

# Alessandro Polo

## List of Publications by Year in descending order

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68  
papers

891  
citations

567281

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526287

27  
g-index

68  
all docs

68  
docs citations

68  
times ranked

795  
citing authors

#	ARTICLE	IF	CITATIONS
1	Pareto-Optimal Domino-Tiling of Orthogonal Polygon Phased Arrays. IEEE Transactions on Antennas and Propagation, 2022, 70, 3329-3342.	5.1	10
2	Array Antenna Power Pattern Analysis Through Quantum Computing. , 2022, , .		3
3	Antenna Array Thinning Through Quantum Fourier Transform. IEEE Access, 2021, 9, 124313-124323.	4.2	14
4	Multi-Step Learning-by-Examples Strategy for Real-Time Brain Stroke Microwave Scattering Data Inversion. Electronics (Switzerland), 2021, 10, 95.	3.1	24
5	Designing Smart Electromagnetic Environments for Next-Generation Wireless Communications. Telecom, 2021, 2, 213-221.	2.6	41
6	Advanced Teaching in Electromagnetics at the ELEDIA Research Center. , 2021, , .		0
7	Real-Time CSI-Based Wireless Gesture Recognition for Human-Machine Interaction. , 2021, , .		2
8	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
9	<i>SbD</i> -Based Synthesis of Low-Profile <i>WAIM</i> Superstrates for Printed Patch Arrays. IEEE Transactions on Antennas and Propagation, 2021, 69, 3849-3862.	5.1	13
10	<i>SbD</i> -Synthesis of Electromagnetic Smart Skins Enabling Optimal Wireless City Coverage. , 2021, , .		0
11	AI-Assisted Computationally-Efficient Global Optimization for Inverse Scattering. , 2021, , .		0
12	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
13	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
14	System-by-Design Multiscale Synthesis of Task-Oriented Reflectarrays. IEEE Transactions on Antennas and Propagation, 2020, 68, 2867-2882.	5.1	35
15	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
16	A multi-resolution computational method to solve highly non-linear inverse scattering problems. Journal of Physics: Conference Series, 2020, 1476, 012002.	0.4	2
17	Frequency-based inversion of a single wireless link for indoor passive target detection. Journal of Physics: Conference Series, 2020, 1476, 012010.	0.4	0
18	A learning-based inversion strategy for passive wireless detection of crowds. Journal of Physics: Conference Series, 2020, 1476, 012012.	0.4	0

#	ARTICLE	IF	CITATIONS
19	NDT/NDE by means of a probabilistic differential compressive sensing method. Journal of Physics: Conference Series, 2020, 1476, 012006.	0.4	0
20	A multi-focusing contrast source Bayesian compressive method for solving inverse scattering problems. Journal of Physics: Conference Series, 2020, 1476, 012013.	0.4	0
21	A computational inversion method for interference suppression in reconfigurable thinned ring arrays. Journal of Physics: Conference Series, 2020, 1476, 012016.	0.4	4
22	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
23	PCA-Based inversion of WiFi signal for robust device-free indoor target detection. Journal of Physics: Conference Series, 2020, 1476, 012015.	0.4	0
24	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
25	Teaching Electromagnetics to Next-Generation Engineers – The ELEDIA Recipe: The ELEDIA teaching style. IEEE Antennas and Propagation Magazine, 2020, 62, 50-61.	1.4	4
26	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
27	Modular Design of Hexagonal Phased Arrays Through Diamond Tiles. IEEE Transactions on Antennas and Propagation, 2020, 68, 3598-3612.	5.1	25
28	A convex optimization-based inversion method for the synthesis of monopulse linear arrays. Journal of Physics: Conference Series, 2020, 1476, 012014.	0.4	0
29	Modern Approaches and Self-Evaluation Tools for Teaching Electromagnetics. , 2019, , .		1
30	Iterative classification strategy for multi-resolution wireless sensing of passive targets. Electronics Letters, 2018, 54, 101-103.	1.0	16
31	Compressive Sensing as Applied to Antenna Arrays: Synthesis, Diagnosis, and Processing. , 2018, , .		6
32	Computational methods for wireless structural health monitoring of cultural heritages. Journal of Physics: Conference Series, 2018, 1131, 012005.	0.4	0
33	Evolutionary Optimization Applied to Wireless Smart Lighting in Energy-Efficient Museums. IEEE Sensors Journal, 2017, 17, 1213-1214.	4.7	25
34	Principal component analysis of CSI for the robust wireless detection of passive targets. , 2017, , .		7
35	Learning ensemble strategy for static and dynamic localization in wireless sensor networks. International Journal of Network Management, 2017, 27, e1979.	2.2	7
36	Low-Cost Wireless System for Agrochemical Dosage Reduction in Precision Farming. IEEE Sensors Journal, 2017, 17, 5-6.	4.7	27

