Lorenzo Vangelista

List of Publications by Year
in descending order

69 papers	7,453 citations	489802 18 h-index	425179 34 g-index
70 all docs	70 docs citations	70 times ranked	9025 citing authors

#	Article	IF	Citations
1	Start of Packet Detection and Synchronization for LoraWAN Modulated Signals. IEEE Transactions on Wireless Communications, 2022, 21, 4608-4621.	6.1	2
2	Cascaded WLAN-FWA Networking and Computing Architecture for Pervasive In-Home Healthcare. IEEE Wireless Communications, 2021, 28, 92-99.	6.6	10
3	Performance Analysis of LoRaWAN in Industrial Scenarios. IEEE Transactions on Industrial Informatics, 2021, 17, 6241-6250.	7.2	22
4	A Survey on Technologies, Standards and Open Challenges in Satellite IoT. IEEE Communications Surveys and Tutorials, 2021, 23, 1693-1720.	24.8	135
5	Analysis of 5G Radio Access Protocols for Uplink URLLC in a Connection-Less Mode. IEEE Transactions on Wireless Communications, 2020, 19, 3104-3117.	6.1	13
6	A battery lifetime comparison between LoraWAN and Wireless MBus smart meters. , 2019, , .		6
7	Time-Power Multiplexing for LoRa-Based IoT Networks: An Effective Way to Boost LoRaWAN Network Capacity. International Journal of Wireless Information Networks, 2019, 26, 308-318.	1.8	14
8	Worldwide Connectivity for the Internet of Things Through LoRaWAN. Future Internet, 2019, 11, 57.	2.4	12
9	On the coexistence of LoRaWAN and legacy short range devices in unlicensed bands in Europe. , 2019, , .		1
10	A new LoRa-compatible modulation improving the LoRaWAN network level performance. , 2019, , .		5
11	Boosting Network Capacity in LoRaWAN Through Time-Power Multiplexing. , 2018, , .		10
12	A Power Efficient Adaptive Data Rate Algorithm for LoRaWAN networks. , 2018, , .		8
13	Performance Evaluation of HARQ Schemes for the Internet of Things. Computers, 2018, 7, 48.	2.1	11
14	On the Use of LoRaWAN for Indoor Industrial IoT Applications. Wireless Communications and Mobile Computing, 2018, 2018, 1-11.	0.8	83
15	Comparison of Collision-Free and Contention-Based Radio Access Protocols for the Internet of Things. IEEE Transactions on Communications, 2017, 65, 3832-3846.	4.9	31
16	Analysis of small packet traffic support in LTE. , 2017, , .		1
17	Frequency Shift Chirp Modulation: The LoRa Modulation. IEEE Signal Processing Letters, 2017, 24, 1818-1821.	2.1	308
18	Performance evaluation of LoRa networks in a smart city scenario. , 2017, , .		207

#	Article	IF	Citations
19	On the impact of downlink feedback on LoRa performance. , 2017, , .		26
20	Energy-based anchor node selection for IoT physical layer authentication. , 2016, , .		16
21	Long-range communications in unlicensed bands: the rising stars in the IoT and smart city scenarios. IEEE Wireless Communications, 2016, 23, 60-67.	6.6	826
22	Channel Impulse Response Estimation in IEEE 802.11p via Data Fusion and MMSE Estimator. International Journal of Vehicular Technology, 2015, 2015, 1-10.	1.1	1
23	The challenges of M2M massive access in wireless cellular networks. Digital Communications and Networks, 2015, 1, 1-19.	2.7	214
24	HARQ in LTE uplink: A simple and effective modification suitable for low mobility users. , 2015, , .		2
25	A study on M2M traffic and its impact on cellular networks. , 2015, , .		19
26	RAL: a RESTful M2M communications framework for IoT. , 2015, , .		0
27	Long-Range IoT Technologies: The Dawn of LoRaâ„¢Â. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2015, , 51-58.	0.2	154
28	Internet of Things for Smart Cities. IEEE Internet of Things Journal, 2014, 1, 22-32.	5.5	4,572
29	Channel impulse response estimation in IEEE 802.11p via data fusion and group orthogonal matching pursuit. , 2014, , .		0
30	Padova Smart City: An urban Internet of Things experimentation. , 2014, , .		54
31	Sum capacity maximization for MIMOâ€"OFDMA based cognitive radio networks. Physical Communication, 2014, 10, 106-115.	1.2	8
32	Cognitive Orthogonal Precoder for Two-Tiered Networks Deployment. IEEE Journal on Selected Areas in Communications, 2013, 31, 2338-2348.	9.7	29
33	Network-Wide Clock Synchronization via Message Passing with Exponentially Distributed Link Delays. IEEE Transactions on Communications, 2013, 61, 2012-2024.	4.9	23
34	A Distributed Approach to Interference Alignment in OFDM-Based Two-Tiered Networks. IEEE Transactions on Vehicular Technology, 2013, 62, 1935-1949.	3.9	49
35	On the performance of channel occupancy detectors for vehicular ad-hoc networks. , 2013, , .		2
36	Time-varying clock offset estimation in two-way timing message exchange in wireless sensor networks using factor graphs. , 2012, , .		7

