

Giacomo Oliveri

List of Publications by Year in descending order

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330
papers

7,770
citations

57631

44
h-index

58464

82
g-index

331
all docs

331
docs citations

331
times ranked

3607
citing authors

#	ARTICLE	IF	CITATIONS
1	Differential Evolution as Applied to Electromagnetics. IEEE Antennas and Propagation Magazine, 2011, 53, 38-49.	1.2	444
2	Directions-of-Arrival Estimation Through Bayesian Compressive Sensing Strategies. IEEE Transactions on Antennas and Propagation, 2013, 61, 3828-3838.	3.1	338
3	Unconventional Phased Array Architectures and Design Methodologies—A Review. Proceedings of the IEEE, 2016, 104, 544-560.	16.4	320
4	Compressive Sensing in Electromagnetics - A Review. IEEE Antennas and Propagation Magazine, 2015, 57, 224-238.	1.2	290
5	Bayesian Compressive Sampling for Pattern Synthesis With Maximally Sparse Non-Uniform Linear Arrays. IEEE Transactions on Antennas and Propagation, 2011, 59, 467-481.	3.1	245
6	Complex-Weight Sparse Linear Array Synthesis by Bayesian Compressive Sampling. IEEE Transactions on Antennas and Propagation, 2012, 60, 2309-2326.	3.1	224
7	Harmonic Beamforming in Time-Modulated Linear Arrays. IEEE Transactions on Antennas and Propagation, 2011, 59, 2538-2545.	3.1	220
8	Array Designs for Long-Distance Wireless Power Transmission: State-of-the-Art and Innovative Solutions. Proceedings of the IEEE, 2013, 101, 1464-1481.	16.4	189
9	A Bayesian-Compressive-Sampling-Based Inversion for Imaging Sparse Scatterers. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 3993-4006.	2.7	157
10	Linear Array Thinning Exploiting Almost Difference Sets. IEEE Transactions on Antennas and Propagation, 2009, 57, 3800-3812.	3.1	148
11	Reconfigurable Electromagnetics Through Metamaterials—A Review. Proceedings of the IEEE, 2015, 103, 1034-1056.	16.4	138
12	Reliable Diagnosis of Large Linear Arrays—A Bayesian Compressive Sensing Approach. IEEE Transactions on Antennas and Propagation, 2012, 60, 4627-4636.	3.1	137
13	Wireless Architectures for Heterogeneous Sensing in Smart Home Applications: Concepts and Real Implementation. Proceedings of the IEEE, 2013, 101, 2381-2396.	16.4	135
14	Microwave Imaging Within the First-Order Born Approximation by Means of the Contrast-Field Bayesian Compressive Sensing. IEEE Transactions on Antennas and Propagation, 2012, 60, 2865-2879.	3.1	129
15	ADS-Based Guidelines for Thinned Planar Arrays. IEEE Transactions on Antennas and Propagation, 2010, 58, 1935-1948.	3.1	127
16	Compressive Sensing Pattern Matching Techniques for Synthesizing Planar Sparse Arrays. IEEE Transactions on Antennas and Propagation, 2013, 61, 4577-4587.	3.1	127
17	Localization, tracking, and imaging of targets in wireless sensor networks: An invited review. Radio Science, 2011, 46, .	0.8	118
18	Learning-by-examples techniques as applied to electromagnetics. Journal of Electromagnetic Waves and Applications, 2018, 32, 516-541.	1.0	118

#	ARTICLE	IF	CITATIONS
19	Maximum Efficiency Beam Synthesis of Radiating Planar Arrays for Wireless Power Transmission. IEEE Transactions on Antennas and Propagation, 2013, 61, 2490-2499.	3.1	112
20	Exploitation of Parasitic Smart Antennas in Wireless Sensor Networks. Journal of Electromagnetic Waves and Applications, 2010, 24, 993-1003.	1.0	110
21	Compressive Sensing Imaging of Non-Sparse 2D Scatterers by a Total-Variation Approach Within the Born Approximation. IEEE Transactions on Antennas and Propagation, 2014, 62, 5157-5170.	3.1	99
22	Genetic algorithm (GA)-enhanced almost difference set (ADS)-based approach for array thinning. IET Microwaves, Antennas and Propagation, 2011, 5, 305.	0.7	88
23	Compressive Sensing as Applied to Inverse Problems for Imaging: Theory, Applications, Current Trends, and Open Challenges. IEEE Antennas and Propagation Magazine, 2017, 59, 34-46.	1.2	88
24	Wavelet-Based Compressive Imaging of Sparse Targets. IEEE Transactions on Antennas and Propagation, 2015, 63, 4889-4900.	3.1	83
25	MT $\hat{=}$ BCS-Based Microwave Imaging Approach Through Minimum-Norm Current Expansion. IEEE Transactions on Antennas and Propagation, 2013, 61, 4722-4732.	3.1	82
26	Sparsening Conformal Arrays Through a Versatile $\$BCS\$$ -Based Method. IEEE Transactions on Antennas and Propagation, 2014, 62, 1681-1689.	3.1	82
27	Synthesis of Multilayer WAIM Coatings for Planar-Phased Arrays Within the System-by-Design Framework. IEEE Transactions on Antennas and Propagation, 2015, 63, 2482-2496.	3.1	81
28	Bayesian Compressive Sensing Approaches for the Reconstruction of Two-Dimensional Sparse Scatterers Under TE Illuminations. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 2920-2936.	2.7	79
29	Synthesis of Modular Contiguously Clustered Linear Arrays Through a Sparseness-Regularized Solver. IEEE Transactions on Antennas and Propagation, 2016, 64, 4277-4287.	3.1	74
30	Electromagnetic passive localization and tracking of moving targets in a WSN-structured environment. Inverse Problems, 2010, 26, 074003.	1.0	73
31	GPR Prospecting Through an Inverse-Scattering Frequency-Hopping Multifocusing Approach. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 6573-6592.	2.7	73
32	Codesign of Unconventional Array Architectures and Antenna Elements for $\< i>5G$ Base Stations. IEEE Transactions on Antennas and Propagation, 2017, 65, 6752-6767.	3.1	66
33	Bayesian compressive optical imaging within the Rytov approximation. Optics Letters, 2012, 37, 1760.	1.7	65
34	Real-Time NDT-NDE Through an Innovative Adaptive Partial Least Squares SVR Inversion Approach. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 6818-6832.	2.7	64
35	Multiresolution subspace-based optimization method for inverse scattering problems. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2011, 28, 2057.	0.8	63
36	Europe and the Future for WPT : European Contributions to Wireless Power Transfer Technology. IEEE Microwave Magazine, 2017, 18, 56-87.	0.7	59

