Nail Akar

List of Publications by Year
in descending order

57 papers	653 citations	567281 15 h-index	642732 23 g-index
59 all docs	59 docs citations	59 times ranked	354 citing authors

#	Article	IF	Citations
1	An invariant subspace approach in m/g/l and g/m/l type markov chains. Stochastic Models, 1997, 13, 381-416.	0.3	84
2	Wavelength converter sharing in asynchronous optical packet/burst switching: An exact blocking analysis for markovian arrivals. IEEE Journal on Selected Areas in Communications, 2006, 24, 69-80.	14.0	40
3	A common solution to a pair of linear matrix equations over a principal ideal domain. Linear Algebra and Its Applications, 1991, 144, 85-99.	0.9	37
4	Infinite- and finite-buffer Markov fluid queues: a unified analysis. Journal of Applied Probability, 2004, 41, 557-569.	0.7	31
5	Discrete-Time Queueing Model of Age of Information With Multiple Information Sources. IEEE Internet of Things Journal, 2021, 8, 14531-14542.	8.7	30
6	A numerically efficient method for the MAP/D/1/K queue via rational approximations. Queueing Systems, 1996, 22, 97-120.	0.9	28
7	Solving Multi-Regime Feedback Fluid Queues. Stochastic Models, 2008, 24, 425-450.	0.5	28
8	A novel computational method for solving finite qbd processes. Stochastic Models, 2000, 16, 273-311.	0.3	25
9	A simple and effective mechanism for stored video streaming with TCP transport and server-side adaptive frame discard. Computer Networks, 2005, 48, 489-501.	5.1	21
10	Infinite- and finite-buffer Markov fluid queues: a unified analysis. Journal of Applied Probability, 2004, 41, 557-569.	0.7	20
11	Finding the Exact Distribution of (Peak) Age of Information for Queues of PH/PH/1/1 and M/PH/1/2 Type. IEEE Transactions on Communications, 2020, 68, 5661-5672.	7.8	20
12	Fixed point analysis of limited range share per node wavelength conversion in asynchronous optical packet switching systems. Photonic Network Communications, 2009, 18, 255-263.	2.7	18
13	Computing Moments of First Passage Times to a Subset of States in Markov Chains. SIAM Journal on Matrix Analysis and Applications, 2005, 27, 396-412.	1.4	17
14	A survey of quality of service differentiation mechanisms for optical burst switching networks. Optical Switching and Networking, 2010, 7, 1-11.	2.0	17
15	Exact Analysis of Single-Wavelength Optical Buffers With Feedback Markov Fluid Queues. Journal of Optical Communications and Networking, 2009, 1, 530.	4.8	16
16	Solving the ME/ME/1 queue with state–space methods and the matrix sign function. Performance Evaluation, 2006, 63, 131-145.	1.2	15
17	Performance Evaluation of Slotted Optical Burst Switching Systems With Quality of Service Differentiation. Journal of Lightwave Technology, 2009, 27, 2621-2633.	4.6	13
18	The Multi-Source Probabilistically Preemptive M/PH/1/1 Queue With Packet Errors. IEEE Transactions on Communications, 2021, 69, 7297-7308.	7.8	13

#	Article	IF	Citations
19	A Performance Study of Limited Range Partial Wavelength Conversion for Asynchronous Optical Packet/Burst Switching. , 2006, , .		12
20	The workload-dependent MAP/PH/1 queue with infinite/finite workload capacity. Performance Evaluation, 2013, 70, 1047-1058.	1.2	12
21	A Two-Level Temporal Fair Scheduler for Multi-Cell Wireless Networks. IEEE Wireless Communications Letters, 2015, 4, 269-272.	5.0	10
22	Delay Analysis of Timer-Based Frame Coalescing in Energy Efficient Ethernet. IEEE Communications Letters, 2013, 17, 1459-1462.	4.1	9
23	Queue management for two-user cognitive radio with delay-constrained primary user. Computer Networks, 2018, 142, 1-12.	5.1	9
24	The finite/infinite horizon ruin problem with multi-threshold premiums: a Markov fluid queue approach. Annals of Operations Research, 2017, 252, 85-99.	4.1	8
25	Comparative study of limited-range wavelength conversion policies for asynchronous optical packet switching. Journal of Optical Networking, 2007, 6, 134.	2.5	7
26	Class-based first-fit spectrum allocation with fragmentation avoidance for dynamic flexgrid optical networks. Optical Switching and Networking, 2015, 15, 44-52.	2.0	7
27	Markov modulated periodic arrival process offered to an ATM multiplexer. Performance Evaluation, 1995, 22, 175-190.	1.2	6
28	Performance Analysis of an Optical Packet Switch Employing Full/Limited Range Share Per Node Wavelength Conversion. , 2007, , .		6
29	Dynamic threshold-based assembly algorithms for optical burst switching networks subject to burst rate constraints. Photonic Network Communications, 2010, 20, 120-130.	2.7	6
30	Retrial Queuing Models of Multi-Wavelength FDL Feedback Optical Buffers. IEEE Transactions on Communications, 2011, 59, 2832-2840.	7.8	6
31	Joint Cell Muting and User Scheduling in Multicell Networks with Temporal Fairness. Wireless Communications and Mobile Computing, 2018, 2018, 1-18.	1.2	6
32	On the Queuing Model of the Energy-Delay Tradeoff in Wireless Links With Power Control and Link Adaptation. IEEE Transactions on Communications, 2019, 67, 3431-3442.	7.8	6
33	AIMD-based online MPLS traffic engineering for TCP flows via distributed multi-path routing. Annales Des Telecommunications/Annals of Telecommunications, 2004, 59, 1353-1371.	2.5	5
34	Rate-controlled optical burst switching for both congestion avoidance and service differentiation. Optical Switching and Networking, 2005, 2, 217-229.	2.0	5
35	System-theoretical algorithmic solution to waiting times in semi-Markov queues. Performance Evaluation, 2009, 66, 587-606.	1.2	5
36	Exact analysis of offset-based service differentiation in single-channel multi-class OBS. IEEE Communications Letters, 2009, 13, 148-150.	4.1	5

