

Guido Ala

List of Publications by Year in descending order

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Version: 2024-02-01

77
papers

1,163
citations

377584

21
h-index

511568

30
g-index

78
all docs

78
docs citations

78
times ranked

719
citing authors

#	ARTICLE	IF	CITATIONS
1	Time Evolution of Partial Discharges in a Dielectric Subjected to the DC Periodic Voltage. Energies, 2022, 15, 2052.	1.6	3
2	Transient Electrical Behavior of the TF Superconducting Coils of Divertor Tokamak Test Facility During a Fast Discharge. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-10.	1.1	3
3	A New Approach to Partial Discharge Detection Under DC Voltage: Application to Different Materials. IEEE Electrical Insulation Magazine, 2021, 37, 18-32.	1.1	9
4	The effect of Transient Over Voltages on the Partial Discharges activity in HVDC joints. , 2021, , .		0
5	Effect of Heat Exchange Transient Conditions With Moving Water-Air Interface on Space Charge Accumulation in Undersea HVdc Cables. IEEE Transactions on Industry Applications, 2021, 57, 4528-4536.	3.3	2
6	Design optimization for the quench protection of DTT's superconducting toroidal field magnets. Fusion Engineering and Design, 2021, 172, 112748.	1.0	7
7	UAV-Assisted Data Collection in Wireless Sensor Networks: A Comprehensive Survey. Electronics (Switzerland), 2021, 10, 2603.	1.8	32
8	Partial Discharges in HVDC Cables - The Effect of the Temperature Gradient During Load Transients. IEEE Transactions on Dielectrics and Electrical Insulation, 2021, 28, 1767-1774.	1.8	9
9	Transient DC-Arc Voltage Model in the Hybrid Switch of the DTT Fast Discharge Unit. , 2021, , .		2
10	Electric Mobility in Portugal: Current Situation and Forecasts for Fuel Cell Vehicles. Energies, 2021, 14, 7945.	1.6	18
11	The Effect of the Axial Heat Transfer on Space Charge Accumulation Phenomena in HVDC Cables. Energies, 2020, 13, 4827.	1.6	6
12	A prototypal PCB board for the EMI characterization of SiC-based innovative switching devices. , 2020, , .		10
13	An advanced numerical treatment of EM absorption in human tissue. , 2020, , .		0
14	From electric mobility to hydrogen mobility: current state and possible future expansions. , 2020, , .		4
15	Conceptual Design and Modeling of the Toroidal Field Coils Circuit of DTT. , 2020, , .		8
16	Space charge accumulation in undersea HVDC cables as function of heat exchange conditions at the boundaries " water-air interface. , 2020, , .		4
17	A methodology for evaluating the flexibility potential of domestic air-conditioning systems. , 2020, , .		1
18	Reliability of PEA Measurement in Presence of an Air Void Defect. Energies, 2020, 13, 5652.	1.6	6

