

Sastry Kompella

List of Publications by Year in descending order

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141
papers

2,928
citations

394421

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36
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141
all docs

141
docs citations

141
times ranked

1885
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Scheduling With Age of Information Guarantee. IEEE/ACM Transactions on Networking, 2022, 30, 2046-2059. | 3.8 | 10 |
| 2 | Age of Information Optimization in Multi-Channel Based Multi-Hop Wireless Networks. IEEE Transactions on Mobile Computing, 2022, , 1-15. | 5.8 | 1 |
| 3 | Ao ² : Minimizing Age of Outdated Information to Improve Freshness in Data Collection. , 2022, , . | | 10 |
| 4 | A Theory of Second-Order Wireless Network Optimization and Its Application on Aol. , 2022, , . | | 2 |
| 5 | Radar Target Classification Receiver Using Sparse Regression and Target Tailored Matched Filters. IEEE Transactions on Aerospace and Electronic Systems, 2022, , 1-12. | 4.7 | 0 |
| 6 | Practical Implementation of Adaptive Threshold Energy Detection using Software Defined Radio. IEEE Transactions on Aerospace and Electronic Systems, 2021, 57, 1227-1241. | 4.7 | 6 |
| 7 | Aion: A Bandwidth Optimized Scheduler with Aol Guarantee. , 2021, , . | | 10 |
| 8 | Optimal Sampling and Scheduling for Timely Status Updates in Multi-Source Networks. IEEE Transactions on Information Theory, 2021, 67, 4019-4034. | 2.4 | 46 |
| 9 | Boosting or Hindering: Aol and Throughput Interrelation in Routing-Aware Multi-Hop Wireless Networks. IEEE/ACM Transactions on Networking, 2021, 29, 1008-1021. | 3.8 | 11 |
| 10 | Minimizing Aol in a 5G-Based IoT Network Under Varying Channel Conditions. IEEE Internet of Things Journal, 2021, 8, 14543-14558. | 8.7 | 11 |
| 11 | Age of Sensed Information in a Cognitive Radio Network. , 2021, , . | | 2 |
| 12 | A Model for Coherent Communication Gain in Distributed Wireless Networks. , 2021, , . | | 1 |
| 13 | Ad Hoc Networking Under Limitations on Sum Power Interference to an External Node. , 2021, , . | | 0 |
| 14 | The Role of Aol in a Cognitive Radio Network: Lyapunov Optimization and Tradeoffs. , 2021, , . | | 1 |
| 15 | Generalizable and Interpretable Deep Learning for Network Congestion Prediction. , 2021, , . | | 4 |
| 16 | Wireless Network Topology Control: Adjustable Resiliency and Network Traffic Delivery. , 2021, , . | | 1 |
| 17 | Age of Incorrect Information for Remote Estimation of a Binary Markov Source. , 2020, , . | | 32 |
| 18 | Aol and Throughput Tradeoffs in Routing-aware Multi-hop Wireless Networks. , 2020, , . | | 18 |

