Rudra Dutta

List of Publications by Year in descending order

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98 papers 1,514 citations

15 h-index 395343 33 g-index

106 all docs

106
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106 times ranked 903 citing authors

| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Traffic grooming in WDM networks: past and future. IEEE Network, 2002, 16, 46-56. | 4.9 | 304 |
| 2 | A Survey of Network Design Problems and Joint Design Approaches in Wireless Mesh Networks. IEEE Communications Surveys and Tutorials, 2011, 13, 396-428. | 24.8 | 185 |
| 3 | On optimal traffic grooming in WDM rings. IEEE Journal on Selected Areas in Communications, 2002, 20, 110-121. | 9.7 | 119 |
| 4 | Network Virtualization: Technologies, Perspectives, and Frontiers. Journal of Lightwave Technology, 2013, 31, 523-537. | 2.7 | 117 |
| 5 | Traffic Grooming: A Changing Role in Green Optical Networks. , 2009, , . | | 60 |
| 6 | ChoiceNet. Computer Communication Review, 2014, 44, 58-65. | 1.5 | 57 |
| 7 | Dynamic traffic grooming: the changing role of traffic grooming. IEEE Communications Surveys and Tutorials, 2007, 9, 32-50. | 24.8 | 51 |
| 8 | On Hierarchical Traffic Grooming in WDM Networks. IEEE/ACM Transactions on Networking, 2008, 16, 1226-1238. | 2.6 | 48 |
| 9 | Advanced Wireless for Unmanned Aerial Systems: 5G Standardization, Research Challenges, and AERPAW Architecture. IEEE Vehicular Technology Magazine, 2020, 15, 22-30. | 2.8 | 45 |
| 10 | Clustering Methods for Hierarchical Traffic Grooming in Large-Scale Mesh WDM Networks. Journal of Optical Communications and Networking, 2010, 2, 502. | 3.3 | 30 |
| 11 | Choice as a principle in network architecture. , 2012, , . | | 30 |
| 12 | Toward Proper Guard Zones for Link Signature. IEEE Transactions on Wireless Communications, 2016, 15, 2104-2117. | 6.1 | 27 |
| 13 | Zero-determinant Strategies for Multi-player Multi-action Iterated Games. IEEE Signal Processing Letters, 2016, 23, 311-315. | 2.1 | 24 |
| 14 | Benefits of Multiple Battery Levels for the Lifetime of Large Wireless Sensor Networks. Lecture Notes in Computer Science, 2005, , 1440-1444. | 1.0 | 21 |
| 15 | A Unified Software Architecture to Enable Cross-Layer Design in the Future Internet. , 2007, , . | | 18 |
| 16 | Measurements and Analysis of M/M/1 and M/M/c Queuing Models of the SIP Proxy Server. , 2009, , . | | 17 |
| 17 | Choice as a principle in network architecture. Computer Communication Review, 2012, 42, 105-106. | 1.5 | 17 |
| 18 | A Dynamic Recursive Unified Internet Design (DRUID). Computer Networks, 2011, 55, 919-935. | 3.2 | 16 |