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37	Low-Cost Wireless Monitoring and Decision Support for Water Saving in Agriculture. IEEE Sensors Journal, 2017, 17, 4299-4309.	4.7	111
38	Design of compact printed antennas for 5G base stations. , 2017, , .		8
39	Codesign of Unconventional Array Architectures and Antenna Elements for <i>5G</i>; Base Stations. IEEE Transactions on Antennas and Propagation, 2017, 65, 6752-6767.	5.1	66
40	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
41	Device-free human monitoring using channel state information. , 2017, , .		0
42	An accurate ensemble-based wireless localization strategy for wireless sensor networks. , 2016, , .		2
43	Antenna system strategies for wireless sensor networks in resource hungry smart cities. , 2016, , .		1
44	Experimental validation of a wireless distributed system for smart public lighting management. , 2016, , .		13
45	Performance assessment of a smart road management system for the wireless detection of wildlife road-crossing. , 2016, , .		10
46	Optimization strategies for fleet management based on wireless terminals localization in smart cities scenarios. , 2016, , .		4
47	An improved anchor selection strategy for wireless localization of WSN nodes. , 2016, , .		13
48	Exploiting EM simulation modelling for wireless indoor localization. , 2016, , .		4
49	A wireless monitoring system for phytosanitary treatment in smart farming applications. , 2016, , .		7
50	Improved target tracking using regression tree in wireless sensor networks. , 2016, , .		0
51	Semantic wireless localization of WiFi terminals in smart buildings. Radio Science, 2016, 51, 876-892.	1.6	20
52	Wildlife road-crossing monitoring system: Advances and test-site validation. , 2016, , .		5
53	A Relocable and Resilient Distributed Measurement System for Electromagnetic Exposure Assessment. IEEE Sensors Journal, 2016, 16, 4595-4604.	4.7	11
54	Evolutionary optimization strategies applied to wireless fleet management in emergency scenarios. , 2015, , .		5

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55	Opportunistic crowd sensing in WiFi-enabled indoor areas. , 2015, , .		0
56	Improved wireless localization of mobile devices in smart indoor scenarios. , 2015, , .		2
57	Decision support for smart irrigation by means of wireless distributed sensors. , 2015, , .		21
58	A frequency-hopping BCS strategy for imaging buried objects. , 2015, , .		0
59	On the role of information in inversion and synthesis - challenges, tools, and trends. , 2015, , .		0
60	Crowd detection and occupancy estimation through indirect environmental measurements. , 2014, , .		14
61	Passive wireless localization strategies for security in large indoor areas. , 2014, , .		1
62	Advances in decision-making support tools for fleet management in emergency and security applications. , 2014, , .		8
63	Wireless monitoring of heterogeneous parameters in complex museum scenario. , 2014, , .		4
64	Semantic wireless localization for innovative indoor/outdoor services. , 2014, , .		5
65	Decision support system for fleet management based on TETRA terminals geolocation. , 2014, , .		12
66	Semantic wireless localization enabling advanced services in museums. , 2014, , .		14
67	Wireless Architectures for Heterogeneous Sensing in Smart Home Applications: Concepts and Real Implementation. Proceedings of the IEEE, 2013, 101, 2381-2396.	21.3	135
68	A WSN-based architecture for the E-Museum - the experience at &#x201C;Sala dei 500&#x201D; in Palazzo Vecchio (Florence). , 2013, , .		7