#	Article	IF	Citations
37	Embedded systems for prototyping underwater acoustic networks: The DESERT Underwater libraries on board the PandaBoard and NetDCU. , 2012, , .		4
38	Light-Sync: A low overhead synchronization algorithm for underwater acoustic networks. , 2012, , .		6
39	Cognitive interference alignment for OFDM two-tiered networks. , 2012, , .		11
40	Channel estimation impact for LTE small cells based on MU-VFDM. , 2012, , .		10
41	Interoperable and globally interconnected Smart Grid using IPv6 and 6LoWPAN. , 2012, , .		12
42	Maximum Likelihood Estimation of Time and Carrier Frequency Offset for DVB-T2. IEEE Transactions on Broadcasting, 2012, 58, 77-86.	2.5	18
43	A Factor Graph Approach to Clock Offset Estimation in Wireless Sensor Networks. IEEE Transactions on Information Theory, 2012, 58, 4244-4260.	1.5	30
44	Fast clock synchronization in wireless sensor networks via ADMM-based consensus. , 2011, , .		11
45	Efficient resource allocation for MIMO-OFDMA based cognitive radio networks. , 2011, , .		6
46	SDR implementation of a DVB-T2 transmitter: The core building blocks. , 2011, , .		0
47	Base Station Selection in Uplink Macro Diversity Cellular Systems with Hybrid ARQ. IEEE Journal on Selected Areas in Communications, 2011, 29, 1249-1259.	9.7	11
48	Joint Discovery in Synchronous Wireless Networks. IEEE Transactions on Communications, 2011, 59, 2296-2305.	4.9	24
49	Per Sub-Block Equalization of Very Long OFDM Blocks in Mobile Communications. IEEE Transactions on Communications, 2011, 59, 363-368.	4.9	15
50	Design considerations for massively parallel channel estimation algorithms. , 2011, , .		0
51	Fast Consensus by the Alternating Direction Multipliers Method. IEEE Transactions on Signal Processing, 2011, 59, 5523-5537.	3.2	112
52	Joint discovery in wireless networks. , 2010, , .		0
53	Uplink Cell Selection for Cooperative Multi-Cell Networks with Hybrid ARQ. , 2010, , .		2
54	The Deployment of a Smart Monitoring System Using Wireless Sensor and Actuator Networks. , 2010, , .		77

#	Article	IF	Citations
55	On correlation-based synchronization for DVB-T2. IEEE Communications Letters, 2010, 14, 248-250.	2.5	13
56	Exact analytical expression of schmidl-cox signal detection performance in AWGN. IEEE Communications Letters, 2010, 14, 378-380.	2.5	3
57	Superimposed Sequence Versus Pilot Aided Channel Estimations for Next Generation DVB-T Systems. IEEE Transactions on Broadcasting, 2009, 55, 140-144.	2.5	20
58	Coded Decision Directed Demodulation for Second Generation Digital Video Broadcasting Standard. IEEE Transactions on Broadcasting, 2009, 55, 607-615.	2.5	6
59	On hard and soft detection of space-time block codes by a novel soft output sphere decoder. , 2009, , .		0
60	Key technologies for next-generation terrestrial digital television standard DVB-T2. , 2009, 47, 146-153.		84
61	On the analysis of P1 symbol performance for DVB-T2. , 2009, , .		7
62	Improved Data Detection Exploiting Full Cyclic Prefix for the Evolution of DVB-T. , 2008, , .		3
63	Soft Detection of Modulation Diversity Schemes for Next Generation Digital Terrestrial Television. , 2008, , .		0
64	Superimposed technique for OFDM/OQAM based digital terrestrial television broadcasting. , 2008, , .		5
65	A novel general formulation of up/downsampling commutativity. IEEE Transactions on Signal Processing, 2005, 53, 2124-2134.	3.2	6
66	False alarm probability-based estimation of multipath channel length. IEEE Transactions on Communications, 2003, 51, 1432-1434.	4.9	11
67	Exact spectral evaluation of the family of digital pulse interval modulated signals. IEEE Transactions on Information Theory, 2001, 47, 2983-2992.	1.5	12
68	Efficient implementations and alternative architectures for OFDM-OQAM systems. IEEE Transactions on Communications, 2001, 49, 664-675.	4.9	51
69	Implementation and performance evaluation of wireless sensor networks for smart grid. , 0, , 324-350.		2