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| 19 | Centrality-based power control for hot-spot mitigation in multi-hop wireless networks. Computer Communications, 2012, 35, 1074-1085. | 3.1 | 16 |
| 20 | Comparative Study of M/M/1 and M/D/1 Models of a SIP Proxy Server. , 2008, , . | | 14 |
| 21 | Performance and scalability of $M/M/c$ based queuing model of the SIP Proxy Server - a practical approach. , 2009, , . | | 12 |
| 22 | A hierarchical model for multigranular optical networks. , 2008, , . | | 11 |
| 23 | Dynamic IDS Configuration in the Presence of Intruder Type Uncertainty. , 2015, , . | | 11 |
| 24 | AERPAW emulation overview and preliminary performance evaluation. Computer Networks, 2021, 194, 108083. | 3.2 | 11 |
| 25 | Design of a protocol to enable economic transactions for network services. , 2015, , . | | 9 |
| 26 | An Experimental Research Platform Architecture for UAS Communications and Networking. , 2019, , . | | 9 |
| 27 | Traffic grooming in WDM ring networks to minimize the maximum electronic port cost. Optical Switching and Networking, 2005, 2, 1-18. | 1.2 | 8 |
| 28 | Comparative Study of Secure vs. Non-secure Transport Protocols on the SIP Proxy Server Performance: An Experimental Approach. , 2010, , . | | 8 |
| 29 | A Verification Service Architecture for the Future Internet. , 2013, , . | | 8 |
| 30 | AERPAW Emulation Overview., 2020,,. | | 8 |
| 31 | Traffic grooming in path, star, and tree networks. , 2003, , . | | 7 |
| 32 | Loner links aware routing and scheduling in Wireless Mesh Networks. , 2008, , . | | 7 |
| 33 | A stochastic multi-channel spectrum access game with incomplete information. , 2015, , . | | 7 |
| 34 | Design of Wireless Mesh Networks under the Additive Interference Model. Computer Communications and Networks (IC3N), Proceedings of the IEEE International Conference on, 2006, , . | 0.0 | 6 |
| 35 | Impact of power control on capacity of large scale Wireless Mesh Networks. , 2009, , . | | 6 |
| 36 | A study of performance and scalability metrics of a SIP proxy server – a practical approach. Journal of Computer and System Sciences, 2011, 77, 884-897. | 0.9 | 6 |

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| 37 | Impact of Power Control on Capacity of TDM-Scheduled Wireless Mesh Networks., 2011,,. | | 6 |
| 38 | Extending Openflow for Service Insertion and Payload Inspection. , 2014, , . | | 6 |
| 39 | Impact of software obfuscation on susceptibility to Return-Oriented Programming attacks. , 2015, , . | | 6 |
| 40 | A multi-player Markov stopping game for delay-tolerant and opportunistic resource sharing networks. , $2016, , .$ | | 6 |
| 41 | GADFly: A Fast and Robust Algorithm to Detect P2P Botnets in Communication Graphs. , 2018, , . | | 6 |
| 42 | Adaptive ad hoc self-organizing scheduling for quasi-periodic sensor network lifetime. Computer Communications, 2006, 29, 3366-3384. | 3.1 | 5 |
| 43 | Language of choice: On embedding choice-related semantics in a realizable protocol. , 2016, , . | | 5 |
| 44 | Human Factors in Network Reliability Engineering. Journal of Network and Systems Management, 2018, 26, 686-722. | 3.3 | 5 |
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| 46 | On the Suitability of Composable Services for the Assurable Future Internet., 2007,,. | | 4 |
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| 48 | Impact of Power Control on Relay Load Balancing in Wireless Sensor Networks. , 2010, , . | | 4 |
| 49 | The human factor: A challenge for network reliability design. , 2015, , . | | 4 |
| 50 | Inception to application: A GENI based prototype of an open Marketplace for network services., 2016,,. | | 4 |
| 51 | Collaborative botnet detection with partial communication graph information., 2017,,. | | 4 |
| 52 | A Graded Approach to Network Forensics with Privacy Concerns. , 2019, , . | | 4 |
| 53 | Aerial Experimentation and Research Platform for Mobile Communications and Computing. , 2019, , . | | 4 |
| 54 | Traffic Analysis in Support of Hybrid SDN Campus Architectures for Enhanced Cybersecurity., 2021,,. | | 4 |