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37	Multiband Fractal Antenna for Wireless Communication Systems for Emergency Management. Journal of Electromagnetic Waves and Applications, 2012, 26, 1-11.	1.0	57
38	Efficient Prediction of the EM Response of Reflectarray Antenna Elements by an Advanced Statistical Learning Method. IEEE Transactions on Antennas and Propagation, 2018, 66, 3995-4007.	3.1	57
39	Cognitive Radios With Multiple Antennas Exploiting Spatial Opportunities. IEEE Transactions on Signal Processing, 2010, 58, 4453-4459.	3.2	53
40	Adaptive Nulling in Time-Varying Scenarios Through Time-Modulated Linear Arrays. IEEE Antennas and Wireless Propagation Letters, 2012, 11, 101-104.	2.4	53
41	System-by-design: A new paradigm for handling design complexity. , 2014, , .		53
42	Color Compressive Sensing Imaging of Arbitrary-Shaped Scatterers. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 1986-1999.	2.9	50
43	Holographic Smart EM Skins for Advanced Beam Power Shaping in Next Generation Wireless Environments. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2021, 6, 171-182.	1.4	49
44	Synthesis of Multi-Beam Sub-Arrayed Antennas Through an Excitation Matching Strategy. IEEE Transactions on Antennas and Propagation, 2011, 59, 482-492.	3.1	46
45	A New Meta-Paradigm for the Synthesis of Antenna Arrays for Future Wireless Communications. IEEE Transactions on Antennas and Propagation, 2019, 67, 3774-3788.	3.1	46
46	Rectangular Thinned Arrays Based on McFarland Difference Sets. IEEE Transactions on Antennas and Propagation, 2011, 59, 1546-1552.	3.1	45
47	Hybrid BCS-Deterministic Approach for Sparse Concentric Ring Isophoric Arrays. IEEE Transactions on Antennas and Propagation, 2015, 63, 378-383.	3.1	44
48	Multiscale System-by-Design Synthesis of Printed WAIMs for Waveguide Array Enhancement. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2017, 2, 84-96.	1.4	43
49	A Nested Multi-Scaling Inexact-Newton Iterative Approach for Microwave Imaging. IEEE Transactions on Antennas and Propagation, 2012, 60, 971-983.	3.1	42
50	On the Robustness to Element Failures of Linear ADS-Thinned Arrays. IEEE Transactions on Antennas and Propagation, 2011, 59, 4849-4853.	3.1	41
51	Hybrid ADS-Based Techniques for Radio Astronomy Array Design. IEEE Transactions on Antennas and Propagation, 2011, 59, 1817-1827.	3.1	41
52	Designing Smart Electromagnetic Environments for Next-Generation Wireless Communications. Telecom, 2021, 2, 213-221.	1.6	41
53	Design of a UHF RFID/GPS Fractal Antenna for Logistics Management. Journal of Electromagnetic Waves and Applications, 2012, 26, 480-492.	1.0	39
54	Imaging sparse metallic cylinders through a local shape function Bayesian compressive sensing approach. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2013, 30, 1261.	0.8	39

