Byrav Ramamurthy

List of Publications by Year
in descending order

146 papers	3,623 citations	304743 22 h-index	168389 53 g-index
149 all docs	149 docs citations	149 times ranked	2377 citing authors

#	Article	IF	Citations
1	OneLNK. , 2022, , .		0
2	SNAG: SDN-Managed Network Architecture for GridFTP Transfers Using Application-Awareness. IEEE/ACM Transactions on Networking, 2022, 30, 1585-1598.	3.8	0
3	Future Wireless Networking Experiments Escaping Simulations. Future Internet, 2022, 14, 120.	3.8	4
4	Cache management for large data transfers and multipath forwarding strategies in Named Data Networking. Computer Networks, 2021, 199, 108437.	5.1	7
5	Enhancing the SDTMA-NDN architecture for transferring the scientific data software using named data networking. Computer Networks, 2020, 166, 106954.	5.1	6
6	Dynamic wavelength and bandwidth allocation for supporting diverse customers and prioritized traffic in NG-PON2 networks. Photonic Network Communications, 2020, 40, 194-208.	2.7	3
7	MARS: A Multi-Attribute Routing and Scheduling Algorithm for DTN Interplanetary Networks. IEEE/ACM Transactions on Networking, 2020, 28, 2065-2076.	3.8	18
8	Resource Allocation and QoS Guarantees for Real World IP Traffic in Integrated XG-PON and IEEE802.11e EDCA Networks. IEEE Access, 2020, 8, 124883-124893.	4.2	24
9	Supporting Diverse Customers and Prioritized Traffic in Next-Generation Passive Optical Networks. Lecture Notes in Computer Science, 2020, , 645-657.	1.3	2
10	Cache Management for Large Data Transfers in Named Data Networking using SDN. , 2019, , .		2
11	Ease of Use and Acceptability of a Smartphone App for Young, Low-Income Mothers. Journal of Technology in Behavioral Science, 2018, 3, 5-11.	2.3	5
12	Multipath Forwarding Strategies and SDN Control for Named Data Networking. , 2018, , .		9
13	Large Data Transfer Predictability and Forecasting using Application-Aware SDN. , 2018, , .		2
14	Comparative Performance Evaluation of High-performance Data Transfer Tools. , 2018, , .		3
15	Optimized Service Chain Mapping and reduced flow processing with Application-Awareness. , 2018, , .		2
16	Automated Inter-Domain Cut-Through Switching for the Future Internet. IEEE Transactions on Network and Service Management, 2018, 15, 1393-1406.	4.9	1
17	N-Look Ahead Routing and Scheduling (N-LARS) for DTN Space Networks. , 2018, , .		4
18	Dynamic provisioning in virtualized Cloud infrastructure in IP/MPLS-over-WDM networks. , 2017, , .		3