#	Article	IF	Citations
37	Analysis of continuous feedback Markov fluid queues and its applications to modeling Optical Burst Switching. , 2013, , .		5
38	Transient and First Passage Time Distributions of First- and Second-order Multi-regime Markov Fluid Queues via ME-fication. Methodology and Computing in Applied Probability, 2020, , 1.	1.2	5
39	Power allocation and temporal fair user group scheduling for downlink NOMA. Telecommunication Systems, 2021, 77, 753-766.	2.5	5
40	A matrix analytical method for the discrete time Lindley equation using the generalized Schur decomposition. , 2006, , .		4
41	Dimensioning shared-per-node recirculating fiber delay line buffers in an optical packet switch. Performance Evaluation, 2013, 70, 1059-1071.	1.2	4
42	Running Multiple Instances of the Distributed Coordination Function for Air-Time Fairness in Multi-Rate WLANs. IEEE Transactions on Communications, 2013, 61, 5067-5076.	7.8	4
43	Exact Analytical Model of Age of Information in Multi-Source Status Update Systems With Per-Source Queueing. IEEE Internet of Things Journal, 2022, 9, 20706-20718.	8.7	4
44	Fitting Matrix Geometric Distributions by Model Reduction. Stochastic Models, 2015, 31, 292-315.	0.5	3
45	Analytical performance modeling of elastic optical links with aligned spectrum allocation. Computer Networks, 2015, 88, 40-50.	5.1	3
46	Fixed-point analysis of a network of routers with persistent TCP/UDP flows and class-based weighted fair queuing. Telecommunication Systems, 2017, 64, 585-598.	2.5	3
47	Energy management for age of information control in solar-powered IoT end devices. Wireless Networks, 2021, 27, 3165-3178.	3.0	3
48	Performance modeling of QoS differentiation in optical packet switching via FDL access limitation. Photonic Network Communications, 2017, 34, 344-355.	2.7	2
49	Packet Loss Analysis of Synchronous Buffer-less Optical Switch with Shared Limited Range Wavelength Converters. , 2007, , .		1
50	TCP flow aware adaptive path switching in diffserv enabled MPLS networks. European Transactions on Telecommunications, 2011, 22, 185-199.	1.2	1
51	Analytical model of asynchronous shared-per-wavelength multi-fiber optical switch. , 2011, , .		1
52	Moments of Conditional Sojourn Times in Finite Capacity M/M/1/N-PS Processor Sharing Queues. IEEE Communications Letters, 2012, 16, 533-535.	4.1	1
53	Mapping time-varying IP traffic to flexible optical paths in flexgrid optical networks. Photonic Network Communications, 2015, 29, 67-77.	2.7	1
54	Capacity requirements of traffic handling schemes in multi-service networks. Computer Communications, 2005, 28, 2070-2081.	5.1	0

#	Article	IF	Citations
55	Analysis of an Adaptive Modulation and Coding scheme with HARQ for TCP traffic. , 2015, , .		0
56	Disk scheduling with shortest cumulative access time first algorithms. Turkish Journal of Electrical Engineering and Computer Sciences, 2017, 25, 3367-3380.	1.4	0
57	Steady-state and first passage time distributions for waiting times in the $ MAP/M/s+G $ queueing model with generally distributed patience times. Journal of Industrial and Management Optimization, 2021, .	1.3	0