| # | ARTICLE | IF | CITATIONS |
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| 19 | On DoF-Based Interference Cancellation Under General Channel Rank Conditions. IEEE/ACM Transactions on Networking, 2020, 28, 1002-1016. | 3.8 | 2 |
| 20 | Exploring transmit null forming in open-loop coherent distributed arrays. , 2020, , . | | 2 |
| 21 | Transmission scheduling in spatio-temporal process monitoring based wireless sensor networks. , 2020, , . | | 0 |
| 22 | Special issue on age of information. Journal of Communications and Networks, 2019, 21, 201-203. | 2.6 | 3 |
| 23 | How Advantageous Is It? An Analytical Study of Controller-Assisted Path Construction in Distributed SDN. IEEE/ACM Transactions on Networking, 2019, 27, 1643-1656. | 3.8 | 3 |
| 24 | Learning the Optimal Synchronization Rates in Distributed SDN Control Architectures. , 2019, , . | | 14 |
| 25 | Learning to Sample a Signal through an Unknown System for Minimum Aol. , 2019, , . | | 12 |
| 26 | Magnalium: Highly Reliable SDC Networks with Multiple Control Plane Composition. , 2019, , . | | 1 |
| 27 | Age-optimal Sampling and Transmission Scheduling in Multi-Source Systems. , 2019, , . | | 51 |
| 28 | MIMO-Empowered Secondary Networks for Efficient Spectrum Sharing. , 2019, , 989-1020. | | 0 |
| 29 | System Power Minimization in Non-contiguous Spectrum Access. , 2019, , 839-868. | | 0 |
| 30 | Information freshness over a Markov channel: The effect of channel state information. Ad Hoc Networks, 2019, 86, 63-71. | 5.5 | 10 |
| 31 | A General Method to Determine Asymptotic Capacity Upper Bounds for Wireless Networks. IEEE Transactions on Network Science and Engineering, 2019, 6, 2-15. | 6.4 | 2 |
| 32 | On the Age of Information With Packet Deadlines. IEEE Transactions on Information Theory, 2018, 64, 6419-6428. | 2.4 | 121 |
| 33 | Impact of Hostile Interference on Wireless Link Connectivity. IEEE Transactions on Control of Network Systems, 2018, 5, 1445-1456. | 3.7 | 2 |
| 34 | Age of Information for Queues in Tandem. , 2018, , . | | 17 |
| 35 | A General Model for DoF-based Interference Cancellation in MIMO Networks With Rank-Deficient Channels. , 2018, , . | | 3 |
| 36 | Experiment: Investigating Feasibility of Coexistence of LTE-U with a Rotating Radar in CBRS Bands. , 2018, , . | | 6 |

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| 37 | Information Freshness Over an Interference Channel: A Game Theoretic View. , 2018, , . | | 32 |
| 38 | SDN Controller Placement With Delay-Overhead Balancing in Wireless Edge Networks. IEEE Transactions on Network and Service Management, 2018, 15, 1446-1459. | 4.9 | 35 |
| 39 | Towards an "Effective Age" Concept. , 2018, , . | | 10 |
| 40 | Towards an effective age of information: Remote estimation of a Markov source. , 2018, , . | | 47 |
| 41 | Age-optimal updates of multiple information flows. , 2018, , . | | 93 |
| 42 | Beyond Overlay: Reaping Mutual Benefits for Primary and Secondary Networks Through Node-Level Cooperation. IEEE Transactions on Mobile Computing, 2017, 16, 2-15. | 5.8 | 8 |
| 43 | A Distributed Scheduling Algorithm for Underwater Acoustic Networks With Large Propagation Delays. IEEE Transactions on Communications, 2017, 65, 1131-1145. | 7.8 | 19 |
| 44 | Impact of asynchronous transmissions in noncontiguous OFDMA. , 2017, , . | | 0 |
| 45 | Information freshness and popularity in mobile caching. , 2017, , . | | 55 |
| 46 | Impact of hostile interference on information freshness: A game approach. , 2017, , . | | 34 |
| 47 | On Link Scheduling in Dual-Hop 60-GHz mmWave Networks. IEEE Transactions on Vehicular Technology, 2017, 66, 11180-11192. | 6.3 | 19 |
| 48 | Special issue on wireless SDN. Journal of Communications and Networks, 2017, 19, 543-545. | 2.6 | 1 |
| 49 | Coexistence of radar and communication systems in CBRS bands through downlink power control. , 2017, , . | | 13 |
| 50 | Modeling the age of information in emulated ad hoc networks. , 2017, , . | | 12 |
| 51 | How Close Can I Be? - A Comprehensive Analysis of Cellular Interference on ATC Radar. , 2017, , . | | 3 |
| 52 | A Distributed Algorithm to Achieve Transparent Coexistence for a Secondary Multi-Hop MIMO Network. IEEE Transactions on Wireless Communications, 2016, 15, 6063-6077. | 9.2 | 1 |
| 53 | Link scheduling and channel assignment with a graph spectral clustering approach. , 2016, , . | | 1 |
| 54 | Controlling the age of information: Buffer size, deadline, and packet replacement. , 2016, , . | | 39 |