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19	Forensic Analysis of Fire in a Substation of a Commercial Center. IEEE Transactions on Industry Applications, 2020, 56, 3218-3223.	3.3	5
20	Different Scenarios of Electric Mobility: Current Situation and Possible Future Developments of Fuel Cell Vehicles in Italy. Sustainability, 2020, 12, 564.	1.6	24
21	Dynamic Reconfiguration Systems for PV Plant: Technical and Economic Analysis. Energies, 2020, 13, 2004.	1.6	7
22	Experimental Investigation on the Performances of Innovative PV Vertical Structures. Photonics, 2019, 6, 86.	0.9	18
23	The Role of Right Interpretation of Space Charge Distribution for Optimized Design of HVDC Cables. IEEE Transactions on Industry Applications, 2019, 55, 7165-7174.	3.3	8
24	The Industrial Applicability of PEA Space Charge Measurements, for Performance Optimization of HVDC Power Cables. Energies, 2019, 12, 4186.	1.6	15
25	Review of the PEA Method for Space Charge Measurements on HVDC Cables and Mini-Cables. Energies, 2019, 12, 3512.	1.6	28
26	Legal Liability of Professional Engineers: the Case of a Fire at a Shopping Center. , 2019, , .		2
27	Computational issues of an electromagnetics transient meshless method. AIP Conference Proceedings, 2019, , .	0.3	0
28	Forecasting the Diffusion of Hydrogen EV Refuelling Infrastructures in Italy. , 2019, , .		2
29	Experimental Investigation on the Performances of a Multilevel Inverter Using a Field Programmable Gate Array-Based Control System. Energies, 2019, 12, 1016.	1.6	27
30	Improved fast Gauss transform for meshfree electromagnetic transients simulations. Applied Mathematics Letters, 2019, 95, 130-136.	1.5	3
31	Energy and economic analysis of air-to-air heat pumps as an alternative to domestic gas boiler heating systems in the South of Italy. Energy, 2019, 173, 59-74.	4.5	27
32	Partial Discharge Detection Using a Spherical Electromagnetic Sensor. Sensors, 2019, 19, 1014.	2.1	36
33	Experimental Study on B-Spline-Based Modulation Schemes Applied in Multilevel Inverters for Electric Drive Applications. Energies, 2019, 12, 4521.	1.6	10
34	Special issue on advances in EMC numerical modelling. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2018, 31, e2468.	1.2	0
35	On the Distribution of Lightning Current among Interconnected Grounding Systems in Medium Voltage Grids. Energies, 2018, 11, 771.	1.6	18
36	Automatic EMI Filter Design for Power Electronic Converters Oriented to High Power Density. Electronics (Switzerland), 2018, 7, 9.	1.8	39

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37	An augmented MFS approach for brain activity reconstruction. <i>Mathematics and Computers in Simulation</i> , 2017, 141, 3-15.	2.4	19
38	Special Issue on Advances in EMC numerical modeling. <i>International Journal of Numerical Modelling: Electronic Networks, Devices and Fields</i> , 2017, 30, e2224.	1.2	0
39	Towards an efficient meshfree solver. <i>AIP Conference Proceedings</i> , 2016, , .	0.3	3
40	Some Numerical Remarks on a Meshless Approximation Method. , 2016, , .		1
41	Design and Performance Evaluation of a High Power-Density EMI Filter for PWM Inverter-Fed Induction-Motor Drives. <i>IEEE Transactions on Industry Applications</i> , 2016, 52, 2397-2404.	3.3	88
42	Physiological compatibility of wireless chargers for electric bicycles. , 2015, , .		31
43	A novel numerical meshless approach for electric potential estimation in transcranial stimulation. <i>AIP Conference Proceedings</i> , 2015, , .	0.3	2
44	A brief overview on the numerical behavior of an implicit meshless method and an outlook to future challenges. <i>AIP Conference Proceedings</i> , 2015, , .	0.3	1
45	Mitigation of 50 Hz magnetic field produced by an overhead transmission line. , 2015, , .		0
46	Attenuation of low frequency magnetic fields produced by HV underground power cables. , 2015, , .		9
47	A Meshfree Solver for the MEG Forward Problem. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-4.	1.2	21
48	The Method of Fundamental Solutions in Solving Coupled Boundary Value Problems for M/EEG. <i>SIAM Journal of Scientific Computing</i> , 2015, 37, B570-B590.	1.3	22
49	Unconditionally stable meshless integration of time-domain Maxwell's curl equations. <i>Applied Mathematics and Computation</i> , 2015, 255, 157-164.	1.4	22
50	Numerical Investigations of an Implicit Leapfrog Time-Domain Meshless Method. <i>Journal of Scientific Computing</i> , 2015, 62, 898-912.	1.1	22
51	Viscoelasticity: An electrical point of view. , 2014, , .		2
52	Electrical analogous in viscoelasticity. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2014, 19, 2513-2527.	1.7	35
53	A numerical method for imaging of biological microstructures by VHF waves. <i>Journal of Computational and Applied Mathematics</i> , 2014, 259, 805-814.	1.1	3
54	A marching-on in time meshless kernel based solver for full-wave electromagnetic simulation. <i>Numerical Algorithms</i> , 2013, 62, 541-558.	1.1	22

