

Valter Mariani Primiani

List of Publications by Year in descending order

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125
papers

2,697
citations

201674

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h-index

214800

47
g-index

125
all docs

125
docs citations

125
times ranked

1709
citing authors

#	ARTICLE	IF	CITATIONS
1	Electromagnetic shielding performance of carbon foams. Carbon, 2012, 50, 1972-1980.	10.3	268
2	Broadband Electromagnetic Absorbers Using Carbon Nanostructure-Based Composites. IEEE Transactions on Microwave Theory and Techniques, 2011, 59, 2633-2646.	4.6	225
3	Theoretical and experimental evaluation of the electromagnetic radiation from apertures in shielded enclosure. IEEE Transactions on Electromagnetic Compatibility, 1992, 34, 423-432.	2.2	113
4	Electromagnetic characterization and shielding effectiveness of concrete composite reinforced with carbon nanotubes in the mobile phones frequency band. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2014, 188, 119-129.	3.5	103
5	Optimization of Multilayer Shields Made of Composite Nanostructured Materials. IEEE Transactions on Electromagnetic Compatibility, 2012, 54, 60-69.	2.2	85
6	Broadband electromagnetic characterization of carbon foam to metal contact. Carbon, 2014, 68, 149-158.	10.3	80
7	Analysis of the Independent Positions of Reverberation Chamber Stirrers as a Function of Their Operating Conditions. IEEE Transactions on Electromagnetic Compatibility, 2011, 53, 288-295.	2.2	71
8	Electromagnetic shielding of thermal protection system for hypersonic vehicles. Acta Astronautica, 2013, 87, 30-39.	3.2	66
9	Reduction of satellite electromagnetic scattering by carbon nanostructured multilayers. Acta Astronautica, 2013, 88, 61-73.	3.2	66
10	Source Stirring Mode for Reverberation Chambers. IEEE Transactions on Electromagnetic Compatibility, 2005, 47, 815-823.	2.2	49
11	Wide-band characterization of current probes. IEEE Transactions on Electromagnetic Compatibility, 2003, 45, 616-625.	2.2	47
12	REVERBERATION CHAMBER AS A MULTIVARIATE PROCESS: FDTD EVALUATION OF CORRELATION MATRIX AND INDEPENDENT POSITIONS. Progress in Electromagnetics Research, 2013, 133, 217-234.	4.4	47
13	Experimental Investigation of Electromagnetic Obstacle Detection for Visually Impaired Users: A Comparison With Ultrasonic Sensing. IEEE Transactions on Instrumentation and Measurement, 2012, 61, 3047-3057.	4.7	46
14	Performance and Immunity Evaluation of Complete WLAN Systems in a Large Reverberation Chamber. IEEE Transactions on Electromagnetic Compatibility, 2013, 55, 806-815.	2.2	45
15	Numerical Analysis of a New Location for the Working Volume Inside a Reverberation Chamber. IEEE Transactions on Electromagnetic Compatibility, 2012, 54, 238-245.	2.2	43
16	Determination of the electrical conductivity of carbon/carbon at high microwave frequencies. Carbon, 2013, 54, 76-85.	10.3	42
17	A Comparison Between Different Reception Diversity Schemes of a 4G-LTE Base Station in Reverberation Chamber: A Deployment in a Live Cellular Network. IEEE Transactions on Electromagnetic Compatibility, 2017, 59, 2029-2037.	2.2	42
18	Accurate Analysis of Reverberation Field Penetration Into an Equipment-Level Enclosure. IEEE Transactions on Electromagnetic Compatibility, 2009, 51, 170-180.	2.2	41

