Roberto Garello

List of Publications by Year
in descending order

75 papers	1,527 citations	623574 14 h-index	414303 32 g-index
76 all docs	76 docs citations	76 times ranked	900 citing authors

#	Article	IF	Citations
1	Effect of randomizers on the power spectrum excess of space telemetry signals. International Journal of Satellite Communications and Networking, 2022, 40, 67-82.	1.2	2
2	Performance Improvement on Reception Confirmation Messages in Bluetooth Mesh Networks. IEEE Internet of Things Journal, 2022, 9, 2056-2070.	5.5	9
3	Sparse Satellite Constellation Design for Global and Regional Direct-to-Satellite IoT Services. IEEE Transactions on Aerospace and Electronic Systems, 2022, 58, 3786-3801.	2.6	12
4	Implementation of 5G beamforming techniques on cylindrical arrays. , 2019, , .		1
5	State-of-the-art space mission telecommand receivers. IEEE Aerospace and Electronic Systems Magazine, 2017, 32, 4-15.	2.3	9
6	On the error performance bound of ordered statistics decoding of linear block codes. , 2016, , .		18
7	Analysis and performance evaluation of new coding options for space telecommand links â€•Part I: AWGN channels. International Journal of Satellite Communications and Networking, 2015, 33, 509-525.	1.2	11
8	Analysis and performance evaluation of new coding options for space telecommand links â€" part II: jamming channels. International Journal of Satellite Communications and Networking, 2015, 33, 527-542.	1.2	7
9	On the use of eigenvectors in multi-antenna spectrum sensing with noise variance estimation. , 2015, , .		0
10	SNR Wall analysis of multi-sensor energy detection with noise variance estimation. , 2014, , .		1
11	Packet-loss modelling for multi-radio wireless sensor networks. , 2014, , .		1
12	A cooperative NLoS identification and positioning approach in wireless networks. , 2014, , .		2
13	Impact of noise estimation on energy detection and eigenvalue based spectrum sensing algorithms. , 2014, , .		10
14	Spectrum Sensing Algorithms for Cognitive TV White-Spaces Systems. Signals and Communication Technology, 2014, , 71-90.	0.4	3
15	Advanced Channel Coding for Space Mission Telecommand Links. , 2013, , .		9
16	Analysis of hybrid and cooperative positioning algorithms in urban canyon scenarios. , 2013, , .		3
17	Advanced Coding Schemes against Jamming in Telecommand Links. , 2013, , .		4
18	Corneal Sublayers Thickness Estimation Obtained by High-Resolution FD-OCT. International Journal of Biomedical Imaging, 2013, 2013, 1-7.	3.0	12

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19	Digital Video Broadcast-Terrestrial (DVB-T) Single Frequency Networks Positioning in Dynamic Scenarios. Sensors, 2013, 13, 10191-10218.	2.1	62
20	Multi-access interface selection based on data mining algorithm. , 2013, , .		4
21	A cognitive and cooperative tracking approach in wireless networks. , 2013, , .		2
22	Solutions for the path ambiguity problem in DVB-T signal-of-opportunity positioning system. , 2012, , .		0
23	Study of positioning methods in DVB-T single frequency networks. , 2012, , .		3
24	An Energy Efficient Tracking algorithm in UWB-based sensor networks. , 2012, , .		2
25	Decentralized Neyman-Pearson Test with Belief Propagation for Peer-to-Peer Collaborative Spectrum Sensing. IEEE Transactions on Wireless Communications, 2012, 11, 1881-1891.	6.1	14
26	Hybrid Indoor Positioning Approaches Based on WSN and RFID. , 2011, , .		10
27	Hybrid WSN-RFID cooperative positioning based on extended kalman filter. , 2011, , .		7
28	Optical Transition-Edge Sensors Single Photon Pulse Analysis. IEEE Transactions on Applied Superconductivity, 2011, 21, 285-288.	1.1	7
29	Hybrid Cooperative Positioning Based on Distributed Belief Propagation. IEEE Journal on Selected Areas in Communications, 2011, 29, 1948-1958.	9.7	86
30	Performance of Eigenvalue-Based Signal Detectors with Known and Unknown Noise Level. , 2011, , .		94
31	Comparison of spectrum sensing methods for cognitive radio under low SNR. , 2011, , .		3
32	Detection of discontinuous signals for cognitive radio applications. IET Communications, 2011, 5, 1453-1461.	1.5	13
33	The Minimum Entropy Mapping Spectrum of a DNA Sequence. IEEE Transactions on Information Theory, 2010, 56, 771-783.	1.5	21
34	Hybrid GNSS-Terrestrial Cooperative Positioning via Distributed Belief Propagation. , 2010, , .		17
35	Distributed Inference of Channel Occupation Probabilities in Cognitive Networks via Message Passing. , 2010, , .		9
36	On the Autocorrelation Properties of Truncated Maximum-Length Sequences and Their Effect on the Power Spectrum. IEEE Transactions on Signal Processing, 2010, 58, 6284-6297.	3.2	11