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19	Network-aware virtual data center resource orchestration in an optical data center. , 2017, , .		1
20	EAODR: A novel routing algorithm based on the Modified Temporal Graph network model for DTN-based Interplanetary Networks. Computer Networks, 2017, 129, 129-141.	5.1	17
21	The Case for Using Content-Centric Networking for Distributing High-Energy Physics Software. , 2017, , .		6
22	Enhanced New Mothers Network Cell Phone Application Intervention: Interdisciplinary Team Development and Lessons Learned. Comprehensive Child and Adolescent Nursing, 2017, 40, 126-135.	0.9	3
23	Resource delayed release strategy for dynamic and fast end-to-end service provisioning in SDN-enabled OTN over WDM networks. , 2017, , .		2
24	SDTMA-NDN: Scientific data transfer management architecture using named data networking. , 2017, , .		0
25	MHealthInt: Healthcare intervention using mobile app and Google Cloud Messaging. , 2016, , .		1
26	Inter-domain routing with cut-through switching for the MobilityFirst Future Internet architecture. , 2016, , .		3
27	Provisioning virtualized Cloud services in IP/MPLS-over-EON networks. Photonic Network Communications, 2016, 31, 418-431.	2.7	7
28	OpenSec: Policy-Based Security Using Software-Defined Networking. IEEE Transactions on Network and Service Management, 2016, 13, 30-42.	4.9	63
29	Budget-Optimized Network-Aware Joint Resource Allocation in Grids/Clouds Over Optical Networks. Journal of Lightwave Technology, 2016, 34, 3890-3900.	4.6	14
30	The Interplanetary Internet Implemented on the GENI Testbed. , 2015, , .		6
31	The Interplanetary Internet implemented on a terrestrial testbed. Ad Hoc Networks, 2015, 27, 147-158.	5.5	4
32	Remote mobile screen (RMS): An approach for secure BYOD environments. , 2015, , .		9
33	Provisioning virtualized cloud services in IP/MPLS-over-EON Networks. , 2015, , .		5
34	Routing, modulation level and spectrum allocation with dynamic modulation level conversion in elastic optical networks. Photonic Network Communications, 2014, 28, 295-305.	2.7	8
35	Using OpenFlow to provide cut-through switching in MobilityFirst. Photonic Network Communications, 2014, 28, 165-177.	2.7	3
36	OpenSec: A framework for implementing security policies using OpenFlow. , 2014, , .		18

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37	The GpENI testbed: Network infrastructure, implementation experience, and experimentation. Computer Networks, 2014, 61, 51-74.	5.1	22
38	Network Innovation using OpenFlow: A Survey. IEEE Communications Surveys and Tutorials, 2014, 16, 493-512.	39.4	450
39	Cost-Optimized Joint Resource Allocation in Grids/Clouds With Multilayer Optical Network Architecture. Journal of Optical Communications and Networking, 2014, 6, 911.	4.8	9
40	Balancing Cost and Reliability in the Design of Internet Protocol Backbone Using Agile Optical Networking. IEEE Transactions on Reliability, 2014, 63, 427-442.	4.6	4
41	The Interplanetary Internet Implemented on the GENI Testbed. , 2014, , .		1
42	Cut-through switching options in a MobilityFirst network with openflow. , 2013, , .		2
43	On provisioning diverse circuits in heterogeneous multi-layer optical networks. Computer Communications, 2013, 36, 689-697.	5.1	6
44	A dynamic local method for bandwidth adaptation in bundle links to conserve energy in core networks. Optical Switching and Networking, 2013, 10, 481-490.	2.0	5
45	Exploring the Design Space of Multichannel Peer-to-Peer Live Video Streaming Systems. IEEE/ACM Transactions on Networking, 2013, 21, 162-175.	3.8	12
46	Communication Technologies and Architectures for Space Network and Interplanetary Internet. IEEE Communications Surveys and Tutorials, 2013, 15, 881-897.	39.4	110
47	CAPEX optimized routing for scheduled traffic in multi-layer optical networks. , 2013, , .		0
48	Budget-Minimized Resource Allocation and Task Scheduling in Distributed Grid/Clouds. , 2013, , .		11
49	Cost-Optimized Reservation and Routing for Scheduled Traffic in Optical Networks. Journal of Optical Communications and Networking, 2013, 5, 1215.	4.8	5
50	The interplanetary Internet implemented on a terrestrial testbed. , 2013, , .		4
51	Investigation of Energy Savings in Optical Networks using Bundle Link Rightsizing Methods. , 2013, , .		1
52	On providing bounded delay service to subscribers in P2P live streaming systems. , 2012, , .		2
53	Simplifying network management using Software Defined Networking and OpenFlow. , 2012, , .		27
54	Partial forwarding vs. partial participation for dynamic window resizing in P2P streaming. Computer Networks, 2012, 56, 1782-1796.	5.1	0