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| 55 | Clustering for Hierarchical Traffic Grooming in Large Scale Mesh WDM Networks. , 2007, , 249-258. | | 4 |
| 56 | On optimal traffic grooming in WDM rings. Performance Evaluation Review, 2001, 29, 164-174. | 0.4 | 3 |
| 57 | Spare capacity provisioning for quasi-static traffic. Computer Networks, 2007, 51, 5011-5035. | 3.2 | 3 |
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| 60 | Spatially Diffuse Pathsets for Robust Routing in Ad Hoc Networks. , 2011, , . | | 3 |
| 61 | Converging choice and service in future commodity optical networks using traffic grooming. , 2013, , . | | 3 |
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| 67 | Complexity of path traffic grooming. Journal of Optical Networking, 2007, 6, 1270. | 2.5 | 2 |
| 68 | A new internet architecture to enable software defined optics and evolving optical switching models. , 2008, , . | | 2 |
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| 70 | Using Centrality-Based Power Control for Hot-Spot Mitigation in Wireless Networks. , 2010, , . | | 2 |
| 71 | A Leader–Follower Controlled Markov Stopping Game for Delay Tolerant and Opportunistic Resource Sharing Networks. IEEE Journal on Selected Areas in Communications, 2017, 35, 615-627. | 9.7 | 2 |
| 72 | On service composition algorithm for Open Marketplaces of network services. , 2017, , . | | 2 |

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| 73 | Cooperative trajectory planning in an intercommunicating group of UAVs for convex plume wrapping. , 2017, , . | | 2 |
| 74 | Recovering an OSPF Network from Malicious Attacks: An Experimental Evaluation of Recovery Techniques. , $2018, , .$ | | 2 |
| 75 | Performance Implications of Problem Decomposition Approaches for SDN Pipelines., 2020,,. | | 2 |
| 76 | The AERPAW Experiment Workflow - Considerations for Designing Usage Models for a Computing-supported Physical Research Platform. , 2022, , . | | 2 |
| 77 | Complexity of Converter Placement Supporting Broadcast in WDM Networks. , 2006, , . | | 1 |
| 78 | Differential capacity p-Cycles: A p-Cycle variant with increased capacity efficiency. Optical Switching and Networking, 2010, 7, 185-195. | 1.2 | 1 |
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| 80 | Reliability prediction of diffused pathset routing in wireless multihop networks. , 2014, , . | | 1 |
| 81 | A GENI Meso-Scale Experiment of a Verification Service. , 2014, , . | | 1 |
| 82 | Evaluating Different Pricing Algorithms for a Flexible Optical Choice-Based Network., 2017,,. | | 1 |
| 83 | Toward realizing choice-based co-optimizable networking paradigm. , 2017, , . | | 1 |
| 84 | Towards Privacy-Aware Collaborative Security: A Game-Theoretic Approach., 2017,,. | | 1 |
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| 86 | Identifying P2P Communities in Network Traffic Using Measures of Community Connections : IEEE CNS 20 Poster. , 2020, , . | | 1 |
| 87 | Traffic-partitioning approaches to grooming ring access networks. Journal of Optical Networking, 2005, 4, 602. | 2.5 | 0 |
| 88 | MF-TCP: Design and evaluation of TCP for message ferry delay tolerant networks., 2009,,. | | 0 |
| 89 | Differential Capacity p-Cycles: A p-Cycle variant with increased capacity efficiency., 2009, , . | | 0 |
| 90 | Architectural support for Internet evolution and innovation. , 2010, , . | | 0 |

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| 92 | Joint Design. Signals and Communication Technology, 2013, , 133-168. | 0.4 | 0 |
| 93 | Using linear system reliability to obtain theoretical understanding of wireless routing. , 2014, , . | | O |
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| 95 | Special Issue on Survivable and Resilient Communication Networks and Services. Journal of Network and Systems Management, 2016, 24, 445-448. | 3.3 | 0 |
| 96 | Role of Provider Strategies and Granularity in a Circuit-Packet Optical Choice-based Network., 2018,,. | | 0 |
| 97 | Service Provisioning within a Choice-Based Network. , 2018, , . | | O |
| 98 | Traffic Grooming. Springer Handbooks, 2020, , 513-534. | 0.3 | 0 |