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| 55 | Physical-layer security of NC-OFDM-based systems. , 2016, , . | | 3 |
| 56 | Cross-Layer Optimization for Multi-Hop Wireless Networks With Successive Interference Cancellation. IEEE Transactions on Wireless Communications, 2016, 15, 5819-5831. | 9.2 | 31 |
| 57 | Effect of Message Transmission Path Diversity on Status Age. IEEE Transactions on Information Theory, 2016, 62, 1360-1374. | 2.4 | 154 |
| 58 | Quality of Experience Driven Multi-User Video Streaming in Cellular Cognitive Radio Networks With Single Channel Access. IEEE Transactions on Multimedia, 2016, 18, 1401-1413. | 7.2 | 19 |
| 59 | Network-coded cooperative communications with multiple relay nodes: Achievable rate and network optimization. Ad Hoc Networks, 2016, 53, 79-93. | 5.5 | 5 |
| 60 | On Throughput Region for Primary and Secondary Networks With Node-Level Cooperation. IEEE Journal on Selected Areas in Communications, 2016, 34, 2763-2775. | 14.0 | 5 |
| 61 | Wireless link connectivity under hostile interference: Nash and stackelberg equilibria. , 2016, , . | | 2 |
| 62 | Age of information with a packet deadline. , 2016, , . | | 54 |
| 63 | Design and implementation of an underlay control channel for NC-OFDM-based networks. , 2016, , . | | 5 |
| 64 | A Decomposition Approach to Quality-Driven Multiuser Video Streaming in Cellular Cognitive Radio Networks. IEEE Transactions on Wireless Communications, 2016, 15, 728-739. | 9.2 | 20 |
| 65 | On power control in full duplex underlay cognitive radio networks. Ad Hoc Networks, 2016, 37, 183-194. | 5.5 | 14 |
| 66 | An Analytical Model for Interference Alignment in Multi-Hop MIMO Networks. IEEE Transactions on Mobile Computing, 2016, 15, 17-31. | 5.8 | 19 |
| 67 | Minimum Time Length Scheduling under Blockage and Interference in Multi-Hop mmWave Networks. , 2015, , . | | 10 |
| 68 | Simultaneous Schedule-Based Transmission by Primary and Secondary Users for Heavy-Traffic Cognitive Radio Networks. IEEE Transactions on Vehicular Technology, 2015, 64, 1132-1142. | 6.3 | 1 |
| 69 | Experimental evaluation of the age of information via emulation. , 2015, , . | | 29 |
| 70 | SINR-based scheduling for minimum latency broadcast. , 2015, , . | | 3 |
| 71 | Minimum-energy link scheduling for emptying wireless networks. , 2015, , . | | 5 |
| 72 | Optimal throughput curve for primary and secondary users with node-level cooperation. , 2015, , . | | 4 |

