Mehmet Can Vuran

List of Publications by Citations

99 papers	8,857 citations	32 h-index	94 g-index
112 ext. papers	10,798 ext. citations	4.6 avg, IF	6.41 L-index

#	Paper	IF	Citations
99	NeXt generation/dynamic spectrum access/cognitive radio wireless networks: A survey. *Computer Networks*, **2006**, 50, 2127-2159	5.4	3966
98	A survey on spectrum management in cognitive radio networks **2008**, 46, 40-48		949
97	**2010**,		475
96	Spatio-temporal correlation: theory and applications for wireless sensor networks. *Computer Networks*, **2004**, 45, 245-259	5.4	425
95	Spatial correlation-based collaborative medium access control in wireless sensor networks. *IEEE/ACM Transactions on Networking*, **2006**, 14, 316-329	3.8	248
94	Signal propagation techniques for wireless underground communication networks. *Physical Communication*, **2009**, 2, 167-183	2.2	225
93	BorderSense: Border patrol through advanced wireless sensor networks. *Ad Hoc Networks*, **2011**, 9, 468-477	4.8	187
92	MISE-PIPE: Magnetic induction-based wireless sensor networks for underground pipeline monitoring. *Ad Hoc Networks*, **2011**, 9, 218-227	4.8	167
91	Autonomous precision agriculture through integration of wireless underground sensor networks with center pivot irrigation systems. *Ad Hoc Networks*, **2013**, 11, 1975-1987	4.8	144
90	Internet of underground things in precision agriculture: Architecture and technology aspects. *Ad Hoc Networks*, **2018**, 81, 160-173	4.8	130
89	Channel model and analysis for wireless underground sensor networks in soil medium. *Physical Communication*, **2010**, 3, 245-254	2.2	129
88	Error Control in Wireless Sensor Networks: A Cross Layer Analysis. *IEEE/ACM Transactions on Networking*, **2009**, 17, 1186-1199	3.8	122
87	XLP: A Cross-Layer Protocol for Efficient Communication in Wireless Sensor Networks. *IEEE Transactions on Mobile Computing*, **2010**, 9, 1578-1591	4.6	109
86	Cross-Layer Analysis of the End-to-End Delay Distribution in Wireless Sensor Networks. *IEEE/ACM Transactions on Networking*, **2012**, 20, 305-318	3.8	95
85	Semi-supervised near-miss fall detection for ironworkers with a wearable inertial measurement unit. *Automation in Construction*, **2016**, 68, 194-202	9.6	93
84	A Cross-Layer Protocol for Wireless Sensor Networks **2006**,		83
83	Collective sensing of workers' gait patterns to identify fall hazards in construction. *Automation in Construction*, **2017**, 82, 166-178	9.6	66

82	Spatio-Temporal Event Model for Cyber-Physical Systems **2009**,		58
81	Development of a Testbed for Wireless Underground Sensor Networks. *Eurasip Journal on Wireless Communications and Networking*, **2010**, 2010,	3.2	53
80	The State of the Art in Cross-Layer Design for Wireless Sensor Networks. *Lecture Notes in Computer Science*, **2006**, 78-92	0.9	52
79	Communication with Aboveground Devices in Wireless Underground Sensor Networks: An Empirical Study **2010**,		51
78	Di-Sense: In situ real-time permittivity estimation and soil moisture sensing using wireless underground communications. *Computer Networks*, **2019**, 151, 31-41	5.4	51
77	Empirical Evaluation of Wireless Underground-to-Underground Communication in Wireless Underground Sensor Networks. *Lecture Notes in Computer Science*, **2009**, 231-244	0.9	45
76	Cyber-physical systems in industrial process control. *ACM SIGBED Review*, **2008**, 5, 1-2	1.3	42
75	Pulses in the sand: Impulse response analysis of wireless underground channel **2016**,		39
74	Cross-Layer Analysis of Error Control in Wireless Sensor Networks **2006**,		39
73	. *IEEE Transactions on Antennas and Propagation*, **2019**, 67, 3996-4009	4.9	38
72	**2016**,		37
71	Internet of underground things: Sensing and communications on the field for precision agriculture **2018**,		33
70	On the cross-layer interactions between congestion and contention in wireless sensor and actor networks. *Ad Hoc Networks*, **2007**, 5, 897-909	4.8	33
69	Smart underground antenna arrays: A soil moisture adaptive beamforming approach **2017**,		32
68	On network connectivity of wireless sensor networks for sandstorm monitoring. *Computer Networks*, **2011**, 55, 1150-1157	5.4	32
67	(CPS)^2 **2010**,		32
66	Cooperative Spectrum Sensing in Cognitive Radio Networks Using Multidimensional Correlations. *IEEE Transactions on Wireless Communications*, **2014**, 13, 1832-1843	9.6	30
65	Wireless underground channel diversity reception with multiple antennas for internet of underground things **2017**,		30