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55	On Cost Optimized Routing for Scheduled Traffic in Multi-layer Optical Transport Networks. , 2012, , .		1
56	Experiences with dynamic circuit creation in a regional network testbed. , 2011, , .		1
57	A dynamic local method for bandwidth adaptation in bundle links to conserve energy in core networks. , 2011, , .		5
58	Cost and Reliability Considerations in Designing the Next-Generation IP over WDM Backbone Networks. , 2011, , .		8
59	SDRCS: A service-differentiated real-time communication scheme for event sensing in wireless sensor networks. Computer Networks, 2011, 55, 3287-3302.	5.1	19
60	Improving multi-view peer-to-peer live streaming systems with the divide-and-conquer strategy. Computer Networks, 2011, 55, 4069-4085.	5.1	5
61	Diverse community: Demand differentiation in P2P live streaming. Peer-to-Peer Networking and Applications, 2011, 4, 23-36.	3.9	2
62	Rightsizing Bundle Link Capacities for Energy Savings in the Core Network. , 2011, , .		9
63	Understanding User Generated Content Characteristics: A Hot-Event Perspective. , 2011, , .		11
64	The Great Plains Environment for Network Innovation (GpENI): A Programmable Testbed for Future Internet Architecture Research. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2011, , 428-441.	0.3	17
65	Providing NPR-Style Time-Shifted Streaming in P2P Systems. , 2011, , .		0
66	Linear Programming Models For Multi-Channel P2P Streaming Systems. , 2010, , .		18
67	An efficient scheme for removing compromised sensor nodes from wireless sensor networks. Security and Communication Networks, 2010, 3, 320-333.	1.5	3
68	Continuous and Parallel Optimization of Dynamic Bandwidth Scheduling in WDM Networks. , 2010, , .		7
69	Cost Efficiency of Anycast-Based Forwarding in Duty-Cycled WSNs with Lossy Channel. , 2010, , .		9
70	A Tabu Search Approach for Joint Scheduling of Resources in a Lambda Grid Network. , 2010, , .		10
71	A two-tier Wireless Sensor Network infrastructure for large-scale real-time groundwater monitoring. , 2010, , .		5
72	Key Management in Wireless Sensor Networks with Multiple Base Stations. , 2010, , 419-442.		0

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73	Optimal segment size for fixed-sized segment protection in wavelength-routed optical networks. , 2009, , .		1
74	LTRES: A loss-tolerant reliable event sensing protocol for wireless sensor networks. Computer Communications, 2009, 32, 1666-1676.	5.1	10
75	Analysis of multi-hop traffic grooming in WDM mesh networks. Optical Switching and Networking, 2009, 6, 64-75.	2.0	12
76	Packet reordering in high-speed networks and its impact on high-speed TCP variants. Computer Communications, 2009, 32, 62-68.	5.1	24
77	A flexible Divide-and-Conquer protocol for multi-view peer-to-peer live streaming. , 2009, , .		11
78	Providing statistically guaranteed streaming quality for peer-to-peer live streaming. , 2009, , .		5
79	An efficient and attack-resistant key agreement scheme for secure group communications in mobile ad-hoc networks. Wireless Communications and Mobile Computing, 2008, 8, 1297-1312.	1.2	1
80	Rerouting schemes for dynamic traffic grooming in optical WDM networks. Computer Networks, 2008, 52, 1891-1904.	5.1	14
81	A load-balancing spare capacity reallocation approach in the next-generation SONET metro networks. Optical Switching and Networking, 2008, 5, 38-50.	2.0	0
82	A Partial Forwarding Scheme for Dynamic Window Resizing in Live P2P Streaming Systems. , 2008, , .		4
83	Variable neighbor selection in live peer-to-peer multimedia streaming networks. , 2008, , .		5
84	A service-differentiated real-time communication scheme for wireless sensor networks. , 2008, , .		7
85	Guest editorial - Multidomain optical networks: issues and challenges. , 2008, 46, 76-77.		3
86	Providing Reliable Data Transport for Dynamic Event Sensing in Wireless Sensor Networks. , 2008, , .		4
87	A Key Management Protocol for Wireless Sensor Networks with Multiple Base Stations. , 2008, , .		11
88	A security framework for wireless sensor networks utilizing a unique session key. , 2008, , .		5
89	Group Rekeying Schemes for Secure Group Communication in Wireless Sensor Networks. , 2007, , .		16
90	A scalable approach for survivable virtual topology routing in optical WDM networks. IEEE Journal on Selected Areas in Communications, 2007, 25, 63-69.	14.0	46