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| 73 | Toward Transparent Coexistence for Multihop Secondary Cognitive Radio Networks. IEEE Journal on Selected Areas in Communications, 2015, 33, 958-971. | 14.0 | 10 |
| 74 | Network Performance and Spectral Behavior of Cognitive Radios during a Coexistence Field Test. , 2014, , . | | 3 |
| 75 | Impact of channel state information on energy efficient transmission in interference channels. , 2014, , . | | 0 |
| 76 | QoE driven video streaming in cognitive radio networks: The case of single channel access. , 2014, , . | | 12 |
| 77 | Shark-IA. , 2014, , . | | 14 |
| 78 | Power Control in Full Duplex Underlay Cognitive Radio Networks: A Control Theoretic Approach. , 2014, , . | | 15 |
| 79 | Cooperation in Cognitive Underlay Networks: Stable Throughput Tradeoffs. IEEE/ACM Transactions on Networking, 2014, 22, 1756-1768. | 3.8 | 27 |
| 80 | Effect of message transmission diversity on status age. , 2014, , . | | 65 |
| 81 | Achieving transparent coexistence in a multi-hop secondary network through distributed computation. , 2014, , . | | 1 |
| 82 | Joint Optimization of Session Grouping and Relay Node Selection for Network-Coded Cooperative Communications. IEEE Transactions on Mobile Computing, 2014, 13, 2028-2041. | 5.8 | 10 |
| 83 | Achievable Throughput under BER Constraints via Transmission Scheduling and Multiuser Detection. IEEE Transactions on Wireless Communications, 2014, 13, 124-131. | 9.2 | 3 |
| 84 | Special issue on cognitive networking. Journal of Communications and Networks, 2014, 16, 101-109. | 2.6 | 0 |
| 85 | Frequency Selection and Relay Placement for Energy Efficiency in Underwater Acoustic Networks. IEEE Journal of Oceanic Engineering, 2014, 39, 331-342. | 3.8 | 23 |
| 86 | Cognitive Cooperative Random Access for Multicast: Stability and Throughput Analysis. IEEE Transactions on Control of Network Systems, 2014, 1, 135-144. | 3.7 | 5 |
| 87 | Minimum Time Length Scheduling under Blockage and Interference in Multi-Hop mmWave Networks. , 2014, , . | | 0 |
| 88 | UPS: A United Cooperative Paradigm for Primary and Secondary Networks. , 2013, , . | | 14 |
| 89 | Beyond interference avoidance: On transparent coexistence for multi-hop secondary CR networks. , 2013, , . | | 7 |
| 90 | Age of information under random updates. , 2013, , . | | 186 |

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| 91 | On interference alignment for multi-hop MIMO networks. , 2013, , . | | 8 |
| 92 | Bridging the Gap between Protocol and Physical Models for Wireless Networks. IEEE Transactions on Mobile Computing, 2013, 12, 1404-1416. | 5.8 | 47 |
| 93 | Bicriteria Optimization in Multihop Wireless Networks: Characterizing the Throughput-Energy Envelope. IEEE Transactions on Mobile Computing, 2013, 12, 1866-1878. | 5.8 | 4 |
| 94 | Multicast throughput stability analysis for cognitive cooperative random access. , 2013, , . | | 5 |
| 95 | On Optimal Wireless Scheduling with Propagation Delays. , 2013, , . | | 0 |
| 96 | Impact of channel state information on the stability of cognitive shared channels. , 2012, , . | | 2 |
| 97 | Toward simple criteria to establish capacity scaling laws for wireless networks. , 2012, , . | | 13 |
| 98 | Stable Throughput Regions in Wireless Networks. Foundations and Trends in Networking, 2012, 7, 235-338. | 10.2 | 13 |
| 99 | Network Coding in Cooperative Communications: Friend or Foe?. IEEE Transactions on Mobile Computing, 2012, 11, 1073-1085. | 5.8 | 44 |
| 100 | Optimal frequency selection for energy efficient underwater acoustic networks. , 2012, , . | | 1 |
| 101 | Wireless multicast with cooperative relaying. , 2012, , . | | 2 |
| 102 | Implementation of distributed time exchange based cooperative forwarding. , 2012, , . | | 0 |
| 103 | Squeezing the most out of interference: An optimization framework for joint interference exploitation and avoidance. , 2012, , . | | 43 |
| 104 | Joint Flow Routing and Relay Node Assignment in Cooperative Multi-Hop Networks. IEEE Journal on Selected Areas in Communications, 2012, 30, 254-262. | 14.0 | 30 |
| 105 | Achievable Rate Analysis in Network-Coded Cooperative Communications with Multiple Relay Nodes. , 2011, , . | | 2 |
| 106 | On the Asymptotic Capacity of Multi-Hop MIMO Ad Hoc Networks. IEEE Transactions on Wireless Communications, 2011, 10, 1032-1037. | 9.2 | 21 |
| 107 | On the Throughput of MIMO-Empowered Multihop Cognitive Radio Networks. IEEE Transactions on Mobile Computing, 2011, 10, 1505-1519. | 5.8 | 19 |
| 108 | Stable throughput tradeoffs in cognitive shared channels with cooperative relaying. , 2011, , . | | 56 |

