Rodolfo Araneo

List of Publications by Citations

105 papers	1,279 citations	18 h-index	31 g-index
133 ext. papers	1,873 ext. citations	3.8 avg, IF	4.99 L-index

#	Paper	IF	Citations
105	**2008**,		157
104	Piezo-semiconductive quasi-1D nanodevices with or without anti-symmetry. *Advanced Materials*, **2012**, 24, 4719-24	24	101
103	Semiclassical spatially dispersive intraband conductivity tensor and quantum capacitance of graphene. *Physical Review B*, **2013**, 87,	3.3	87
102	Fast MoM Analysis of the Shielding Effectiveness of Rectangular Enclosures With Apertures, Metal Plates, and Conducting Objects. *IEEE Transactions on Electromagnetic Compatibility*, **2009**, 51, 274-283	2	64
101	EMC Issues in High-Power Grid-Connected Photovoltaic Plants. *IEEE Transactions on Electromagnetic Compatibility*, **2009**, 51, 639-648	2	54
100	Lateral bending of tapered piezo-semiconductive nanostructures for ultra-sensitive mechanical force to voltage conversion. *Nanotechnology*, **2013**, 24, 265707	3.4	36
99	A Neural Network Based Prediction System of Distributed Generation for the Management of Microgrids. *IEEE Transactions on Industry Applications*, **2019**, 55, 7092-7102	4.3	29
98	Alternative Definitions for the Time-Domain Shielding Effectiveness of Enclosures. *IEEE Transactions on Electromagnetic Compatibility*, **2014**, 56, 482-485	2	28
97	An Efficient MoM Formulation for the Evaluation of the Shielding Effectiveness of Rectangular Enclosures With Thin and Thick Apertures. *IEEE Transactions on Electromagnetic Compatibility*, **2008**, 50, 294-304	2	28
96	Prediction in Photovoltaic Power by Neural Networks. *Energies*, **2017**, 10, 1003	3.1	27
95	The clash of mechanical and electrical size-effects in ZnO nanowires and a double power law approach to elastic strain engineering of piezoelectric and piezotronic devices. *Advanced Materials*, **2014**, 26, 5976-85	24	25
94	Time-Domain Analysis of Building Shielding Against Lightning Electromagnetic Fields. *IEEE Transactions on Electromagnetic Compatibility*, **2015**, 57, 397-404	2	24
93	Shielding Effectiveness of Periodic Screens Against Finite High-Impedance Near-Field Sources. *IEEE Transactions on Electromagnetic Compatibility*, **2011**, 53, 706-716	2	21
92	Thermal-electric model for piezoelectric ZnO nanowires. *Nanotechnology*, **2015**, 26, 265402	3.4	20
91	Design Concepts, Fabrication and Advanced Characterization Methods of Innovative Piezoelectric Sensors Based on ZnO Nanowires. *Sensors*, **2014**, 14, 23539-23562	3.8	20
90	Efficient Evaluation of the 3-D Periodic Green's Function Through the Ewald Method. *IEEE Transactions on Microwave Theory and Techniques*, **2008**, 56, 2069-2075	4.1	20
89	Simplified Conservative Testing Method of Touch and Step Voltages by Multiple Auxiliary Electrodes at Reduced Distance. *IEEE Transactions on Industry Applications*, **2015**, 51, 4987-4993	4.3	19

