

# Bulent Tavli

## List of Publications by Year in descending order

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115  
papers

2,250  
citations

236925

25  
h-index

265206

42  
g-index

116  
all docs

116  
docs citations

116  
times ranked

2112  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Coverage-Aware Distributed $k$ -Connectivity Maintenance Algorithm for Arbitrarily Large $k$ in Mobile Sensor Networks. IEEE/ACM Transactions on Networking, 2022, 30, 62-75.	3.8	9
2	Reliability of linear WSNs: A complementary overview and analysis of impact of cascaded failures on network lifetime. Ad Hoc Networks, 2022, 131, 102839.	5.5	6
3	Privacy protection via joint real and reactive load shaping in smart grids. Sustainable Energy, Grids and Networks, 2022, 32, 100794.	3.9	2
4	On the Tradeoff Between Network Lifetime and $k$ -Connectivity-Based Reliability in UWSNs. IEEE Internet of Things Journal, 2022, 9, 24444-24452.	8.7	1
5	Distributed $k$ -Connectivity Restoration for Fault Tolerant Wireless Sensor and Actuator Networks: Algorithm Design and Experimental Evaluations. IEEE Transactions on Reliability, 2021, 70, 1112-1125.	4.6	22
6	A Holistic Analysis of Privacy-Aware Smart Grid Demand Response. IEEE Transactions on Industrial Electronics, 2021, 68, 7631-7641.	7.9	12
7	Efficient computation of wireless sensor network lifetime through deep neural networks. Wireless Networks, 2021, 27, 2055-2065.	3.0	4
8	Holistic Privacy for Electricity, Water, and Natural Gas Metering in Next Generation Smart Homes. IEEE Communications Magazine, 2021, 59, 24-29.	6.1	1
9	Impact of Critical Node Failures on Lifetime of UWSNs with Incomplete Secure Connectivity. , 2021, , .		1
10	3-D Dynamic UAV Base Station Location Problem. INFORMS Journal on Computing, 2021, 33, 839-860.	1.7	4
11	Backhaul-Aware Optimization of UAV Base Station Location and Bandwidth Allocation for Profit Maximization. IEEE Access, 2020, 8, 154573-154588.	4.2	30
12	Optimal operation mode selection for energy-efficient light-weight multi-hop time synchronization in linear wireless sensor networks. Eurasip Journal on Wireless Communications and Networking, 2020, , .	2.4	6
13	Surface Gateway Placement Optimization for Underwater Sensor Networks. , 2020, , .		1
14	Impact of Minimizing the Eavesdropping Risks on Lifetime of Underwater Acoustic Sensor Networks. , 2020, , .		2
15	Neural network based instant parameter prediction for wireless sensor network optimization models. Wireless Networks, 2019, 25, 3405-3418.	3.0	29
16	Packet Size Optimization for Lifetime Maximization in Underwater Acoustic Sensor Networks. IEEE Transactions on Industrial Informatics, 2019, 15, 719-729.	11.3	74
17	Comparative Analysis of Transmission Power Level and Packet Size Optimization Strategies for WSNs. IEEE Systems Journal, 2019, 13, 2264-2274.	4.6	11
18	The location-allocation problem of drone base stations. Computers and Operations Research, 2019, 111, 155-176.	4.0	14