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55	Planar Array Diagnosis by Means of an Advanced Bayesian Compressive Processing. IEEE Transactions on Antennas and Propagation, 2018, 66, 5892-5906.	3.1	39
56	Generalized QCTO for Metamaterial-Lens-Coated Conformal Arrays. IEEE Transactions on Antennas and Propagation, 2014, 62, 4089-4095.	3.1	38
57	Sparse scatterers imaging through approximated multitask compressive sensing strategies. Microwave and Optical Technology Letters, 2013, 55, 1553-1558.	0.9	37
58	Synthesis of Time-Modulated Planar Arrays with Controlled Harmonic Radiations. Journal of Electromagnetic Waves and Applications, 2010, 24, 827-838.	1.0	36
59	Planar thinned array design by hybrid analytical–stochastic optimisation. IET Microwaves, Antennas and Propagation, 2017, 11, 1841-1845.	0.7	36
60	System-by-Design Multiscale Synthesis of Task-Oriented Reflectarrays. IEEE Transactions on Antennas and Propagation, 2020, 68, 2867-2882.	3.1	35
61	On the Use of Nonlinear Metasurfaces for Circumventing Fundamental Limits of Mantle Cloaking for Antennas. IEEE Transactions on Antennas and Propagation, 2021, 69, 5048-5053.	3.1	34
62	An SbD-QCTO Approach to the Synthesis of Isotropic Metamaterial Lenses. IEEE Antennas and Wireless Propagation Letters, 2014, 13, 1783-1786.	2.4	33
63	Adaptive nulling in time-modulated linear arrays with minimum power losses. IET Microwaves, Antennas and Propagation, 2011, 5, 157.	0.7	32
64	Advanced Pulse Sequence Design in Time-Modulated Arrays for Cognitive Radio. IEEE Antennas and Wireless Propagation Letters, 2018, 17, 898-902.	2.4	30
65	Fully interleaved linear arrays with predictable sidelobes based on almost difference sets. IET Radar, Sonar and Navigation, 2010, 4, 649.	0.9	29
66	Electromagnetic subsurface prospecting by a multifocusing inexact Newton method within the second-order Born approximation. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2014, 31, 1167.	0.8	29
67	Instantaneous brain stroke classification and localization from real scattering data. Microwave and Optical Technology Letters, 2019, 61, 805-808.	0.9	29
68	Synthesis of Shaped Beam Reflectarrays With Constrained Geometry by Exploiting Nonradiating Surface Currents. IEEE Transactions on Antennas and Propagation, 2018, 66, 5805-5817.	3.1	28
69	Array Miniaturization Through <i>QCTO-SI</i> ; Metamaterial Radomes. IEEE Transactions on Antennas and Propagation, 2015, 63, 3465-3476.	3.1	27
70	Hybrid Design of a Fractal-Shaped GSM/UMTS Antenna. Journal of Electromagnetic Waves and Applications, 2010, 24, 707-719.	1.0	26
71	Synthesis of Sub-Arrayed Time Modulated Linear Arrays Through a Multi-Stage Approach. IEEE Transactions on Antennas and Propagation, 2011, 59, 3246-3254.	3.1	26
72	Printed UWB Antenna Operating Over Multiple Mobile Wireless Standards. IEEE Antennas and Wireless Propagation Letters, 2011, 10, 1429-1432.	2.4	26

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73	A TIME-DOMAIN APPROACH TO THE SYNTHESIS OF UWB ANTENNA SYSTEMS. Progress in Electromagnetics Research, 2012, 122, 557-575.	1.6	26
74	3-D Crack Detection in Anisotropic Layered Media Through a Sparseness-Regularized Solver. IEEE Antennas and Wireless Propagation Letters, 2015, 14, 1031-1034.	2.4	26
75	Compressive Sensing-Based Born Iterative Method for Tomographic Imaging. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 1753-1765.	2.9	25
76	Electromagnetic inversion with the multiscaling inexact Newton method—experimental validation. Microwave and Optical Technology Letters, 2011, 53, 2834-2838.	0.9	24
77	Bayesian Compressive Sensing as Applied to Directions-of-Arrival Estimation in Planar Arrays. Journal of Electrical and Computer Engineering, 2013, 2013, 1-12.	0.6	24
78	Real-Time Electrical Impedance Tomography of the Human Chest by Means of a Learning-by-Examples Method. IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2019, 3, 88-96.	2.3	24
79	PLANAR MONOPOLE UWB ANTENNA WITH UNII1/UNII2 WLAN-BAND NOTCHED CHARACTERISTICS. Progress in Electromagnetics Research B, 2010, 25, 277-292.	0.7	23
80	Pervasive remote sensing through WSNs. , 2012, , .		23
81	Hybrid Design of Non-Regular Linear Arrays With Accurate Control of the Pattern Sidelobes. IEEE Transactions on Antennas and Propagation, 2013, 61, 6237-6242.	3.1	23
82	Multifrequency Bayesian compressive sensing methods for microwave imaging. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2014, 31, 2415.	0.8	23
83	Three-dimensional electromagnetic imaging of dielectric targets by means of the multiscaling inexact-Newton method. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2017, 34, 1119.	0.8	23
84	ADS-based array design for 2-D and 3-D ultrasound imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2010, 57, 1568-1582.	1.7	22
85	A nonlinear Kernel-based adaptive learning-by-examples method for robust NDT/NDE of conductive tubes. Journal of Electromagnetic Waves and Applications, 2019, 33, 669-696.	1.0	22
86	SYNTHESIS OF MONOPULSE SUB-ARRAYED LINEAR AND PLANAR ARRAY ANTENNAS WITH OPTIMIZED SIDELOBES. Progress in Electromagnetics Research, 2009, 99, 109-129.	1.6	21
87	Electromagnetic imaging within the contrast-source formulation by means of the multiscaling inexact Newton method. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2012, 29, 945.	0.8	21
88	Transformation Electromagnetics Miniaturization of Sectoral and Conical Metamaterial-Enhanced Horn Antennas. IEEE Transactions on Antennas and Propagation, 2016, 64, 1508-1513.	3.1	21
89	A FULLY-ADAPTIVE SMART ANTENNA PROTOTYPE: IDEAL MODEL AND EXPERIMENTAL VALIDATION IN COMPLEX INTERFERENCE SCENARIOS. Progress in Electromagnetics Research, 2009, 96, 173-191.	1.6	20
90	Synthesis of Nonuniform MIMO Arrays Through Combinatorial Sets. IEEE Antennas and Wireless Propagation Letters, 2012, 11, 728-731.	2.4	20

