Mehmet C Vuran

List of Publications by Year
in descending order

51 papers	9,037 citations	331670 21 h-index	526287 27 g-index
51 all docs	51 docs citations	51 times ranked	5527 citing authors

#	Article	IF	Citations
1	NeXt generation/dynamic spectrum access/cognitive radio wireless networks: A survey. Computer Networks, 2006, 50, 2127-2159.	5.1	5,385
2	Spatio-temporal correlation: theory and applications for wireless sensor networks. Computer Networks, 2004, 45, 245-259.	5.1	574
3	Signal propagation techniques for wireless underground communication networks. Physical Communication, 2009, 2, 167-183.	2.1	277
4	BorderSense: Border patrol through advanced wireless sensor networks. Ad Hoc Networks, 2011, 9, 468-477.	5.5	258
5	MISE-PIPE: Magnetic induction-based wireless sensor networks for underground pipeline monitoring. Ad Hoc Networks, 2011, 9, 218-227.	5.5	208
6	Internet of underground things in precision agriculture: Architecture and technology aspects. Ad Hoc Networks, 2018, 81, 160-173.	5.5	202
7	Autonomous precision agriculture through integration of wireless underground sensor networks with center pivot irrigation systems. Ad Hoc Networks, 2013, 11, 1975-1987.	5.5	195
8	Channel model and analysis for wireless underground sensor networks in soil medium. Physical Communication, 2010, 3, 245-254.	2.1	161
9	Error Control in Wireless Sensor Networks: A Cross Layer Analysis. IEEE/ACM Transactions on Networking, 2009, 17, 1186-1199.	3.8	158
10	Semi-supervised near-miss fall detection for ironworkers with a wearable inertial measurement unit. Automation in Construction, 2016, 68, 194-202.	9.8	137
11	XLP: A Cross-Layer Protocol for Efficient Communication in Wireless Sensor Networks. IEEE Transactions on Mobile Computing, 2010, 9, 1578-1591.	5.8	135
12	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	128
13	A Cross-Layer Protocol for Wireless Sensor Networks. , 2006, , .		114
14	Collective sensing of workers' gait patterns to identify fall hazards in construction. Automation in Construction, 2017, 82, 166-178.	9.8	98
15	Di-Sense: In situ real-time permittivity estimation and soil moisture sensing using wireless underground communications. Computer Networks, 2019, 151, 31-41.	5.1	83
16	Development of a Testbed for Wireless Underground Sensor Networks. Eurasip Journal on Wireless Communications and Networking, 2010, 2010, .	2.4	73
17	Empirical Evaluation of Wireless Underground-to-Underground Communication in Wireless Underground Sensor Networks. Lecture Notes in Computer Science, 2009, , 231-244.	1.3	71
18	A Theoretical Model of Underground Dipole Antennas for Communications in Internet of Underground Things. IEEE Transactions on Antennas and Propagation, 2019, 67, 3996-4009.	5.1	64

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19	Cross-Layer Analysis of Error Control in Wireless Sensor Networks. , 2006, , .		51
20	Impacts of Soil Type and Moisture on the Capacity of Multi-Carrier Modulation in Internet of Underground Things. , 2016, , .		51
21	Cooperative Spectrum Sensing in Cognitive Radio Networks Using Multidimensional Correlations. IEEE Transactions on Wireless Communications, 2014, 13, 1832-1843.	9.2	48
22	Internet of underground things: Sensing and communications on the field for precision agriculture. , 2018, , .		47
23	Pulses in the sand: Impulse response analysis of wireless underground channel. , 2016, , .		44
24	Smart underground antenna arrays: A soil moisture adaptive beamforming approach. , 2017, , .		44
25	On network connectivity of wireless sensor networks for sandstorm monitoring. Computer Networks, 2011, 55, 1150-1157.	5.1	38
26	(CPS)^2. , 2010, , .		38
27	Vehicle-to-barrier communication during real-world vehicle crash tests. Computer Communications, 2018, 127, 172-186.	5.1	37
28	Wireless underground channel diversity reception with multiple antennas for internet of underground things. , 2017, , .		36
29	Towards Internet of Underground Things in smart lighting: A statistical model of wireless underground channel. , 2017, , .		36
30	EM-Based Wireless Underground Sensor Networks. , 2018, , 247-285.		33
31	Impacts of soil moisture on cognitive radio underground networks. , 2013, , .		29
32	Environment aware connectivity for wireless underground sensor networks. , 2013, , .		21
33	A Statistical Impulse Response Model Based on Empirical Characterization of Wireless Underground Channels. IEEE Transactions on Wireless Communications, 2020, 19, 5966-5981.	9.2	21
34	Empirical analysis of the hidden terminal problem in Wireless Underground Sensor Networks. , 2012, , .		20
35	Mobile data harvesting in wireless underground sensor networks. , 2012, , .		20
36	SDRCS: A service-differentiated real-time communication scheme for event sensing in wireless sensor networks. Computer Networks, 2011, 55, 3287-3302.	5.1	19

#	Article	IF	Citations
37	Vibration energy harvesting for wireless underground sensor networks. , 2013, , .		19
38	A Channel Model for Wireless Underground Sensor Networks Using Lateral Waves. , 2011, , .		17
39	Cross-layer analysis of error control in underwater wireless sensor networks. Computer Communications, 2012, 35, 2162-2172.	5.1	14
40	Ratings for spectrum: Impacts of TV viewership on TV whitespace. , 2014, , .		6
41	A city-wide experimental testbed for the next generation wireless networks. Ad Hoc Networks, 2021, 111, 102305.	5.5	6
42	Exploiting soil moisture information for adaptive error control in wireless underground sensor networks. , 2013, , .		5
43	Vision Graph Construction in Wireless Multimedia Sensor Networks. , 2010, , .		3
44	Dynamic Pricing of Wireless Internet Based on Usage and Stochastically Changing Capacity. Manufacturing and Service Operations Management, 2019, 21, 833-852.	3.7	3
45	Impacts of Soil and Antenna Characteristics on LoRa in Internet of Underground Things. , 2021, , .		3
46	MPSBL: Multiple Transmit Power Assisted Sequence-Based Localization in Wireless Sensor Networks. , 2018, , .		2
47	Stochastic Modeling of Delay, Energy Consumption, and Lifetime. Signals and Communication Technology, 2014, , 11-56.	0.5	2
48	Crashing Waves: An Empirical Vehicle-to-Barrier Communication Channel Model via Crash Tests. , 2021, , .		2
49	Wireless Underground Sensor Networks: System in Support of Future Agriculture. Journal of Nanotechnology in Engineering and Medicine, 2013, 4, .	0.8	1
50	OneLNK. , 2022, , .		0
51	STUN: Secret-Free Trust-Establishment For Underground Wireless Networks. , 2022, , .		0