64	Sensing through the continent **2012**,		29
63	Towards Internet of Underground Things in smart lighting: A statistical model of wireless underground channel **2017**,		28
62	A concept lattice-based event model for Cyber-Physical Systems **2010**,		27
61	Vehicle-to-barrier communication during real-world vehicle crash tests. *Computer Communications*, **2018**, 127, 172-186	5.1	26
60	EM-Based Wireless Underground Sensor Networks **2018**, 247-285		23
59	Impacts of soil moisture on cognitive radio underground networks **2013**,		23
58	A reliable energy-efficient multi-level routing algorithm for wireless sensor networks using fuzzy Petri nets. *Sensors*, **2011**, 11, 3381-400	3.8	23
57	Spatio-temporal Characteristics of Point and Field Sources in Wireless Sensor Networks **2006**,		23
56	Environment aware connectivity for wireless underground sensor networks **2013**,		19
55	Mobile data harvesting in wireless underground sensor networks **2012**,		18
54	Stochastic Analysis of Energy Consumption in Wireless Sensor Networks **2010**,		18
53	Cross-Layer Analysis of the End-to-End Delay Distribution in Wireless Sensor Networks **2009**,		18
52	Time-domain and Frequency-domain Reflectometry Type Soil Moisture Sensor Performance and Soil Temperature Effects in Fine- and Coarse-textured Soils. *Applied Engineering in Agriculture*, **2019** , 35, 117-134	0.8	15
51	SDRCS: A service-differentiated real-time communication scheme for event sensing in wireless sensor networks. *Computer Networks*, **2011**, 55, 3287-3302	5.4	14
50	Cross-Layer Packet Size Optimization for Wireless Terrestrial, Underwater, and Underground Sensor Networks **2008**,		13
49	Cross-layer analysis of error control in underwater wireless sensor networks. *Computer Communications*, **2012**, 35, 2162-2172	5.1	12
48	A-MAC: Adaptive Medium Access Control for Next Generation Wireless Terminals. *IEEE/ACM Transactions on Networking*, **2007**, 15, 574-587	3.8	12
47	Analysis of event detection delay in wireless sensor networks **2011**,		11