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19	Numerical Simulation of Reverberation Chamber Parameters Affecting the Received Power Statistics. IEEE Transactions on Electromagnetic Compatibility, 2012, 54, 522-532.	2.2	41
20	Power Boosting and Compensation During OTA Testing of a Real 4G LTE Base Station in Reverberation Chamber. IEEE Transactions on Electromagnetic Compatibility, 2015, 57, 623-634.	2.2	41
21	Measurement of the Properties of a Plasma Column Used as a Radiating Element. IEEE Transactions on Instrumentation and Measurement, 2008, 57, 242-247.	4.7	39
22	Testing of the Carrier Aggregation Mode for a Live LTE Base Station in Reverberation Chamber. IEEE Transactions on Vehicular Technology, 2017, 66, 3024-3033.	6.3	35
23	Experimental Characterization of a Surfaguide Fed Plasma Antenna. IEEE Transactions on Antennas and Propagation, 2011, 59, 425-433.	5.1	33
24	Field penetration into metallic enclosures through slots excited by ESD. IEEE Transactions on Electromagnetic Compatibility, 1994, 36, 110-116.	2.2	28
25	Electrical fast-transient test: conducted and radiated disturbance determination by a complete source modeling. IEEE Transactions on Electromagnetic Compatibility, 2001, 43, 37-44.	2.2	28
26	Numerical and Experimental Analysis of the Field to Enclosure Coupling in Reverberation Chamber and Comparison With Anechoic Chamber. IEEE Transactions on Electromagnetic Compatibility, 2006, 48, 203-211.	2.2	28
27	A Theoretical Feasibility Study of a Source Stirring Reverberation Chamber. IEEE Transactions on Electromagnetic Compatibility, 2009, 51, 3-11.	2.2	28
28	ABSORBING CROSS SECTION IN REVERBERATION CHAMBER: EXPERIMENTAL AND NUMERICAL RESULTS. Progress in Electromagnetics Research B, 2012, 45, 187-202.	1.0	27
29	Reverberation Chamber Performance Varying the Position of the Stirrer Rotation Axis. IEEE Transactions on Electromagnetic Compatibility, 2014, 56, 486-489.	2.2	27
30	ESD indirect coupling modeling. IEEE Transactions on Electromagnetic Compatibility, 1996, 38, 274-281.	2.2	26
31	Reverberation chambers: Full 3D FDTD simulations and measurements of independent positions of the stirrers. , 2011, , .		26
32	Field Penetration Through a Wire Mesh Screen Excited by a Reverberation Chamber Field: FDTD Analysis and Experiments. IEEE Transactions on Electromagnetic Compatibility, 2009, 51, 883-891.	2.2	25
33	Numerical Simulation of LOS and NLOS Conditions for an Antenna Inside a Reverberation Chamber. Journal of Electromagnetic Waves and Applications, 2010, 24, 2319-2331.	1.6	25
34	Low-Frequency Theoretical Analysis of a Source-Stirred Reverberation Chamber. IEEE Transactions on Electromagnetic Compatibility, 2017, 59, 315-324.	2.2	24
35	Design and Prototyping of a Switching Beam Disc Antenna for Wideband Communications. IEEE Transactions on Antennas and Propagation, 2006, 54, 3721-3726.	5.1	23
36	Immunity Tests of Implantable Cardiac Pacemaker Against CW and Pulsed ELF Fields: Experimental and Numerical Results. IEEE Transactions on Electromagnetic Compatibility, 2006, 48, 502-515.	2.2	23