#	ARTICLE	IF	CITATIONS
19	DASH-QoS: A scalable network layer service differentiation architecture for DASH over SDN. Computer Networks, 2019, 154, 12-25.	5.1	7
20	UAV Base Station Location Optimization for Next Generation Wireless Networks: Overview and Future Research Directions. , 2019, , .		61
21	Social Internet of Digital Twins via Distributed Ledger Technologies: Application of Predictive Maintenance. , 2019, , .		8
22	Liberalization of Digital Twins of IoT-Enabled Home Appliances via Blockchains and Absolute Ownership Rights. IEEE Communications Magazine, 2019, 57, 65-71.	6.1	30
23	Design and Evaluation of Algorithms for Energy Efficient and Complete Determination of Critical Nodes for Wireless Sensor Network Reliability. IEEE Transactions on Reliability, 2019, 68, 280-290.	4.6	26
24	The Impact of Incomplete Secure Connectivity on the Lifetime of Wireless Sensor Networks. IEEE Systems Journal, 2018, 12, 1042-1046.	4.6	11
25	Distributed Multi-Unit Privacy Assured Bidding (PAB) for Smart Grid Demand Response Programs. IEEE Transactions on Smart Grid, 2018, 9, 4119-4127.	9.0	21
26	Analysis of the Tradeoff Between Network Lifetime and $k$ -Connectivity in WSNs. , 2018, , .		1
27	A hybrid energy harvesting framework for energy efficiency in wireless sensor networks based smart grid applications. , 2018, , .		14
28	A survey on packet size optimization for terrestrial, underwater, underground, and body area sensor networks. International Journal of Communication Systems, 2018, 31, e3572.	2.5	16
29	Path-Loss Modeling for Wireless Sensor Networks: A review of models and comparative evaluations. IEEE Antennas and Propagation Magazine, 2017, 59, 18-37.	1.4	115
30	The Impact of Incapacitation of Multiple Critical Sensor Nodes on Wireless Sensor Network Lifetime. IEEE Wireless Communications Letters, 2017, 6, 306-309.	5.0	15
31	Comparative Analysis of Load-Shaping-Based Privacy Preservation Strategies in a Smart Grid. IEEE Transactions on Industrial Informatics, 2017, 13, 3226-3235.	11.3	25
32	Design and experimental evaluation of a distributed time synchronization technique for multi-hop wireless sensor networks. , 2017, , .		0
33	Assessment of wireless sensor network lifetime reduction due to elimination of critical node sets. , 2017, , .		1
34	Packet Size Optimization in Wireless Sensor Networks for Smart Grid Applications. IEEE Transactions on Industrial Electronics, 2017, 64, 2392-2401.	7.9	147
35	Towards measuring uniqueness of human voice. , 2017, , .		1
36	Optimal Mobility Patterns of Multiple Base Stations for Wireless Sensor Network Lifetime Maximization. IEEE Sensors Journal, 2017, 17, 7177-7188.	4.7	25

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37	Distributed detection of critical nodes in wireless sensor networks using connected dominating set. , 2016, , .		10
38	Optimal transmission power level sets for lifetime maximization in wireless sensor networks. , 2016, , .		6
39	Joint Optimization of Transmission Power Level and Packet Size for WSN Lifetime Maximization. IEEE Sensors Journal, 2016, 16, 5084-5094.	4.7	38
40	Power scheduling in privacy enhanced microgrid networks with renewables and storage. , 2016, , .		8
41	High performance adjacent error detection for nanometer devices. Electronics Letters, 2016, 52, 1788-1789.	1.0	3
42	Design and implementation of a wireless sensor network based Critical Infrastructure monitoring system. , 2016, , .		0
43	Transmission Power Control for Link-Level Handshaking in Wireless Sensor Networks. IEEE Sensors Journal, 2016, 16, 561-576.	4.7	53
44	Maximizing Wireless Sensor Network lifetime by communication/computation energy optimization of non-repudiation security service: Node level versus network level strategies. Ad Hoc Networks, 2016, 37, 301-323.	5.5	38
45	DLWTS: Distributed Light Weight Time Synchronization for Wireless Sensor Networks. , 2015, , .		5
46	Impact of Limiting Hop Count on the Lifetime of Wireless Sensor Networks. IEEE Communications Letters, 2015, 19, 569-572.	4.1	33
47	Privacy-Guaranteeing Bidding in Smart Grid Demand Response Programs. , 2015, , .		1
48	Prolonging Wireless Sensor Network Lifetime by Optimal Utilization of Compressive Sensing. , 2015, , .		1
49	Generic menu optimization for multi-profile customer systems. , 2015, , .		2
50	Optimal Base Station Mobility Patterns for Wireless Sensor Network Lifetime Maximization. IEEE Sensors Journal, 2015, 15, 6592-6603.	4.7	43
51	The impact of elimination of the most critical node on Wireless Sensor Network lifetime. , 2015, , .		9
52	Evaluating energy cost of route diversity for security in wireless sensor networks. Computer Standards and Interfaces, 2015, 39, 44-57.	5.4	14
53	Optimal data compression for lifetime maximization in wireless sensor networks operating in stealth mode. Ad Hoc Networks, 2015, 24, 134-147.	5.5	23
54	The impact of bandwidth constraints on the energy consumption of Wireless Sensor Networks. , 2014, , .		16