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91	A Two-phase Approach for Dynamic Lightpath Scheduling in WDM Optical Networks. , 2007, , .		30
92	KeyRev: An Efficient Key Revocation Scheme for Wireless Sensor Networks. , 2007, , .		25
93	A key management protocol for hybrid wireless sensor networks. , 2007, , .		1
94	Dedicated path protection for waveband switching in WDM networks (invited paper). , 2007, , .		4
95	Algorithms for Intermediate Waveband Switching in Optical WDM Mesh Networks. , 2007, , .		18
96	Layered Clustering Communication Protocol for Wireless Sensor Networks. , 2007, , .		6
97	A survey of security issues in wireless sensor networks. IEEE Communications Surveys and Tutorials, 2006, 8, 2-23.	39.4	614
98	Dynamic Lightpath Scheduling in Next-Generation WDM Optical Networks. , 2006, , .		4
99	Heterogeneous waveband switching in wavelength division multiplexed networks based on autonomous clustering architecture [Invited]. Journal of Optical Networking, 2006, 5, 667.	2.5	10
100	A New Cryptographic Scheme for Securing Dynamic Conferences in Data Networks. , 2006, , .		0
101	Autonomous Clustering-Based Heterogeneous Waveband Switching in WDM Networks. , 2006, , .		4
102	Router and Firewall Redundancy with OpenBSD and CARP. , 2006, , .		5
103	A distributed reliable data transport strategy for event based wireless sensor networks. , 2006, , .		2
104	The Performance of Elliptic Curve Based Group Diffie-Hellman Protocols for Secure Group Communication over Ad Hoc Networks. , 2006, , .		22
105	An Authenticated Key Agreement Protocol for Mobile Ad Hoc Networks. Lecture Notes in Computer Science, 2006, , 509-520.	1.3	7
106	Design of sparse grooming networks for transporting dynamic multi-granularity sub-wavelength traffic. , 2005, , .		5
107	JOR: a content-based object router. Computer Communications, 2005, 28, 654-663.	5.1	4
108	Sparse Regeneration in Translucent Wavelength-Routed Optical Networks: Architecture, Network Design and Wavelength Routing. Photonic Network Communications, 2005, 10, 39-53.	2.7	133