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91	Electromagnetic subsurface prospecting by a fully nonlinear multifocusing inexact Newton method. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2014, 31, 2618.	0.8	20
92	Multi-resolution subspace-based optimization method for solving three-dimensional inverse scattering problems. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2015, 32, 2218.	0.8	20
93	Multi-Layered Coating Metasurfaces Enabling Frequency Reconfigurability in Wire Antenna. IEEE Open Journal of Antennas and Propagation, 2022, 3, 206-216.	2.5	20
94	Failure correction in time-modulated linear arrays. IET Radar, Sonar and Navigation, 2014, 8, 195-201.	0.9	19
95	Genetically-designed arbitrary length almost difference sets. Electronics Letters, 2009, 45, 1182.	0.5	18
96	Interleaved linear arrays with difference sets. Electronics Letters, 2010, 46, 323.	0.5	18
97	Reconfigurable sum-difference pattern by means of parasitic elements for forward-looking monopulse radar. IET Radar, Sonar and Navigation, 2013, 7, 747-754.	0.9	18
98	A Total-Variation Sparseness-Promoting Method for the Synthesis of Contiguously Clustered Linear Arrays. IEEE Transactions on Antennas and Propagation, 2019, 67, 4589-4601.	3.1	18
99	A Warning About Metamaterials for Users of Frequency-Domain Numerical Simulators. IEEE Transactions on Antennas and Propagation, 2008, 56, 792-798.	3.1	17
100	ON THE IMPACT OF MUTUAL COUPLING EFFECTS ON THE PSL PERFORMANCES OF ADS THINNED ARRAYS. Progress in Electromagnetics Research B, 2009, 17, 293-308.	0.7	17
101	Iterative Multiresolution Bayesian CS for Microwave Imaging. IEEE Transactions on Antennas and Propagation, 2018, 66, 3665-3677.	3.1	17
102	Hybrid PSO-CP technique for the synthesis of non-uniform linear arrays with maximum directivity. Journal of Electromagnetic Waves and Applications, 2015, 29, 113-123.	1.0	16
103	Antenna Measurements-by-Design for Antenna Qualification. IEEE Transactions on Antennas and Propagation, 2018, 66, 6300-6312.	3.1	16
104	2-D TM GPR Imaging Through a Multiscaling Multifrequency Approach in Lp Spaces. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 10011-10021.	2.7	15
105	Further comments on the performances of finite element simulators for the solution of electromagnetic problems involving metamaterials. Microwave and Optical Technology Letters, 2006, 48, 2524-2529.	0.9	14
106	A multi-sensor WSN backbone for museum monitoring and surveillance. , 2012, , .		14
107	Crowd detection and occupancy estimation through indirect environmental measurements. , 2014, , .		14
108	Design of multi-layer mantle cloaks. , 2014, , .		14

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109	Semantic wireless localization enabling advanced services in museums. , 2014, , .		14
110	Antenna Array Thinning Through Quantum Fourier Transform. IEEE Access, 2021, 9, 124313-124323.	2.6	14
111	S-Band Spline-Shaped Aperture-Stacked Patch Antenna for Air Traffic Control Applications. IEEE Transactions on Antennas and Propagation, 2018, 66, 4292-4297.	3.1	13
112	System-by-Design Paradigm-Based Synthesis of Complex Systems: The case of spline-contoured 3D radomes. IEEE Antennas and Propagation Magazine, 2022, 64, 72-83.	1.2	13
113	<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.	3.1	13
114	Innovative array designs for wireless power transmission. , 2011, , .		12
115	Autocorrelation-Driven Synthesis of Antenna Arraysâ€”The Case of <i>DS</i> -Based Planar Isophoric Thinned Arrays. IEEE Transactions on Antennas and Propagation, 2020, 68, 2895-2910.	3.1	12
116	OFDM Recognition Based on Cyclostationary Analysis in an Open Spectrum Scenario. , 2009, , .		11
117	Multibeam Antenna Arrays With Common Subarray Layouts. IEEE Antennas and Wireless Propagation Letters, 2010, 9, 1190-1193.	2.4	11
118	Latest advances and innovative solutions in antenna array synthesis for microwave wireless power transmission. , 2012, , .		11
119	EPJ Applied Metamaterials Special Issue on â€œMetamaterial-by-Design: Theory, Methods, and Applications to Communications and Sensingâ€• EPJ Applied Metamaterials, 2016, 3, E1.	0.8	11
120	Progressive compressive sensing for exploiting frequency-diversity in <i>GPR</i> imaging. Journal of Electromagnetic Waves and Applications, 2018, 32, 1164-1193.	1.0	11
121	Material-by-Design Synthesis of Conformal Miniaturized Linear Phased Arrays. IEEE Access, 2018, 6, 26367-26382.	2.6	11
122	A WSN-based system for real-time electromagnetic monitoring. , 2011, , .		10
123	Wideband multilayer <i>WAIM</i> design and optimization. , 2014, , .		10
124	Synthesis of linear multi-beam arrays through hierarchical almost difference set-based interleaving. IET Microwaves, Antennas and Propagation, 2014, 8, 794-808.	0.7	9
125	Non-linear Mantle Cloaks for Self-Configurable Power-Dependent Phased Arrays. , 2020, , .		9
126	Anomalous TEM Modes in Guiding Structures Filled With Double Negative and Double Positive Materials. IEEE Microwave and Wireless Components Letters, 2007, 17, 19-21.	2.0	8

