Alessandro Polo

List of Publications by Year
in descending order

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68	891	567281 15	526287 27
papers	citations	h-index	g-index

68	68	68	795
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Wireless Architectures for Heterogeneous Sensing in Smart Home Applications: Concepts and Real Implementation. Proceedings of the IEEE, 2013, 101, 2381-2396.	21.3	135
2	Low-Cost Wireless Monitoring and Decision Support for Water Saving in Agriculture. IEEE Sensors Journal, 2017, 17, 4299-4309.	4.7	111
3	Codesign of Unconventional Array Architectures and Antenna Elements for <italic>5G</italic> Base Stations. IEEE Transactions on Antennas and Propagation, 2017, 65, 6752-6767.	5.1	66
4	Designing Smart Electromagnetic Environments for Next-Generation Wireless Communications. Telecom, 2021, 2, 213-221.	2.6	41
5	System-by-Design Multiscale Synthesis of Task-Oriented Reflectarrays. IEEE Transactions on Antennas and Propagation, 2020, 68, 2867-2882.	5.1	35
6	An Irregular Two-Sizes Square Tiling Method for the Design of Isophoric Phased Arrays. IEEE Transactions on Antennas and Propagation, 2020, 68, 4437-4449.	5.1	31
7	Low-Cost Wireless System for Agrochemical Dosage Reduction in Precision Farming. IEEE Sensors Journal, 2017, 17, 5-6.	4.7	27
8	Evolutionary Optimization Applied to Wireless Smart Lighting in Energy-Efficient Museums. IEEE Sensors Journal, 2017, 17, 1213-1214.	4.7	25
9	Modular Design of Hexagonal Phased Arrays Through Diamond Tiles. IEEE Transactions on Antennas and Propagation, 2020, 68, 3598-3612.	5.1	25
10	A Multiresolution Contraction Integral Equation Method for Solving Highly Nonlinear Inverse Scattering Problems. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 1234-1247.	4.6	24
11	Optimal Excitation Matching Strategy for Sub-Arrayed Phased Linear Arrays Generating Arbitrary-Shaped Beams. IEEE Transactions on Antennas and Propagation, 2020, 68, 4638-4647.	5.1	24
12	Multi-Step Learning-by-Examples Strategy for Real-Time Brain Stroke Microwave Scattering Data Inversion. Electronics (Switzerland), 2021, 10, 95.	3.1	24
13	Decision support for smart irrigation by means of wireless distributed sensors. , 2015, , .		21
14	Semantic wireless localization of WiFi terminals in smart buildings. Radio Science, 2016, 51, 876-892.	1.6	20
15	Emerging Swarm Intelligence Algorithms and Their Applications in Antenna Design: The GWO, WOA, and SSA Optimizers. Applied Sciences (Switzerland), 2021, 11, 8330.	2.5	19
16	Iterative classification strategy for multiâ€resolution wireless sensing of passive targets. Electronics Letters, 2018, 54, 101-103.	1.0	16
17	Crowd detection and occupancy estimation through indirect environmental measurements. , 2014, , .		14
18	Semantic wireless localization enabling advanced services in museums. , 2014, , .		14

#	Article	IF	Citations
19	Antenna Array Thinning Through Quantum Fourier Transform. IEEE Access, 2021, 9, 124313-124323.	4.2	14
20	Experimental validation of a wireless distributed system for smart public lighting management. , 2016, , .		13
21	An improved anchor selection strategy for wireless localization of WSN nodes. , 2016, , .		13
22	SbD-Based Synthesis of Low-Profile WAIM Superstrates for Printed Patch Arrays. IEEE Transactions on Antennas and Propagation, 2021, 69, 3849-3862.	5.1	13
23	Decision support system for fleet management based on TETRA terminals geolocation. , 2014, , .		12
24	A Relocable and Resilient Distributed Measurement System for Electromagnetic Exposure Assessment. IEEE Sensors Journal, 2016, 16, 4595-4604.	4.7	11
25	Performance assessment of a smart road management system for the wireless detection of wildlife road-crossing. , 2016, , .		10
26	Pareto-Optimal Domino-Tiling of Orthogonal Polygon Phased Arrays. IEEE Transactions on Antennas and Propagation, 2022, 70, 3329-3342.	5.1	10
27	Reliable Antenna Measurements in a Near-Field Cylindrical Setup With a Sparsity Promoting Approach. IEEE Transactions on Antennas and Propagation, 2020, 68, 4143-4148.	5.1	9
28	Advances in decision-making support tools for fleet management in emergency and security applications. , 2014, , .		8
29	Design of compact printed antennas for 5G base stations. , 2017, , .		8
30	A WSN-based architecture for the E-Museum - the experience at “Sala dei 500” in Palazzo Vecchio (Florence). , 2013, , .		7
31	A wireless monitoring system for phytosanitary treatment in smart farming applications. , 2016, , .		7
32	Principal component analysis of CSI for the robust wireless detection of passive targets. , 2017, , .		7
33	Learning ensemble strategy for static and dynamic localization in wireless sensor networks. International Journal of Network Management, 2017, 27, e1979.	2.2	7
34	A forecasting strategy based on wireless sensing for thermal comfort optimization in smart buildings. Microwave and Optical Technology Letters, 2017, 59, 2913-2917.	1.4	7
35	Compressive Sensing as Applied to Antenna Arrays: Synthesis, Diagnosis, and Processing. , 2018, , .		6
36	Maximum BCE synthesis of domino-tiled planar arrays for far-field wireless power transmission. Journal of Electromagnetic Waves and Applications, 2020, 34, 2349-2370.	1.6	6