88	ZnO Nanostructures and Electrospun ZnO-Polymeric Hybrid Nanomaterials in Biomedical, Health, and Sustainability Applications. *Nanomaterials*, **2019**, 9,	5.4	18
87	Current–Voltage Characteristics of ZnO Nanowires Under Uniaxial Loading. *IEEE Nanotechnology Magazine*, **2014**, 13, 724-735	2.6	18
86	Smart ECM-Based Electrospun Biomaterials for Skeletal Muscle Regeneration. *Nanomaterials*, **2020**, 10,	5.4	18
85	Low-Frequency Dominant-Mode Propagation in Spatially Dispersive Graphene Nanowaveguides. *IEEE Transactions on Electromagnetic Compatibility*, **2012**, 1-6	2	17
84	Dyadic Green's Functions for Dipole Excitation of Homogenized Metasurfaces. *IEEE Transactions on Antennas and Propagation*, **2016**, 64, 167-178	4.9	16
83	Assessment of a practical model to estimate the cell temperature of a photovoltaic module. *International Journal of Energy and Environmental Engineering*, **2014**, 5, 1	4	16
82	Dipole Excitation of Periodic Metallic Structures. *IEEE Transactions on Antennas and Propagation*, **2011**, 59, 2178-2187	4.9	16
81	Time-Domain Shielding of a Thin Conductive Sheet in the Presence of Pulsed Vertical Dipoles. *IEEE Transactions on Electromagnetic Compatibility*, **2018**, 60, 157-165	2	15
80	Transient behavior of wind towers grounding systems under lightning strikes. *International Journal of Energy and Environmental Engineering*, **2016**, 7, 235-247	4	15
79	A Distributed Algorithm for the Cooperative Prediction of Power Production in PV Plants. *IEEE Transactions on Energy Conversion*, **2019**, 34, 497-508	5.4	15
78	. *IEEE Transactions on Electromagnetic Compatibility*, **2015**, 57, 726-733	2	14
77	Nonlocal Effects on Surface Plasmon Polariton Propagation in Graphene Nanoribbons. *IEEE Transactions on Terahertz Science and Technology*, **2015**, 5, 941-950	3.4	14
76	Review of O&M Practices in PV Plants: Failures, Solutions, Remote Control, and Monitoring Tools. *IEEE Journal of Photovoltaics*, **2020**, 10, 914-926	3.7	14
75	Design of impedance matching couplers for power line communications **2009**,		12
74	Magnetic Shielding of Planar Metallic Screens: A New Analytical Closed-Form Solution. *IEEE Transactions on Electromagnetic Compatibility*, **2020**, 62, 1884-1888	2	12
73	Eco-sustainable routing of power lines for the connection of renewable energy plants to the Italian high-voltage grid. *International Journal of Energy and Environmental Engineering*, **2015**, 6, 9-19	4	10
72	Semi-Analytical Representation of the Two-Dimensional Time-Domain Green's Function of a Graphene Sheet in the Intraband Regime. *IEEE Nanotechnology Magazine*, **2015**, 14, 681-688	2.6	10
71	Assessment of the technical usable potential of the TUM Shaft Hydro Power plant on the Aurino River, Italy. *Renewable Energy*, **2013**, 60, 648-654	8.1	10

70	Toward a definition of the shielding effectiveness in the time - domain **2013**,		10
69	COMPACT ELECTROMAGNETIC ABSORBERS FOR FREQUENCIES BELOW 1 GHZ. *Progress in Electromagnetics Research*, **2013**, 143, 67-86	3.8	10
68	. *IEEE Access*, **2020**, 8, 211490-211505	3.5	10
67	Embedding of time series for the prediction in photovoltaic power plants **2016**,		10
66	Computation, Properties, and Realizability of the Characteristic Immittance Matrices of Nonuniform Multiconductor Transmission Lines. *IEEE Transactions on Power Delivery*, **2018**, 33, 1885-1894	4.3	9
65	Time-Domain Shielding Performance of Enclosures: A Comparison of Different Global Approaches. *IEEE Transactions on Electromagnetic Compatibility*, **2016**, 58, 434-441	2	9
64	Frequency-Domain Analysis of Sectionalized Shield Wires on PLC Transmission Over High-Voltage Lines. *IEEE Transactions on Electromagnetic Compatibility*, **2017**, 59, 853-861	2	8
63	Accurate models for the current-voltage characteristics of vertically compressed piezo-semiconductive quasi-1D NWs. *Materials Research Society Symposia Proceedings*, **2013**, 1556, 1		8
62	Space-domain method of moments for graphene nanoribbons **2014**,		7
61	Utilization of Underbuilt Shield Wires to Improve the Lightning Performance of Overhead Distribution Lines Hit by Direct Strokes. *IEEE Transactions on Power Delivery*, **2020**, 35, 1656-1666	4.3	7
60	. *IEEE Transactions on Electromagnetic Compatibility*, **2021**, 63, 308-312	2	7
59	An accurate approach for the evaluation of the performance of overhead distribution lines due to indirect lightning. *Electric Power Systems Research*, **2020**, 186, 106411	3.5	6
58	Transient response of grounding systems of wind turbines under lightning strikes **2014**,		6
57	Innovative power-sharing model for buildings and energy communities. *Renewable Energy*, **2021**, 172, 1087-1102	8.1	6
56	Advanced mechanical and electrical characterization of piezoelectric ZnO nanowires for electro-mechanical modeling of enhanced performance sensors. *Sensors and Actuators A: Physical*, **2016**, 244, 166-173	3.9	6
55	Analysis of Metal Oxide Varistor Arresters for Protection of Multiconductor Transmission Lines Using Unconditionally-Stable Crank□Nicolson FDTD. *Energies*, **2020**, 13, 2112	3.1	5
54	Low-environmental impact routeing of overhead power lines for the connection of renewable energy plants to the Italian HV grid **2014**,		5
53	. *International Journal of Energy and Environmental Engineering*, **2014**, 5, 2	4	5