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37	Coupling Between Multipath Environments Through a Large Aperture. IEEE Antennas and Wireless Propagation Letters, 2015, 14, 1463-1466.	4.0	23
38	Reliable Finite-Difference Time-Domain Simulations of Reverberation Chambers by Using Equivalent Volumetric Losses. IEEE Transactions on Electromagnetic Compatibility, 2016, 58, 653-660.	2.2	23
39	Over-the-Air Tests of High-Speed Moving LTE Users in a Reverberation Chamber. IEEE Transactions on Vehicular Technology, 2018, 67, 4340-4349.	6.3	22
40	Base-Case Model for Measurement Uncertainty in a Reverberation Chamber Including Frequency Stirring. IEEE Transactions on Electromagnetic Compatibility, 2018, 60, 1695-1703.	2.2	22
41	ESD field penetration through slots into shielded enclosures: a time domain approach. IEEE Transactions on Electromagnetic Compatibility, 1997, 39, 377-386.	2.2	21
42	A rigorous model for radiated emission prediction in PCB circuits. IEEE Transactions on Electromagnetic Compatibility, 1993, 35, 102-109.	2.2	20
43	Stirrer Efficiency as a Function of its Axis Orientation. IEEE Transactions on Electromagnetic Compatibility, 2015, 57, 1732-1735.	2.2	19
44	Experimental Validation of an Analytical Model for the Design of Source-Stirred Chambers. IEEE Transactions on Electromagnetic Compatibility, 2018, 60, 540-543.	2.2	18
45	'Thermic end-fire' interstitial applicator for microwave hyperthermia. IEEE Transactions on Microwave Theory and Techniques, 1993, 41, 1135-1142.	4.6	17
46	Radiated Immunity Tests: Reverberation Chamber Versus Anechoic Chamber Results. IEEE Transactions on Instrumentation and Measurement, 2006, 55, 1169-1174.	4.7	17
47	Wireless Sensing for the Respiratory Activity of Human Beings: Measurements and Wide-band Numerical Analysis. International Journal of Antennas and Propagation, 2013, 2013, 1-10.	1.2	17
48	Non contact monitoring of the respiration activity by electromagnetic sensing.. , 2011, , .		16
49	MODELING OF THE HUMAN EXPOSURE INSIDE A RANDOM PLANE WAVE FIELD. Progress in Electromagnetics Research B, 2011, 29, 251-267.	1.0	16
50	Measurement of magnetic fields radiated from ESD using field sensors. IEEE Transactions on Electromagnetic Compatibility, 2001, 43, 187-196.	2.2	15
51	ESD field penetration into a populated metallic enclosure a hybrid time-domain approach. IEEE Transactions on Electromagnetic Compatibility, 2002, 44, 243-249.	2.2	15
52	A Metrology Application of Reverberation Chambers: The Current Probe Calibration. IEEE Transactions on Electromagnetic Compatibility, 2007, 49, 114-122.	2.2	15
53	Modelling of a Litz-wire planar winding geometry for an accurate reactance evaluation. IET Science, Measurement and Technology, 2010, 4, 214-219.	1.6	15
54	Over-the-air performance testing of a real 4G LTE base station in a reverberation chamber. , 2014, , .		14

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55	Experimental and numerical analysis of a carousel stirrer for reverberation chambers. , 2012, , .		13
56	Helical Stirring for Enhanced Low-Frequency Performance of Reverberation Chambers. IEEE Transactions on Electromagnetic Compatibility, 2017, 59, 1016-1026.	2.2	13
57	Numerical and experimental analysis of the performance of a reduced surface stirrer for reverberation chambers. , 2012, , .		12
58	Rigorous electromagnetic model of an induction cooking system. IET Science, Measurement and Technology, 2012, 6, 238.	1.6	12
59	A simple but effective way for cable shielding measurement. IEEE Transactions on Electromagnetic Compatibility, 1999, 41, 175-179.	2.2	11
60	Stirrer performance of reverberation chambers evaluated by time domain fidelity. , 2013, , .		11
61	Source stirring technique for reverberation chambers; experimental investigation. , 2008, , .		10
62	Numerical and experimental investigation of unstirred frequencies in reverberation chambers. , 2009, , .		10
63	Design and Testing of an Antenna System for the Source Stirring Technique in Reverberation Chambers. Journal of Electromagnetic Waves and Applications, 2012, 26, 837-850.	1.6	10
64	Uncorrelated frequency steps in a reverberation chamber: A multivariate approach. , 2015, , .		10
65	Advanced concrete materials for EMI reduction in protected environment and IEMI threats suppression. , 2015, , .		10
66	Shielding effectiveness statistical evaluation of random concrete composites. , 2016, , .		10
67	Theoretical and experimental characterization of transient electromagnetic fields radiated by electrostatic discharge (ESD) currents. IEEE Transactions on Electromagnetic Compatibility, 2002, 44, 139-147.	2.2	9
68	Modeling of the Reverberation Chamber Method for Determining the Shielding Properties of a Coaxial Cable. IEEE Transactions on Electromagnetic Compatibility, 2008, 50, 246-251.	2.2	9
69	Carousel stirrer efficiency evaluation by a volumetric lattice-based correlation matrix. , 2013, , .		9
70	On the Estimated Measurement Uncertainty of the Insertion Loss in a Reverberation Chamber Including Frequency Stirring. IEEE Transactions on Electromagnetic Compatibility, 2019, 61, 1414-1422.	2.2	9
71	Experimental and numeric investigation about electromagnetic interference between implantable cardiac pacemaker and magnetic fields at power line frequency. Annali Dell'Istituto Superiore Di Sanita, 2007, 43, 248-53.	0.4	9
72	Investigation of radiated susceptibility during EFT tests. IEEE Transactions on Electromagnetic Compatibility, 1997, 39, 298-303.	2.2	8