46	Vibration energy harvesting for wireless underground sensor networks **2013**,		10
45	Shades of White: Impacts of Population Dynamics and TV Viewership on Available TV Spectrum. *IEEE Transactions on Vehicular Technology*, **2019**, 68, 2427-2442	6.8	9
44	Spatio-temporal soil moisture measurement with wireless underground sensor networks **2010**,		9
43	CFOSynt: Carrier frequency offset assisted clock syntonization for wireless sensor networks **2017**,		8
42	Cost Efficiency of Anycast-Based Forwarding in Duty-Cycled WSNs with Lossy Channel **2010**,		8
41	Connecting soil to the cloud: A wireless underground sensor network testbed **2012**,		7
40	A Channel Model for Wireless Underground Sensor Networks Using Lateral Waves **2011**,		6
39	Sensing through the continent: Towards monitoring migratory birds using cellular sensor networks **2012**,		6
38	Empirical analysis of the hidden terminal problem in Wireless Underground Sensor Networks **2012**,		6
37	Design of a Wireless Vision Sensor for object tracking in Wireless Vision Sensor Networks **2008**,		6
36	A Primer on Vehicle-to-Barrier Communications: Effects of Roadside Barriers, Encroachment, and Vehicle Braking **2016**,		6
35	A Statistical Impulse Response Model Based on Empirical Characterization of Wireless Underground Channels. *IEEE Transactions on Wireless Communications*, **2020**, 19, 5966-5981	9.6	5
34	CorTiS: Correlation-Based Time Synchronization in Internet of Things **2019**,		5
33	Power efficiency of cooperative communication in wireless sensor networks **2009**,		5
32	A service-differentiated real-time communication scheme for wireless sensor networks **2008**,		5
31	Deep-Waveform: A Learned OFDM Receiver Based on Deep Complex-Valued Convolutional Networks. *IEEE Journal on Selected Areas in Communications*, **2021**, 39, 2407-2420	14.2	5
30	A cognitive radio TV prototype for effective TV spectrum sharing **2017**,		4
29	Ratings for spectrum: Impacts of TV viewership on TV whitespace **2014**,		4

28	Exploiting soil moisture information for adaptive error control in wireless underground sensor networks **2013**,		4
27	WSN Applications **2010**, 17-35		4
26	Topology Analysis of Wireless Sensor Networks for Sandstorm Monitoring **2011**,		4
25	Dynamic Pricing of Wireless Internet Based on Usage and Stochastically Changing Capacity. *Manufacturing and Service Operations Management*, **2019**, 21, 833-852	4.6	3
24	Energy Consumption and Latency Analysis for Wireless Multimedia Sensor Networks **2010**,		3
23	Cross-Layer Solutions **2010**, 221-242		3
22	A Dual-Network Testbed for Wireless Sensor Applications **2011**,		3
21	Wireless Heterogeneous Networks and Next Generation Internet. *Mobile Networks and Applications* , **2010**, 15, 607-609	2.9	3
20	. *IEEE Vehicular Technology Magazine*, **2012**, 7, 23-24	9.9	2
19	SPRIDE: Scalable and private continual geo-distance evaluation for precision agriculture **2017**,		2
18	Simulating and testing mobile wireless sensor networks **2010**,		2
17	Towards Optimal Synchronization Scheduling in Internet of (Heterogeneous) Things **2019**,		2
16	Network Time Connectivity for Wireless Networks **2020**,		1
15	Demo abstract: Clock syntonization using CFO information in Wireless Sensor Networks **2017**,		1
14	MPSBL: Multiple Transmit Power Assisted Sequence-Based Localization in Wireless Sensor Networks **2018**,		1
13	Wireless Underground Sensor Networks: System in Support of Future Agriculture. *Journal of Nanotechnology in Engineering and Medicine*, **2013**, 4,		1
12	Error Control **2010**, 117-137		1
11	Wireless Underground Sensor Networks **2010**, 443-482		1

List of Publications

10	Analysis of the accuracy-latency-energy tradeoff for wireless embedded camera networks **2011**,		1
9	Future Trends in Wireless Sensor Networks433-470		1
8	A city-wide experimental testbed for the next generation wireless networks. *Ad Hoc Networks*, **2021**, 111, 102305	4.8	1
7	Cross-layer Designs **2007**, 75-98		1
6	Transport Layer **2010**, 167-189		0
5	Stochastic Modeling of Delay, Energy Consumption, and Lifetime. *Signals and Communication Technology*, **2014**, 11-56	0.5	0
4	Physical Layer **2010**, 53-76		
3	Medium Access Control **2010**, 77-116		
2	Wireless Multimedia Sensor Networks **2010**, 349-397		
1	Grand Challenges **2010**, 483-490		