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55	Trade-offs in sum-rate maximization and fairness in relay-enhanced OFDMA-based cellular networks. , 2014, , .		1
56	The impact of random power assignment in handshaking on wireless sensor network lifetime. , 2014, , .		1
57	Spectrum sharing in radar and wireless communication systems: A review. , 2014, , .		53
58	The Impact of Near-Ground Path Loss Modeling on Wireless Sensor Network Lifetime. , 2014, , .		13
59	The Impact of Transmission Power Control Strategies on Lifetime of Wireless Sensor Networks. IEEE Transactions on Computers, 2014, 63, 2866-2879.	3.4	56
60	Data packet length optimization for Wireless Sensor Network lifetime maximization. , 2014, , .		8
61	IEEE 802.11 WLAN based Real Time Indoor Positioning: Literature Survey and Experimental Investigations. Procedia Computer Science, 2014, 34, 157-164.	2.0	32
62	Role of Unidirectionality and Reverse Path Length on Wireless Sensor Network Lifetime. IEEE Sensors Journal, 2014, 14, 3971-3982.	4.7	2
63	Communication/computation trade-offs in wireless sensor networks: Comparing network-level and node-level strategies. , 2014, , .		1
64	The impact of scalable routing on lifetime of smart grid communication networks. Ad Hoc Networks, 2014, 22, 27-42.	5.5	5
65	Systematic investigation of the effects of unidirectional links on the lifetime of wireless sensor networks. Computer Standards and Interfaces, 2013, 36, 132-142.	5.4	4
66	Mobile base station position optimization for network lifetime maximization in wireless sensor networks. , 2013, , .		3
67	The impact of base station mobility patterns on Wireless Sensor Network lifetime. , 2013, , .		11
68	Network lifetime maximization and localized routing tradeoff in wireless sensor networks. , 2013, , .		0
69	Optimized scheduling of power in an islanded microgrid with renewables and stored energy. , 2013, , .		2
70	Analysis of Energy Efficiency of Compressive Sensing in Wireless Sensor Networks. IEEE Sensors Journal, 2013, 13, 1999-2008.	4.7	139
71	Neighbor sensor networks: Increasing lifetime and eliminating partitioning through cooperation. Computer Standards and Interfaces, 2013, 35, 396-402.	5.4	7
72	Mobility Helps Energy Balancing in Wireless Networks. , 2013, , .		3

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73	Uncovering the Impact of Minimum-Energy Routing on Lifetime of Wireless Sensor Networks. , 2013, , .		0
74	Energy and lifetime analysis of compressed Wireless Sensor Network communication. , 2013, , .		0
75	Prolonging wireless sensor network lifetime in stealth mode through intelligent data compression. , 2013, , .		1
76	Propagation model alternatives for outdoor Wireless Sensor Networks. , 2013, , .		10
77	Impact of limiting of hop count on lifetime of wireless sensor networks. , 2013, , .		0
78	Effects of handshake hop length of unidirectional links on the lifetime of wireless sensor networks. , 2013, , .		0
79	The impact of link unidirectionality and reverse path length on wireless sensor network lifetime. , 2013, , .		3
80	Optimal number of routing paths in multi-path routing to minimize energy consumption in wireless sensor networks. Eurasip Journal on Wireless Communications and Networking, 2013, 2013, .	2.4	7
81	Energy Cost of Mitigating Physical Attacks in Wireless Sensor Networks. , 2012, , .		0
82	Optimal energy efficient routing in Wireless Sensor Networks with link asymmetry. , 2012, , .		1
83	A survey of visual sensor network platforms. Multimedia Tools and Applications, 2012, 60, 689-726.	3.9	130
84	Communication/computation tradeoffs for prolonging network lifetime in wireless sensor networks: The case of digital signatures. Information Sciences, 2012, 188, 44-63.	6.9	15
85	Optimizing physical-layer parameters for wireless sensor networks. ACM Transactions on Sensor Networks, 2011, 7, 1-20.	3.6	64
86	Impact of Limiting Number of Links on the Lifetime of Wireless Sensor Networks. IEEE Communications Letters, 2011, 15, 43-45.	4.1	7
87	Lifetime Bounds of Wireless Sensor Networks Preserving Perfect Sink Unobservability. IEEE Communications Letters, 2011, 15, 205-207.	4.1	25
88	Experimental study on the effects of communication on cooperative search in complex environments. , 2011, , 535-556.		0
89	Energy-Efficient Real-Time Multicast Routing in Mobile Ad Hoc Networks. IEEE Transactions on Computers, 2011, 60, 707-722.	3.4	27
90	Maximizing lifetime of event-unobservable wireless sensor networks. Computer Standards and Interfaces, 2011, 33, 401-410.	5.4	28