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73	Reverberation chamber as a statistical relaxation process: Entropy analysis and fast time domain simulations. , 2012, , .		8
74	Optimization of 4G wireless access network features by using reverberation chambers: Application to high-speed train LTE users. , 2016, , .		8
75	Latest developments on the shielding effectiveness measurements of materials and gaskets in reverberation chambers. IET Science, Measurement and Technology, 2020, 14, 435-445.	1.6	8
76	Modeling of electromagnetic interference induced by electrostatic discharge (ESD) inside resonant structures. IEEE Transactions on Electromagnetic Compatibility, 2002, 44, 192-202.	2.2	7
77	Investigation of the Antenna Factor Behavior of a Dipole Operating Inside a Resonant Cavity. IEEE Transactions on Electromagnetic Compatibility, 2008, 50, 89-96.	2.2	7
78	On the Shielding Effectiveness Calculation of Enclosures Through Measurements in Reverberation Chambers. IEEE Transactions on Electromagnetic Compatibility, 2021, 63, 1395-1406.	2.2	7
79	Shielding effectiveness evaluation of densified-small-particles (DSP) cement composite. , 2008, , .		6
80	Evaluation of uncorrelation and statistics inside a reverberation chamber in presence of two independent stirrers. , 2010, , .		6
81	Numerical Simulations of Field Values, Wave Impedance, and Received Power Inside a Nonideal Reverberation Chamber. IEEE Transactions on Electromagnetic Compatibility, 2014, 56, 994-997.	2.2	6
82	A continued evaluation of the general method for determining the number of independent stirrer positions in reverberation chambers. , 2014, , .		6
83	Dependence of reverberation chamber performance on distributed losses: A numerical study. , 2014, , .		6
84	High performance FDTD simulations for chaotic electromagnetic environments. , 2017, , .		6
85	A Novel Emission Test Method for Multiple Monopole Source Stirred Reverberation Chambers. IEEE Transactions on Electromagnetic Compatibility, 2020, 62, 2334-2337.	2.2	6
86	A Realistic Model for the Analysis of Heart Magnetic Stimulation. IEEE Transactions on Biomedical Engineering, 2011, 58, 291-300.	4.2	5
87	4G-LTE base station output power estimation from statistical counters during over-the-air tests in reverberation chamber. , 2014, , .		5
88	A novel measurement method for respiration rate by electromagnetic frequency sweep. , 2014, , .		5
89	Stirring performance of helically distributed paddles. , 2017, , .		5
90	Reverberation chambers deformed by spherical diffractors. , 2017, , .		5