52	Takagi-sugeno fuzzy systems applied to voltage prediction of photovoltaic plants **2017**,		5
51	NEAR-FIELD TIME-DOMAIN SHIELDING EFFECTIVENESS OF THIN CONDUCTIVE SCREENS. *Progress in Electromagnetics Research*, **2014**, 146, 47-56	3.8	5
50	Electrospinning nanofibers as separators for lithium-ion batteries **2019**,		4
49	Pulsed Vertical Dipole Response of a Thin Sheet With High-Contrast Dielectric and Conductive Properties. *IEEE Transactions on Antennas and Propagation*, **2018**, 66, 217-225	4.9	4
48	Analysis of the lightning transient response of the earthing system of large-scale ground-mounted PV plants **2017**,		4
47	A global approach to time-domain shielding problems **2014**,		4
46	Mechanics of quasi-1D ZnO nanostructures for energy harvesting. *Materials Research Society Symposia Proceedings*, **2013**, 1556, 1		4
45	Accurate analysis of the piezopotential and the stored energies in laterally bent piezo-semiconductive NWs. *Materials Research Society Symposia Proceedings*, **2013**, 1556, 1		4
44	The Corona Phenomenon in Overhead Lines: Critical Overview of Most Common and Reliable Available Models. *Energies*, **2021**, 14, 6612	3.1	4
43	Impact of Non-Linear Piezoelectricity on the Piezotronic Effect of ZnO Nanowires. *IEEE Nanotechnology Magazine*, **2016**, 15, 512-520	2.6	4
42	Matching a Nonuniform MTL With Only Passive Elements Is Not Always Possible. *IEEE Transactions on Power Delivery*, **2019**, 34, 467-474	4.3	4
41	A Smart Grid in Ponza Island: Battery Energy Storage Management by Echo State Neural Network **2018**,		4
40	On the Insulation Resistance in High-Power Free-Field Grid-Connected Photovoltaic Plants **2019**,		3
39	Ground Transient Resistance of Underground Cables. *IEEE Transactions on Electromagnetic Compatibility*, **2016**, 58, 931-934	2	3
38	Time-Domain Green's Function for a Vertical Dipole Above a Graphene Sheet. *IEEE Nanotechnology Magazine*, **2018**, 17, 841-851	2.6	3
37	Time-Domain shielding effectiveness of planar conductive nanoscreens **2014**,		3
36	Piezo-semiconductive quasi-1D conical NWs for high performance nanodevices. *Materials Research Society Symposia Proceedings*, **2013**, 1556, 1		3
35	Multi-port impedance matching technique for power line communications **2011**,		3