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127	Performances of electromagnetic finite element simulators in the presence of three-dimensional double-negative scatterers. IET Microwaves, Antennas and Propagation, 2007, 1, 737.	0.7	8
128	OPTIMAL SUB-ARRAYING OF COMPROMISE PLANAR ARRAYS THROUGH AN INNOVATIVE ACO-WEIGHTED PROCEDURE. Progress in Electromagnetics Research, 2010, 109, 279-299.	1.6	8
129	A mobile wireless sensor network architecture for collaborative tasks achievement by means of autonomous robot swarm. , 2010, , .		8
130	Estimation of the Directions-of-Arrival of correlated signals by means of a SVM-based multi-resolution approach. , 2010, , .		8
131	IMAGING OF SEPARATE SCATTERERS BY MEANS OF A MULTISCALING MULTIREGION INEXACT-NEWTON APPROACH. Progress in Electromagnetics Research M, 2011, 18, 247-257.	0.5	8
132	Interval Analysis as applied to inverse scattering. , 2012, , .		8
133	Optimization of metamaterial WAIM for planar arrays. , 2013, , .		8
134	Design and synthesis of innovative metamaterial-enhanced arrays. , 2013, , .		8
135	Design of compact printed antennas for 5G base stations. , 2017, , .		8
136	Long-distance <i>WPT</i> unconventional arrays synthesis. Journal of Electromagnetic Waves and Applications, 2017, 31, 1399-1420.	1.0	8
137	Sparse conformal array design for multiple patterns generation through Multi-Task Bayesian Compressive Sensing. , 2017, , .		8
138	Capacity-Driven Low-Interference Fast Beam Synthesis for Next Generation Base Stations. IEEE Transactions on Antennas and Propagation, 2022, 70, 4472-4484.	3.1	8
139	Cavities Involving Metamaterials With an Uncountable Set of Resonant Frequencies. IEEE Microwave and Wireless Components Letters, 2007, 17, 565-567.	2.0	7
140	Real-time indoor localization and tracking of passive targets by means of wireless sensor networks. , 2009, , .		7
141	A WSN-based architecture for the E-Museum - the experience at “Sala dei 500” in Palazzo Vecchio (Florence). , 2013, , .		7
142	Real time groove characterization combining partial least squares and SVR strategies: application to eddy current testing. Journal of Physics: Conference Series, 2017, 904, 012017.	0.3	7
143	Robust real-time inversion of electrical impedance tomography data for human lung ventilation monitoring. Microwave and Optical Technology Letters, 2019, 61, 5-8.	0.9	7
144	An assessment by a commercial software of the accuracy of electromagnetic finite element simulators in the presence of metamaterials. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2008, 27, 1260-1272.	0.5	6

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145	SVM for Electromagnetics: State-of-art, potentialities, and trends. , 2012, , .		6
146	A Material-by-Design strategy for the design and optimization of multisurface-metamaterial polarizers. , 2014, , .		6
147	Design of metamaterial-coated arrays through quasi-conformal transformation optics. , 2014, , .		6
148	Compressive Sensing as Applied to Antenna Arrays: Synthesis, Diagnosis, and Processing. , 2018, , .		6
149	Performance enhancement of linear active electronically scanned arrays by means of <i>MbD</i> -synthesized metalenses. Journal of Electromagnetic Waves and Applications, 2018, 32, 927-955.	1.0	6
150	Tomographic Imaging of Sparse Low-Contrast Targets in Harsh Environments Through Matrix Completion. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 2714-2730.	2.9	6
151	Minimum-Complexity Failure Correction in Linear Arrays via Compressive Processing. IEEE Transactions on Antennas and Propagation, 2021, 69, 4504-4516.	3.1	6
152	Numerical validation and experimental results of a multi-resolution SVM-based classification procedure for breast imaging. Digest / IEEE Antennas and Propagation Society International Symposium, 2009, , .	0.0	5
153	Evolutionary strategies for advanced array optimization. , 2011, , .		5
154	Differential evolution as applied to electromagnetics: Advances, comparisons, and applications. , 2012, , .		5
155	Design of tunable graphene-based antenna arrays for microwave applications. , 2014, , .		5
156	Distributed monitoring for energy consumption optimization in smart buildings. , 2014, , .		5
157	A System-by-Design approach for the synthesis of multi-layer mantle cloaks. , 2015, , .		5
158	Advanced learning-based approaches for reflectarrays design. , 2017, , .		5
159	Overcoming Mantle Cloaking Limits in Antenna Applications through Non-Linear Metasurfaces. , 2020, , .		5
160	DETERMINATION OF THE COMPLEX PERMITTIVITY VALUES OF PLANAR DIELECTRIC SUBSTRATES BY MEANS OF A MULTIFREQUENCY PSO-BASED TECHNIQUE. Progress in Electromagnetics Research M, 2009, 10, 83-91.	0.5	4
161	Three-dimensional real-time localization of subsurface objects — From theory to experimental validation. , 2009, , .		4
162	Array antenna architectures for solar power satellites and wireless power transmission. , 2011, , .		4

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163	IMPROVING THE RELIABILITY OF FREQUENCY DOMAIN SIMULATORS IN THE PRESENCE OF HOMOGENEOUS METAMATERIALS - A PRELIMINARY NUMERICAL ASSESSMENT. Progress in Electromagnetics Research, 2012, 122, 497-518.	1.6	4
164	POLARIZATION-AGILE ADS-INTERLEAVED PLANAR ARRAYS. Progress in Electromagnetics Research, 2013, 142, 771-798.	1.6	4
165	A learning-by-examples approach for non-destructive localization and characterization of defects through eddy current measurements. , 2015, , .		4
166	Innovative array architectures for 5G communications. , 2017, , .		4
167	Full-Vectorial 3D Microwave Imaging of Sparse Scatterers through a Multi-Task Bayesian Compressive Sensing Approach. Journal of Imaging, 2019, 5, 19.	1.7	4
168	Innovative Machine Learning Techniques for Biomedical Imaging. , 2019, , .		4
169	Teaching Electromagnetics to Next-Generation Engineersâ€™The ELEDIA Recipe: The ELEDIA teaching style. IEEE Antennas and Propagation Magazine, 2020, 62, 50-61.	1.2	4
170	Antenna systems with embodied cognition for next generation wireless communications. , 2007, , .		3
171	AN INNOVATIVE MULTI-SOURCE STRATEGY FOR ENHANCING THE RECONSTRUCTION CAPABILITIES OF INVERSE SCATTERING TECHNIQUES. Progress in Electromagnetics Research, 2010, 101, 349-374.	1.6	3
172	ADS-based Y-shaped arrays for interferometry and radio astronomy applications. , 2010, , .		3
173	Iterative multiscaling strategy incorporated into time domain inverse scattering method for cross-borehole imaging. , 2011, , .		3
174	Reconfigurable Electromagnetics through Metamaterials. International Journal of Antennas and Propagation, 2014, 2014, 1-2.	0.7	3
175	System-by-design paradigm as applied to the synthesis of innovative field manipulation devices including task-oriented metamaterials. , 2014, , .		3
176	Planar array diagnosis through compressive sensing: A preliminary assessment. , 2014, , .		3
177	Compressive Sensing in electromagnetics: Theoretical foundations, recent advances, and applicative guidelines. , 2014, , .		3
178	A Total Variation compressive sensing technique for imaging large scatterers. , 2014, , .		3
179	A Multi-Scaling Forward-Backward Time-Stepping Method for microwave imaging. IEICE Electronics Express, 2014, 11, 20140578-20140578.	0.3	3
180	Compressive sensing as a new paradigm in wave scattering and propagation. , 2016, , .		3