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91	MIMO 4 vs. MIMO 2 performance assessment of a real life LTE base station in a reverberation chamber. AEU - International Journal of Electronics and Communications, 2021, 129, 153500.	2.9	5
92	DSP cement composites for electromagnetic shielding: practice and experimental analysis. , 2009, , .		4
93	On the use of a reverberation chamber to test the performance and the immunity of a WLAN system. , 2010, , .		4
94	System throughput and immunity analysis of a 802.11n WLAN in a large reverberation chamber. , 2011, , .		4
95	Analysis of field probe perturbation in a mode stirred reverberation chamber. , 2015, , .		4
96	Evaluation of stirrer efficiency varying the volume of the reverberation chamber. , 2016, , .		4
97	Testing of VoLTE mean opinion score in reverberation chambers. IET Science, Measurement and Technology, 2020, 14, 949-954.	1.6	4
98	Analysis of antenna behavior in a multipath environment generated by a reverberation chamber. , 2009, , .		3
99	Modeling and measuring of microwave absorbing and shielding nanostructured materials. , 2012, , .		3
100	Safety Investigation of a Magnetic Pulse Applicator for Heart Stimulation. IEEE Transactions on Magnetics, 2014, 50, 1-8.	2.1	3
101	Effect of losses on the maximum-to-mean value in a mode-stirred reverberation chamber. , 2014, , .		3
102	An EM Modeling for Rescue System Design of Buried People. International Journal of Antennas and Propagation, 2015, 2015, 1-7.	1.2	3
103	Experimental Analysis of the Aging Effects on Shielding Effectiveness of Cementitious Composites. , 2018, , .		3
104	A general method for radiated emission prediction in a multiple monopole source stirred reverberation chamber. IET Science, Measurement and Technology, 2021, 15, 588-596.	1.6	3
105	FDTD analysis of the field penetration through lossy materials in a reverberation chamber. , 2007, , .		2
106	A breathing detection medical device for rescue of buried people. , 2014, , .		2
107	Efficient numerical analytical tool for time domain obstacles detection. IET Science, Measurement and Technology, 2014, 8, 69-73.	1.6	2
108	HPC Simulations of a Reverberation Chamber with Nonparallel Walls. , 2019, , .		2

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109	Modeling of the Reverberation Chamber Method for the Wire-mesh Shielding Performance Evaluation. , 2007, , .		1
110	A statistical model of the interaction between reverberation fields and lossy materials. , 2008, , .		1
111	SAR numerical analysis of the whole human body exposed to a random field. , 2009, , .		1
112	Radiated susceptibility of breath monitoring system based on UWB pulses in spacecraft modules. , 2012, , .		1
113	Breath detection of humans buried in a homogeneous lossy medium: A simplified analytical model. , 2012, , .		1
114	Applicability of Measurement Uncertainty Models in a Reverberation Chamber Including Frequency Stirring. , 2018, , .		1
115	Experimental Validation of an Emission Test Method for Source Stirred Reverberation Chamber. IEEE Transactions on Electromagnetic Compatibility, 2022, 64, 11-18.	2.2	1
116	Optimization of the Measurement Technique for Emissions in Reverberation Chamber Using the Equivalence Principle. Applied Sciences (Switzerland), 2021, 11, 7696.	2.5	1
117	Rigorous Electromagnetic Analysis of Domestic Induction Heating Appliances. Progress in Electromagnetics Research Symposium: [proceedings] Progress in Electromagnetics Research Symposium, 2009, 5, 491-495.	0.4	1
118	Electromagnetic Sensing of Obstacles for Visually Impaired Users. , 2014, , 187-194.		1
119	Flexible FDTD Simulation for the Wireless Earphone Exposure Evaluation. , 2020, , .		1
120	Array of Antennas Design for the Source Stirring Technique. , 2009, , .		0
121	A model for recovering the conductivity of a conductive material from measurement inside reverberation chamber. , 2009, , .		0
122	2.45 GHz waveguide plasma generation in cylindrical structures. , 2010, , .		0
123	Shielding Effectiveness of Randomly Distributed Conductive Elements: Experimental Analysis and Simplified Model. , 2018, , .		0
124	Shielding Effectiveness Controlling of Coated Glass Assembly in Mobile and Positioning GPS Frequency Bands. , 2021, , .		0
125	Birth and Development of the "Electromagnetic Fields" Group. , 2019, , 23-36.		0