34	Shielding effectiveness of artificial magnetic screens in the VHF band **2009**,		3
33	2-D Convolutional Deep Neural Network for the Multivariate Prediction of Photovoltaic Time Series. *Energies*, **2021**, 14, 2392	3.1	3
32	Two-stage dynamic management in energy communities using a decision system based on elastic net regularization. *Applied Energy*, **2021**, 291, 116852	10.7	3
31	Theoretical Study of the First Higher Order Mode in Grounded Graphene Nanoribbons. *IEEE Nanotechnology Magazine*, **2018**, 17, 814-823	2.6	3
30	Electromagnetic Shielding		3
29	2-D Convolutional Deep Neural Network for Multivariate Energy Time Series Prediction **2019**,		2
28	Electrical Safety of Academic Laboratories **2019**,		2
27	Electromagnetic pulse response of planar screens. *International Journal of Numerical Modelling: Electronic Networks, Devices and Fields*, **2018**, 31, e2329	1	2
26	On Electrical Safety in Academic Laboratories. *IEEE Transactions on Industry Applications*, **2019**, 55, 5613-5620	4.2	2
25	Safety criteria for testing ground systems within their influence zone **2014**,		2
24	**2010**,		2
23	Toward an effective absorber for damping resonances in shielded enclosures **2012**,		2
22	Unconditionally Stable Implicit Schemes for Transient Analysis of Lossy Multiconductor Lines. *IEEE Transactions on Electromagnetic Compatibility*, **2021**, 63, 640-644	2	2
21	. *IEEE Transactions on Power Delivery*, **2021**, 36, 1491-1498	4.3	2
20	Closed-Form LF Magnetic Shielding Effectiveness of Thin Planar Screens in Coplanar Loops Configuration. *IEEE Transactions on Electromagnetic Compatibility*, **2021**, 63, 631-635	2	2
19	A Simple Ball Milling and Thermal Oxidation Method for Synthesis of ZnO Nanowires Decorated with Cubic ZnO Nanoparticles. *Nanomaterials*, **2021**, 11,	5.4	2
18	The impact of different corona models on FD algorithms for the solution of multiconductor transmission lines equations. *High Voltage*, **2021**, 6, 822	4.1	2
17	Joint meeting of the 17th edition of the IEEE international conference on environment and electrical engineering (EEEIC) and the 1st edition of the IEEE industrial and commercial power systems Europe (I&CPS Europe). *IEEE Electromagnetic Compatibility Magazine*, **2017**, 6, 92-94	0.4	1

16	Efficient computation of the shielding effectiveness of metallic enclosures loaded with conductors **2008**,		1
15	Time-domain surface plasmon polaritons on a graphene sheet. *Physical Review B*, **2018**, 97,	3.3	1
14	A Review of the Enabling Methodologies for Knowledge Discovery from Smart Grids Data **2020**,		1
13	A Review of the Enabling Methodologies for Knowledge Discovery from Smart Grids Data. *Energies*, **2020**, 13, 6579	3.1	1
12	Magnetic field penetration through a circular aperture in a perfectly conducting plate excited by a coaxial loop. *IET Microwaves, Antennas and Propagation*, **2021**, 15, 1147-1158	1.6	1
11	The Electromagnetic Effects of Pulsed Horizontal Dipoles on a Thin Conductive Sheet: Time-Domain Analysis. *IEEE Transactions on Electromagnetic Compatibility*, **2020**, 62, 443-450	2	1
10	Application of the transfer matrix approach to direct lightning studies of overhead power lines with underbuilt shield wires Part I: Theory. *IEEE Transactions on Power Delivery*, **2021**, 1-1	4.3	1
9	Application of the transfer matrix approach to direct lightning studies of overhead power lines with underbuilt shield wires Part II: Simulation results. *IEEE Transactions on Power Delivery*, **2021**, 1-1	4.3	1
8	Protection of distribution overhead power lines against direct lightning strokes by means of underbuilt ground wires. *Electric Power Systems Research*, **2022**, 202, 107571	3.5	0
7	Axially Symmetric Source Field Penetration through a Circular Aperture in a Thin Impedance Plate. *IEEE Transactions on Antennas and Propagation*, **2022**, 1-1	4.9	0
6	A rigorous matrix procedure for calculating the line constants and wave parameters of uniform MTLs using SMT/PMU. *International Transactions on Electrical Energy Systems*, **2017**, 27, e2377	2.2	
5	Renewable Energy System Protection and Coordination **2021**, 169-203		
4	Lightning Protection Systems **2021**, 107-167		
3	Safety-by-Design Approach in AC / DC Systems **2021**, 31-62		
2	Performance of Grounding Systems in Transient Conditions **2021**, 231-264		
1	Insulation Resistance and Failures of a High-Power Grid-Connected Photovoltaic Installation: A Case Study. *IEEE Industry Applications Magazine*, **2021**, 27, 16-22	0.6	