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| 109 | Optimizing network-coded cooperative communications via joint session grouping and relay node selection. , 2011, , . | | 17 |
| 110 | Optimal grouping and matching for network-coded cooperative communications. , 2011, , . | | 3 |
| 111 | Parallel TDMA Scheduling for Multiple-Destination Wireless Networks. IEEE Transactions on Wireless Communications, 2011, 10, 3843-3851. | 9.2 | 0 |
| 112 | An Optimal Algorithm for Relay Node Assignment in Cooperative Ad Hoc Networks. IEEE/ACM Transactions on Networking, 2011, 19, 879-892. | 3.8 | 174 |
| 113 | Impact of relay placement on energy efficiency in Underwater Acoustic Networks. , 2011, , . | | 4 |
| 114 | Optimal resource allocation in a bandwidth exchange enabled relay network. , 2011, , . | | 0 |
| 115 | Transmission strategies for single-destination wireless networks. , 2011, , . | | 4 |
| 116 | On optimal throughput-energy curve for multi-hop wireless networks. , 2011, , . | | 17 |
| 117 | On Capacity Scaling Law of Cognitive Radio Ad Hoc Networks. , 2011, , . | | 9 |
| 118 | Optimal scheduling in frequency-agile wireless networks. , 2010, , . | | 0 |
| 119 | Is Network Coding Always Good for Cooperative Communications?. , 2010, , . | | 34 |
| 120 | Channel sharing in cognitive radio networks. , 2010, , . | | 9 |
| 121 | Cooperative Communications in Multi-hop Wireless Networks: Joint Flow Routing and Relay Node Assignment. , 2010, , . | | 87 |
| 122 | On Optimal SINR-Based Scheduling in Multihop Wireless Networks. IEEE/ACM Transactions on Networking, 2010, 18, 1713-1724. | 3.8 | 147 |
| 123 | Optimal Scheduling in Interference Limited Fading Wireless Networks. , 2009, , . | | 7 |
| 124 | Transmission scheduling in capture-based wireless networks. , 2009, , . | | 5 |
| 125 | How to correctly use the protocol interference model for multi-hop wireless networks. , 2009, , . | | 100 |
| 126 | On Path Selection and Rate Allocation for Video in Wireless Mesh Networks. IEEE/ACM Transactions on Networking, 2009, 17, 212-224. | 3.8 | 59 |

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| 129 | Optimal relay assignment for cooperative communications. , 2008, , . | | 137 |
| 130 | On the capacity of multiuser MIMO networks with interference. IEEE Transactions on Wireless Communications, 2008, 7, 488-494. | 9.2 | 20 |
| 131 | Revisiting the optimal scheduling problem. , 2008, , . | | 19 |
| 132 | A cross-layer approach to end-to-end routing and SINR-based scheduling in multi-hop wireless networks. , 2008, , . | | 11 |
| 133 | Optimization of transmission schedules in capture-based wireless networks. , 2008, , . | | 18 |
| 134 | Multi-hop routing and scheduling in wireless networks subject to SINR constraints. , 2007, , . | | 12 |
| 135 | Conjugate Gradient Projection Approach for MIMO Gaussian Broadcast Channels. , 2007, , . | | 11 |
| 136 | Optimal Multipath Routing for Performance Guarantees in Multi-Hop Wireless Networks. , 2007, , . | | 3 |
| 137 | A Cross-layer Approach to Optimal Wireless Link Scheduling with SINR Constraints. , 2007, , . | | 22 |
| 138 | Cross-layer optimized multipath routing for video communications in wireless networks. IEEE Journal on Selected Areas in Communications, 2007, 25, 831-840. | 14.0 | 54 |
| 139 | Path Selection and Rate Allocation for Video Streaming in Multihop Wireless Networks. , 2006, , . | | 7 |
| 140 | Cross-Layer Optimization for UWB-Based AD HOC Networks. , 2006, , . | | 3 |
| 141 | <title>Performance of multiresolution pattern classifiers in medical image encoding from wavelet coefficient distributions</title>. , 1998, 3338, 256. | | 2 |