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37	Semantic wireless localization for innovative indoor/outdoor services. , 2014, , .		5
38	Evolutionary optimization strategies applied to wireless fleet management in emergency scenarios. , 2015, , .		5
39	Wildlife road-crossing monitoring system: Advances and test-site validation. , 2016, , .		5
40	Wireless monitoring of heterogeneous parameters in complex museum scenario. , 2014, , .		4
41	Optimization strategies for fleet management based on wireless terminals localization in smart cities scenarios. , 2016, , .		4
42	Exploiting EM simulation modelling for wireless indoor localization. , 2016, , .		4
43	A computational inversion method for interference suppression in reconfigurable thinned ring arrays. Journal of Physics: Conference Series, 2020, 1476, 012016.	0.4	4
44	Teaching Electromagnetics to Next-Generation Engineersâ€"The ELEDIA Recipe: The ELEDIA teaching style. IEEE Antennas and Propagation Magazine, 2020, 62, 50-61.	1.4	4
45	Array Antenna Power Pattern Analysis Through Quantum Computing. , 2022, , .		3
46	Improved wireless localization of mobile devices in smart indoor scenarios. , 2015, , .		2
47	An accurate ensemble-based wireless localization strategy for wireless sensor networks. , 2016, , .		2
48	Conformal Transformation Electromagnetics Based on Schwarz-Christoffel Mapping for the Synthesis of Doubly Connected Metalenses. IEEE Transactions on Antennas and Propagation, 2020, 68, 1836-1850.	5.1	2
49	A multi-resolution computational method to solve highly non-linear inverse scattering problems. Journal of Physics: Conference Series, 2020, 1476, 012002.	0.4	2
50	Real-Time CSI-Based Wireless Gesture Recognition for Human-Machine Interaction. , 2021, , .		2
51	Passive wireless localization strategies for security in large indoor areas. , 2014, , .		1
52	Antenna system strategies for wireless sensor networks in resource hungry smart cities. , 2016, , .		1
53	Modern Approaches and Self-Evaluation Tools for Teaching Electromagnetics. , 2019, , .		1
54	Opportunistic crowd sensing in WiFi-enabled indoor areas. , 2015, , .		0

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55	A frequency-hopping BCS strategy for imaging buried objects. , 2015, , .		0
56	On the role of information in inversion and synthesis - challenges, tools, and trends. , 2015, , .		0
57	Improved target tracking using regression tree in wireless sensor networks. , 2016, , .		0
58	Device-free human monitoring using channel state information. , 2017, , .		0
59	Computational methods for wireless structural health monitoring of cultural heritages. Journal of Physics: Conference Series, 2018, 1131, 012005.	0.4	0
60	Frequency-based inversion of a single wireless link for indoor passive target detection. Journal of Physics: Conference Series, 2020, 1476, 012010.	0.4	0
61	A learning-based inversion strategy for passive wireless detection of crowds. Journal of Physics: Conference Series, 2020, 1476, 012012.	0.4	0
62	NDT/NDE by means of a probabilistic differential compressive sensing method. Journal of Physics: Conference Series, 2020, 1476, 012006.	0.4	0
63	A multi-focusing contrast source Bayesian compressive method for solving inverse scattering problems. Journal of Physics: Conference Series, 2020, 1476, 012013.	0.4	0
64	PCA-Based inversion of WiFi signal for robust device-free indoor target detetion. Journal of Physics: Conference Series, 2020, 1476, 012015.	0.4	0
65	Advanced Teaching in Electromagnetics at the ELEDIA Research Center. , 2021, , .		0
66	A convex optimization-based inversion method for the synthesis of monopulse linear arrays. Journal of Physics: Conference Series, 2020, 1476, 012014.	0.4	0
67	SbD-Synthesis of Electromagnetic Smart Skins Enabling Optimal Wireless City Coverage. , 2021, , .		0
68	AI-Assisted Computationally-Efficient Global Optimization for Inverse Scattering. , 2021, , .		0