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109	Dynamic Waveband Switching in WDM Mesh Networks Based on a Generic Auxiliary Graph Model. Photonic Network Communications, 2005, 10, 309-331.	2.7	35
110	Shared risk link Group (SRLG)-diverse path provisioning under hybrid service level agreements in wavelength-routed optical mesh networks. IEEE/ACM Transactions on Networking, 2005, 13, 918-931.	3.8	96
111	Dynamic routing in translucent WDM optical networks: the intradomain case. Journal of Lightwave Technology, 2005, 23, 955-971.	4.6	82
112	Survivable lightpath provisioning in WDM mesh networks under shared path protection and signal quality constraints. Journal of Lightwave Technology, 2005, 23, 1556-1567.	4.6	75
113	A link bundled auxiliary graph model for constrained dynamic traffic grooming in WDM mesh networks. IEEE Journal on Selected Areas in Communications, 2005, 23, 1542-1555.	14.0	46
114	A graph model for dynamic waveband switching in WDM mesh networks. , 2004, , .		17
115	A Dynamic Partitioning Protection Routing Technique in WDM Networks. Cluster Computing, 2004, 7, 259-269.	5.0	5
116	Signaling Schemes for Distributed Connection Management in Wavelength-Routed Optical Mesh Networks. Photonic Network Communications, 2004, 8, 89-103.	2.7	4
117	A GCD attack resistant CRTHACS for secure group communications. , 2004, , .		2
118	Interdomain dynamic wavelength routing in the next-generation translucent optical Internet. Journal of Optical Networking, 2004, 3, 169.	2.5	15
119	Dynamic traffic grooming algorithms for reconfigurable sonet over wdm networks. IEEE Journal on Selected Areas in Communications, 2003, 21, 1165-1172.	14.0	31
120	Fiber, Lasers, Receivers, and Amplifiers. , 2002, , 27-50.		0
121	Switches, Wavelength Routers, and Wavelength Converters. , 2002, , 51-75.		5
122	Design Aspects of optical communication networks. Electrical Engineering and Applied Signal Processing Series, 2002, , .	1.2	0
123	Sparse regeneration in a translucent WDM optical network. , 2001, , .		15
124	Chinese Remainder Theorem Based Hierarchical Access Control for Secure Group Communication. Lecture Notes in Computer Science, 2001, , 381-385.	1.3	32
125	Connection Management for Wavelength-Routed Optical WDM Networks. Network Theory and Applications, 2001, , 187-203.	0.6	5
126	<title>Design of virtual private networks (VPNs) over optical wavelength-division-multiplexed (WDM) networks</title>. , 2000, , .		15

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127	Routing and wavelength assignment with power considerations in optical networks. Computer Networks, 2000, 32, 539-555.	5.1	36
128	LSMAC vs. LSNAT: Scalable cluster‑based Web servers. Cluster Computing, 2000, 3, 175-185.	5.0	8
129	LSMAC: An improved load sharing network service dispatcher. World Wide Web, 2000, 3, 53-59.	4.0	4
130	Optical communication networks for the next-generation internet. IEEE Network, 2000, 14, 6-7.	6.9	8
131	Impact of transmission impairments on the teletraffic performance of wavelength-routed optical networks. Journal of Lightwave Technology, 1999, 17, 1713-1723.	4.6	289
132	<title>SIMON: a simulator for optical networks</title>. , 1999, , .		12
133	Optimizing amplifier placements in a multiwavelength optical LAN/MAN: the unequally powered wavelengths case. IEEE/ACM Transactions on Networking, 1998, 6, 755-767.	3.8	33
134	Optimizing amplifier placements in a multiwavelength optical LAN/MAN: the equally powered-wavelengths case. Journal of Lightwave Technology, 1998, 16, 1560-1569.	4.6	27
135	Wavelength conversion in WDM networking. IEEE Journal on Selected Areas in Communications, 1998, 16, 1061-1073.	14.0	321
136	Optical components for WDM lightwave networks. Proceedings of the IEEE, 1997, 85, 1274-1307.	21.3	134
137	Elimination of all-optical cycles in wavelength-routed optical networks. Journal of Lightwave Technology, 1996, 14, 1207-1217.	4.6	12
138	Translucent optical WDM networks for the next-generation backbone networks. , 0, , .		42
139	Electro-Optic and Wavelength Conversion. , 0, , 101-127.		0
140	Survivable virtual topology routing under shared risk link groups in WDM networks. , 0, , .		23
141	A load-balancing spare capacity reallocation approach in service-rich SONET metro mesh networks. , 0, , .		2
142	Distributed hybrid agent based intrusion detection and real time response system. , 0, , .		5
143	DGKD: distributed group key distribution with authentication capability. , 0, , .		24
144	Analysis of multi-hop traffic grooming in WDM mesh networks. , 0, , .		8

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145	On computing disjoint paths with dependent cost structure in optical networks. , 0, , .		5
146	Survivable traffic grooming in WDM mesh networks under SRLG constraints. , 0, , .		11