	Combined Routing and Node Replacement in Energy-Efficient Underwater Sensor Networks for Seismic Monitoring. IEEE Journal of Oceanic Engineering, 2013, 38, 80-90.	3.8	52
20	Integrating virtualization, speed scaling, and powering on/off servers in data centers for energy efficiency. IIE Transactions, 2013, 45, 1114-1136.	2.1	9
21	Computer simulation and mathematical models of the noncentrosomal plant cortical microtubule cytoskeleton. Cytoskeleton, 2012, 69, 144-154.	2.0	34
22	An analytic framework to develop policies for testing, prevention, and treatment of two-stage contagious diseases. Annals of Operations Research, 2012, 196, 707-735.	4.1	5
23	A Three-Dimensional Computer Simulation Model Reveals the Mechanisms for Self-Organization of Plant Cortical Microtubules into Oblique Arrays. Molecular Biology of the Cell, 2010, 21, 2674-2684.	2.1	74
24	Transient analysis of queues for peer-based multimedia content delivery. IIE Transactions, 2010, 42, 881-896.	2.1	5
25	Efficient control for a multi-product quasi-batch process via stochastic dynamic programming. IIE Transactions, 2010, 43, 192-206.	2.1	2
26	Generalized parallel-server fork-join queues withÂdynamic task scheduling. Annals of Operations Research, 2008, 160, 227-255.	4.1	9
27	Market-Based Model Predictive Control for Large-Scale Information Networks: Completion Time and Value of Solution. IEEE Transactions on Automation Science and Engineering, 2008, 5, 630-640.	5.2	12
28	Resource-Sharing Queueing Systems with Fluid-Flow Traffic. Operations Research, 2008, 56, 728-744.	1.9	6
29	Characterizing the departure process from a two server Markovian queue: A non-renewal approach. , 2008, , .		1
30	Optimal policies for control of peers in online multimedia services. , 2007, , .		0
31	Efficient scheduling algorithm for component-based networks. Future Generation Computer Systems, 2007, 23, 558-568.	7.5	7
32	Managing server energy and operational costs in hosting centers. Performance Evaluation Review, 2005, 33, 303-314.	0.6	173
33	On Queues with Markov Modulated Service Rates. Queueing Systems, 2005, 51, 89-113.	0.9	48
34	Deriving Link Travel-Time Distributions via Stochastic Speed Processes. Transportation Science, 2004, 38, 97-106.	4.4	33
35	Analysis of Queues. , 0, , .		62