#	ARTICLE	IF	CITATIONS
181	Compressive Sensing as applied to Electromagnetics - challenges, solutions, and future trends. , 2016, ,		3
182	A system-by-design approach for efficient multiband patch antennas design. , 2017, , .		3
183	Joint DoA and bandwidth estimation of unknown signals through single snapshot data and MT-BCS approach. , 2017, , .		3
184	New Antenna Design Concept for Future Generation Wireless Communication Systems. , 2018, , .		3
185	High Density Interconnect Microstrip Patch Antenna for 5G Base Stations with Integrated Filtering Performance. Technologies, 2018, 6, 45.	3.0	3
186	Unconventional M-MIMO Phased Array Design for 5G Wireless Systems. , 2019, , .		3
187	ADS interleaved arrays with reconfigurable polarization. , 2010, , .		2
188	A Differential Evolution-based iterative multi-scaling algorithm for microwave imaging of dielectric structures. , 2010, , .		2
189	Analytic design techniques for MPT antenna arrays. , 2010, , .		2
190	Iterative multi scaling-enhanced Inexact Newton-method for microwave imaging. , 2010, , .		2
191	Reliable information-retrieval strategies for inverse scattering — A review. , 2011, , .		2
192	BCS-based formulations for antenna arrays synthesis. , 2012, , .		2
193	Multi-task Bayesian compressive sensing for direction-of-arrival estimation. , 2012, , .		2
194	Pareto-based optimization of difference patterns in monopulse non-uniform subarrays. , 2012, , .		2
195	On the exploitation of the a-priori information through the Bayesian compressive sensing for microwave imaging. , 2012, , .		2
196	GA-based adaptive thinning strategy for pattern nulling in linear arrays. , 2012, , .		2
197	Advances on remote wireless power transmission at the ELEDIA research center. , 2013, , .		2
198	Multi-scaling deterministic imaging for GPR survey. , 2014, , .		2

#	ARTICLE	IF	CITATIONS
199	GPR survey through a multi-resolution deterministic approach. , 2014, , .		2
200	A frequency-tunable metamaterial-based antenna using a reconfigurable AMC groundplane. , 2014, , .		2
201	On the radiation properties of ADS-thinned dipole arrays. IEICE Electronics Express, 2014, 11, 20140569-20140569.	0.3	2
202	A comparative assessment of information-exploitation techniques for GPR data inversion. Journal of Physics: Conference Series, 2015, 657, 012010.	0.3	2
203	Surrogate-Assisted Optimization of Metamaterial Devices for Advanced Antenna Systems. , 2015, , .		2
204	CS-based computational imaging at microwave frequencies. , 2016, , .		2
205	Imaging complex targets through alphabet-based compressive sensing. , 2016, , .		2
206	Synthesis of clustered linear arrays through a total variation compressive sensing approach. , 2017, , .		2
207	Advanced techniques for GPR microwave imaging: An experimental study. , 2017, , .		2
208	Design of dual-polarization antennas for 5G base stations. , 2017, , .		2
209	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.	3.1	2
210	The Use of Differential Evolution for the Solution of Electromagnetic Inverse Scattering Problems. Adaptation, Learning, and Optimization, 2010, , 107-131.	0.5	2
211	Experimental validation of a smart antenna system model. Digest / IEEE Antennas and Propagation Society International Symposium, 2009, , .	0.0	1
212	Analytic techniques for the design of non-regular arrays. , 2010, , .		1
213	Computationally-efficient analytic techniques for large array synthesis - feasibility and real-implementations. , 2011, , .		1
214	Synthesis and analysis of a monopole radiator for UWB Body Area Networks. , 2011, , .		1
215	Efficient synthesis of sparse arrays as the solution of an inversion problem within the bayesian compressive sensing framework. , 2012, , .		1
216	Synthesis of planar arrays through Bayesian Compressive Sensing. , 2012, , .		1