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37	Simple Statistical Analysis of the Impact of Some Nonidealities in Downstream VDSL with Linear Precoding. Eurasip Journal on Advances in Signal Processing, 2010, 2010, .	1.0	4
38	Likelihood-ratio propagation and consensus in wireless networks with Markov Random Field models. , 2010, , .		1
39	On the Effect of Estimation and Quantization Errors in Downstream VDSL Systems. , 2010, , .		1
40	Hybrid GNSS-ToA localization and tracking via cooperative unscented Kalman filter. , 2010, , .		40
41	Impact of Wi-Fi traffic on the IEEE 802.15.4 channels occupation in indoor environments. , 2009, , .		14
42	Measurement-Based Analysis of Spectrum Sensing in Adaptive WSNs under Wi-Fi and Bluetooth Interference. , 2009, , .		25
43	FPGA implementation of digital filters for nuclear detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 611, 99-104.	0.7	12
44	Probability of Missed Detection in Eigenvalue Ratio Spectrum Sensing. , 2009, , .		17
45	Exact non-asymptotic threshold for eigenvalue-based spectrum sensing. , 2009, , .		46
46	Energy Detection Spectrum Sensing with Discontinuous Primary User Signal. , 2009, , .		11
47	Digital filters for noise reduction in nuclear detectors. , 2009, , .		1
48	Design of binary sequences and matrices for space applications. , 2009, , .		4
49	Some Remarks on the Problem of Spurious Frequencies in High Data Rate Space Missions. , 2009, , .		2
50	Impact of truncation on the statistical properties of LFSR sequences. , 2009, , .		6
51	Cooperative spectrum sensing based on the limiting eigenvalue ratio distribution in wishart matrices. IEEE Communications Letters, 2009, 13, 507-509.	2.5	141
52	Digital filtering for noise reduction in nuclear detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 594, 382-388.	0.7	10
53	Channel Coding for Future Space Missions: New Requirements and Trends. Proceedings of the IEEE, 2007, 95, 2157-2170.	16.4	36
54	Quasi-Cyclic Low-Density Parity-Check Codes in the McEliece Cryptosystem. , 2007, , .		53

#	ARTICLE	IF	CITATIONS
55	Performance of non-binary Low Density Parity Check Codes for space applications. , 2006, , .		0
56	Average ML Asymptotic Performances of Different Serial Turbo Ensembles. , 2006, , .		0
57	Non-Binary Low Density Parity Check Codes for Satellite Communications. , 2006, , .		0
58	Design and comparison of turbo codes under frame-length and code-rate constraints. International Journal of Satellite Communications and Networking, 2006, 24, 241-259.	1.2	2
59	On the Usage of Quasi-Cyclic Low-Density Parity-Check Codes in the McEliece Cryptosystem. , 2006, , .		16
60	Modulation, coding and signal processing for wireless communications - MHOMS: high-speed ACM modem for satellite applications. IEEE Wireless Communications, 2005, 12, 66-77.	6.6	66
61	Turbo Code Applications on Telemetry and Deep Space Communications. , 2005, , 321-344.		5
62	Extended Hamming Product Codes Analytical Performance Evaluation for Low Error Rate Applications. IEEE Transactions on Wireless Communications, 2004, 3, 2353-2361.	6.1	36
63	Labelings and encoders with the uniform bit error property with applications to serially concatenated trellis codes. IEEE Transactions on Information Theory, 2002, 48, 123-136.	1.5	23
64	Symbol synchronization properties of CCSDS turbo codes. International Journal of Satellite Communications and Networking, 2002, 20, 379-390.	0.6	2
65	Computing the free distance of turbo codes and serially concatenated codes with interleavers: algorithms and applications. IEEE Journal on Selected Areas in Communications, 2001, 19, 800-812.	9.7	154
66	Interleaver properties and their applications to the trellis complexity analysis of turbo codes. IEEE Transactions on Communications, 2001, 49, 793-807.	4.9	37
67	A search for good convolutional codes to be used in the construction of turbo codes. IEEE Transactions on Communications, 1998, 46, 1101-1105.	4.9	138
68	Rotational invariance of trellis codes. I. Encoders and precoders. IEEE Transactions on Information Theory, 1996, 42, 751-765.	1.5	35
69	Rotational invariance of trellis codes. II. Group codes and decoders. IEEE Transactions on Information Theory, 1996, 42, 766-778.	1.5	16
70	Multilevel construction of block and trellis group codes. IEEE Transactions on Information Theory, 1995, 41, 1257-1264.	1.5	18
71	New 16-PSK group trellis codes. IEEE Transactions on Information Theory, 1995, 41, 1517-1523.	1.5	1
72	Group trellis codes over multidimensional unbalanced PSK and their optimality. IEEE Transactions on Communications, 1995, 43, 2922-2932.	4.9	3

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73	Geometrically uniform TCM codes over groups based on LÃ—MPSK constellations. IEEE Transactions on Information Theory, 1994, 40, 137-152.	1.5	32
74	Geometrically uniform partitions of L*MPSK constellations and related binary trellis codes. IEEE Transactions on Information Theory, 1993, 39, 1773-1798.	1.5	31
75	Construction of multilevel group codes. , 0, , .		0