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91	The future of security in Wireless Multimedia Sensor Networks. Telecommunication Systems, 2010, 45, 77-91.	2.5	49
92	Prolonging network lifetime with multi-domain cooperation strategies in wireless sensor networks. Ad Hoc Networks, 2010, 8, 582-596.	5.5	28
93	Data processing and communication strategies for lifetime optimization in wireless sensor networks. AEU - International Journal of Electronics and Communications, 2010, 64, 992-998.	2.9	14
94	Investigating the Tradeoffs between Spatial Granularity and Energy Requirements in Wireless Sensor Networks. , 2010, , .		1
95	Optimal data compression and forwarding in wireless sensor networks. IEEE Communications Letters, 2010, 14, 408-410.	4.1	20
96	Mitigation of Compromising Privacy by Transmission Range Control in Wireless Sensor Networks. IEEE Communications Letters, 2010, 14, 1104-1106.	4.1	13
97	Denial-of-Service attacks and countermeasures in IEEE 802.11 wireless networks. Computer Standards and Interfaces, 2009, 31, 931-941.	5.4	111
98	Energy-efficient relaying in wireless networks. AEU - International Journal of Electronics and Communications, 2009, 63, 695-698.	2.9	7
99	Joint routing and multi level data compression for lifetime optimization in wireless sensor networks. , 2009, , .		1
100	The impact of one-time energy costs on network lifetime in wireless sensor networks. IEEE Communications Letters, 2009, 13, 905-907.	4.1	32
101	QoS and energy efficiency in network wide broadcasting: A MAC layer perspective. Computer Communications, 2007, 30, 3705-3720.	5.1	7
102	Multi-rate Support for Network-Wide Broadcasting in MANETs. Lecture Notes in Computer Science, 2007, , 1140-1144.	1.3	1
103	Energy and Spatial Reuse Efficient Network-Wide Real-Time Data Broadcasting in Mobile Ad Hoc Networks. IEEE Transactions on Mobile Computing, 2006, 5, 1297-1312.	5.8	18
104	Broadcast capacity of wireless networks. IEEE Communications Letters, 2006, 10, 68-69.	4.1	57
105	Energy efficiency and error resilience in coordinated and non-coordinated medium access control protocols. Computer Communications, 2006, 29, 3493-3506.	5.1	7
106	An analysis of coordinated and non-coordinated medium access control protocols under channel noise. , 2005, , .		3
107	MH-TRACE: Multihop Time Reservation Using Adaptive Control for Energy Efficiency. IEEE Journal on Selected Areas in Communications, 2004, 22, 942-953.	14.0	62
108	Trace: time reservation using adaptive control for energy efficiency. IEEE Journal on Selected Areas in Communications, 2003, 21, 1506-1515.	14.0	23

#	ARTICLE	IF	CITATIONS
109	MH-trace: multi-hop time reservation using adaptive control for energy efficiency. , 0, , .		3
110	PN-trace: plain network-wide broadcasting through time reservation using adaptive control for energy efficiency. , 0, , .		2
111	The effects of channel errors on coordinated and non-coordinated medium access control protocols. , 0, , .		3
112	NB-TRACE: network-wide broadcasting through time reservation using adaptive control for energy efficiency. , 0, , .		1
113	MC-Trace: Multicasting Through Time Reservation using Adaptive Control for Energy Efficiency. , 0, , .		10
114	Menu Optimization for Multi-Profile Customer Systems on Large Scale Data. Computational Economics, 0, , 1.	2.6	0
115	Energy Efficient Real-Time Distributed Communication Architectures for Military Tactical Communication Systems. Advances in Wireless Technologies and Telecommunication Book Series, 0, , 35-82.	0.4	1