#	ARTICLE	IF	CITATIONS
217	Minimum-norm current formulation for MT-BCS inversion of scattering data. , 2012, , .		1
218	Inverse scattering problem of homogeneous dielectrics using Genetic Algorithms. , 2014, , .		1
219	Optimized synthesis of wave-manipulating devices within the system-by-design paradigm. , 2014, , .		1
220	Efficient synthesis of complex antenna devices through System-by-Design. , 2014, , .		1
221	On the role of evolutionary optimization within the System-by-Design approach for EM device synthesis. , 2014, , .		1
222	Dealing with EM functional optimization through new generation evolutionary-based methods. , 2014, , .		1
223	Metasurface and metamaterial by design. , 2014, , .		1
224	A compressive sensing approach to NDE/NDT. , 2014, , .		1
225	Evolution of nature-inspired optimization for new generation antenna design. , 2014, , .		1
226	Metamaterial-enhanced arrays by innovative QCTO approaches. , 2014, , .		1
227	Multi-resolution BCS-based approach for DoA estimation. , 2015, , .		1
228	Advances on Compressive Sensing based approaches for inverse scattering. , 2015, , .		1
229	Synthesis of next generation reflectarrays. , 2016, , .		1
230	Scattering camouflage and manipulation using metasurfaces. , 2016, , .		1
231	A computational method for the inversion of wide-band GPR measurements. Journal of Physics: Conference Series, 2016, 756, 012008.	0.3	1
232	Design of mantle cloaks through a System-by-Design approach. , 2016, , .		1
233	Fast design of next generation reflectarrays through advanced LBE strategies. , 2016, , .		1
234	Enabling the optimization-based design of complex EM devices through the System-by-Design approach. , 2016, , .		1

#	ARTICLE	IF	CITATIONS
235	Exploiting non-radiating currents in reflectarray antenna design. , 2017, , .		1
236	Frequency-hopping GPR prospecting of sparse scatterers through Bayesian compressive sensing. , 2017, , .		1
237	Unconventional techniques for the synthesis of modern antenna arrays. , 2017, , .		1
238	Robust diagnosis of planar antenna arrays through a Bayesian compressive sensing approach. , 2017, , .		1
239	Thinned Array Design via Autocorrelation Matching Strategy. , 2018, , .		1
240	Compressive Processing in Inverse Problems: Current Advances and Future Trends. , 2018, , .		1
241	A Total-Variation Compressive Processing Approach to Two-Dimensional Field Reconstruction. , 2019, , .		1
242	Metamaterial-by-Design-A Paradigm for the Industrial Synthesis of EM Manipulation Devices. , 2019, , .		1
243	Modern Approaches and Self-Evaluation Tools for Teaching Electromagnetics. , 2019, , .		1
244	Frontiers in Reflectarray Design. , 2019, , .		1
245	Design of Modular Radar Array Antenna for Two-Way Pattern Sidelobe Optimization. , 2022, , .		1
246	Smart EM Environments: Current Trends and Future Perspectives. , 2022, , .		1
247	Synthesis of Double-Negative Materials by using Dielectric-Loaded Rectangular Waveguides. , 2006, , .		0
248	Some reasons for the bad behavior of finite element simulators in the presence of metamaterials. , 2007, , .		0
249	A simple but numerically unmanageable frequency-domain waveguide discontinuity problem. , 2007, , .		0
250	Accuracy of Finite Difference Frequency Domain Methods in the Presence of Effective Metamaterials. , 2008, , .		0
251	Information processing techniques for Cognitive Base Transceiver stations. , 2008, , .		0
252	Array thinning through binary sequences. Digest / IEEE Antennas and Propagation Society International Symposium, 2009, , .	0.0	0

#	ARTICLE	IF	CITATIONS
253	On the exploitation of the iterative multi-scaling scheme for the electromagnetic non-destructive evaluation with the Inexact-Newton method. , 2010, , .		0
254	A novel design methodology for integration of optimized ultra-wideband elements with aperiodic array topologies. , 2010, , .		0
255	An iterative multi-scaling scheme for the electromagnetic imaging of separated scatterers by the Inexact-Newton method. , 2010, , .		0
256	Imaging sparse scatterers through Bayesian Compressive Sensing methods. , 2011, , .		0
257	Enhancing subspace-based inversions through an efficient multi-scaling scheme. , 2011, , .		0
258	CSI-CFI formulations of the multiresolution Inexact Newton method " A numerical comparison. , 2011, , .		0
259	A CS-based strategy for the design of shaped-beam sparse arrays. , 2011, , .		0
260	Model based inversion algorithms based on Bayesian Compressive sensing. , 2011, , .		0
261	Assessment of the electromagnetic inversion with the multiscaling Inexact-Newton method. , 2011, , .		0
262	Smart antennas design exploiting time-modulation. , 2011, , .		0
263	Inversion of EM scattering data through a multiresolution regularization approach within the contrast source formulation. , 2012, , .		0
264	Exploiting ADS-arrays for the synthesis of MIMO systems. , 2012, , .		0
265	Model-based inversion of electromagnetic scattering data ; An innovative alternate minimization approach. , 2012, , .		0
266	Designing radiating systems through Interval Analysis tools. , 2013, , .		0
267	Imaging PEC through innovative compressive sensing approaches. , 2013, , .		0
268	On the reconfigurability of time-modulated linear arrays in the presence of failures. , 2013, , .		0
269	Inverse scattering through Compressive Sensing. , 2014, , .		0
270	An innovative Frequency Hopping multi-zoom inversion strategy for GPR subsurface imaging. , 2014, , .		0

#	ARTICLE	IF	CITATIONS
271	Extended QCTO for innovative antenna system designs. , 2014, , .		0
272	Contiguously clustered linear arrays through Bayesian compressive sensing. , 2014, , .		0
273	Innovative CS imaging methods in transformed domains. , 2014, , .		0
274	Non-destructive evaluation through a sparse reconstruction strategy. , 2014, , .		0
275	Array synthesis for optimal wireless power systems. , 2014, , .		0
276	Design of thinned arrays with controlled sidelobes by ADS-CP strategy. , 2014, , .		0
277	Imaging sparse scatterers through a multi-frequency CS approach. , 2014, , .		0
278	Probabilistic direction of arrival estimation through Bayesian compressive sensing. , 2014, , .		0
279	Innovative antenna arrays for next generation radar system. , 2015, , .		0
280	Three-dimensional microwave imaging through a multi-zooming Inexact-Newton approach. , 2015, , .		0
281	A system-by-design approach for the synthesis of metamaterial printed WAIMs. , 2015, , .		0
282	Wireless coverage optimization for robotic swarm in emergency scenario. , 2015, , .		0
283	Recent developments in the design of microwave mantle cloaks with improved performance and relative applications. , 2015, , .		0
284	Spline-enhanced synthesis of metamaterial lenses for linear array miniaturization by the SbD-QCTO. , 2015, , .		0
285	A frequency-hopping BCS strategy for imaging buried objects. , 2015, , .		0
286	On the role of information in inversion and synthesis - challenges, tools, and trends. , 2015, , .		0
287	A system-by-design approach to the synthesis of mantle cloaks for large dielectric cylinders. , 2016, , .		0
288	Enhancement of linear arrays through MbD metamaterial coatings. , 2016, , .		0

#	ARTICLE	IF	CITATIONS
289	Real-time eddy-current-testing of metallic structures through statistical learning methodology. , 2016, , .		0
290	System-by-design for multiscale synthesis problems " methodologies and applications. , 2016, , .		0
291	Conformal transformation of linear arrays through QCTO-based design tools. , 2016, , .		0
292	System-by-design methodology for multiscale and multiphysics synthesis problems. , 2016, , .		0
293	Alphabet CS for inverse scattering. , 2016, , .		0
294	Innovative antenna architectures exploiting metamaterials for new generation radars. , 2016, , .		0
295	DS-based thinned planar arrays with arbitrary non-square lattice. , 2016, , .		0
296	An integer genetic algorithm for optimal clustering in phased array antenna. , 2017, , .		0
297	Innovative simplified array design for wireless power transmission. , 2017, , .		0
298	SAR array synthesis for next generation earth observation systems. , 2017, , .		0
299	Multi-resolution compressive sensing inversion of scattering data. , 2017, , .		0
300	Design of notch-enhanced compact printed antennas for 5g communications. , 2017, , .		0
301	Reflectarray antenna simplification through non-radiating currents synthesis. , 2017, , .		0
302	Advances in multi-resolution approaches for computational inverse scattering " On the integration of sparse retrieval within the multi-resolution inversion. , 2017, , .		0
303	Compressive-processing microwave imaging. , 2017, , .		0
304	Real-time crack characterization in conductive tubes through an adaptive partial least squares approach. , 2017, , .		0
305	Overcoming Feasibility Constraints in Reflectarray Design by Exploiting Non-Radiating Currents. , 2018, , .		0
306	Computational methods for wireless structural health monitoring of cultural heritages. Journal of Physics: Conference Series, 2018, 1131, 012005.	0.3	0

#	ARTICLE	IF	CITATIONS
307	Designing New Generation Antennas for 5G MiMo Systems - A New Perspective in Array Synthesis. , 2018, , .		0
308	Sensing Dielectric Scatterers by Means of The Born Iterative Method in the Contrast-Field Bayesian Compressive Sensing Framework. , 2018, , .		0
309	Compressive Processing for Computational Electromagnetics - Theoretical Basics, Current Trends and Advances. , 2018, , .		0
310	Three Dimensional Imaging with the Contrast Source Compressive Sampling. , 2018, , .		0
311	Compressive Sensing for Inverse Problems. , 2018, , .		0
312	Power Pattern Matching Through the Hybrid Bayesian Compressive Sensing. , 2018, , .		0
313	Compressive Processing of Microwave Data for NDE/NDT. , 2018, , .		0
314	Sparsity and Coherence in Inverse Problems - from 1 D to 2D Processing through Matrix Completion. , 2018, , .		0
315	Array Synthesis in the Autocorrelation Domain - Proof and Research Tracks. , 2019, , .		0
316	Advanced Real-Time Strategies for Direction Finding in Rapidly Changing Scenario. , 2019, , .		0
317	Optimal Trade-Off Phased-Arrays for Future Generation Radars and Communication Systems. , 2019, , .		0
318	Advanced Microwave Imaging with Compressive Processing - Concepts, Methods, and Applications. , 2019, , .		0
319	Exploiting System-by-Design Paradigms for Dealing with Complexity Issues in EM Devices Systems. , 2019, , .		0
320	New Trends for Smart EM Environments. , 2019, , .		0
321	Capacity-Driven Design of Clustered Array Architectures for New Generation 5G MU-MiMo Systems. , 2019, , .		0
322	Advanced Teaching in Electromagnetics at the ELEDIA Research Center. , 2021, , .		0
323	Bio-inspired Cognitive Radio for Dynamic Spectrum Access. , 2009, , 131-154.		0
324	Innovative Synthesis of Reflectarrays within the Non-Radiating Inverse Source Framework. , 2018, , .		0

#	ARTICLE	IF	CITATIONS
325	Exploitation of Frequency Diversity in GPR Imaging through an Innovative Constrained-BCS Method. , 2018, , .		0
326	Inverse Scattering and Information Management - Trends and Envisaged Strategies. , 2018, , .		0
327	Wave Manipulation through Advanced Smart Skins for Shaped Beam Synthesis. , 2021, , .		0
328	Advances on CS-Processing Applied to Phased Arrays Synthesis, Processing, and Characterization. , 2022, , .		0
329	SbD-based Propagation Contouring through 1-bit Dual-Polarization Reconfigurable Intelligent Surfaces. , 2022, , .		0
330	Recent Advances in Complex Reflectarray Synthesis within the System-by-Design Framework. , 2022, , .		0