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55	A MULTI-SPHERE PARTICLE NUMERICAL MODEL FOR NON-INVASIVE INVESTIGATIONS OF NEURONAL HUMAN BRAIN ACTIVITY. <i>Progress in Electromagnetics Research Letters</i> , 2013, 36, 143-153.	0.4	14
56	EMI Analysis in Electrical Drives Under Lightning Surge Conditions. <i>IEEE Transactions on Electromagnetic Compatibility</i> , 2012, 54, 850-859.	1.4	11
57	A numerical meshless particle method in solving the magnetoencephalography forward problem. <i>International Journal of Numerical Modelling: Electronic Networks, Devices and Fields</i> , 2012, 25, 428-440.	1.2	21
58	An improved smoothed particle electromagnetics method in 3D time domain simulations. <i>International Journal of Numerical Modelling: Electronic Networks, Devices and Fields</i> , 2012, 25, 325-337.	1.2	21
59	A WAVELET OPERATOR ON THE INTERVAL IN SOLVING MAXWELL'S EQUATIONS. <i>Progress in Electromagnetics Research Letters</i> , 2011, 27, 133-140.	0.4	8
60	Detection of Radiated EM Transients by Exploiting Compact Spherical Antenna Features. <i>Recent Patents on Electrical Engineering</i> , 2011, 4, 202-208.	0.4	10
61	A meshless approach for electromagnetic simulation of metallic carbon nanotubes. <i>Journal of Mathematical Chemistry</i> , 2010, 48, 72-77.	0.7	8
62	SOIL IONIZATION DUE TO HIGH PULSE TRANSIENT CURRENTS LEAKED BY EARTH ELECTRODES. <i>Progress in Electromagnetics Research B</i> , 2009, 14, 1-21.	0.7	24
63	A local linear black-box identification technique for power converters modeling. , 2009, , .		4
64	On the use of a meshless solver for PDEs governing electromagnetic transients. <i>Applied Mathematics and Computation</i> , 2009, 209, 42-51.	1.4	12
65	Finite difference time domain simulation of earth electrodes soil ionisation under lightning surge condition. <i>IET Science, Measurement and Technology</i> , 2008, 2, 134-145.	0.9	55
66	Multiscale Particle Method in Solving Partial Differential Equations. <i>AIP Conference Proceedings</i> , 2007, , .	0.3	0
67	Evaluation of Radiated EMI in 42-V Vehicle Electrical Systems by FDTD Simulation. <i>IEEE Transactions on Vehicular Technology</i> , 2007, 56, 1477-1484.	3.9	27
68	Corrective meshless particle formulations for time domain Maxwell's equations. <i>Journal of Computational and Applied Mathematics</i> , 2007, 210, 34-46.	1.1	20
69	A Mesh-Free Particle Method for Transient Full-Wave Simulation. <i>IEEE Transactions on Magnetics</i> , 2007, 43, 1333-1336.	1.2	9
70	Smoothed Particle ElectroMagnetics: A mesh-free solver for transients. <i>Journal of Computational and Applied Mathematics</i> , 2006, 191, 194-205.	1.1	53
71	A smoothed particle interpolation scheme for transient electromagnetic simulation. <i>IEEE Transactions on Magnetics</i> , 2006, 42, 647-650.	1.2	19
72	Numerical simulation of radiated EMI in 42 V electrical automotive architectures. <i>IEEE Transactions on Magnetics</i> , 2006, 42, 879-882.	1.2	14

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73	Wavelet-like bases for thin-wire integral equations in electromagnetics. Journal of Computational and Applied Mathematics, 2005, 175, 77-86.	1.1	8
74	An advanced numerical model in solving thin-wire integral equations by using semi-orthogonal compactly supported spline wavelets. IEEE Transactions on Electromagnetic Compatibility, 2003, 45, 218-228.	1.4	37
75	Wavelet-based efficient simulation of electromagnetic transients in a lightning protection system. IEEE Transactions on Magnetics, 2003, 39, 1257-1260.	1.2	13
76	A simulation model for electromagnetic transients in lightning protection systems. IEEE Transactions on Electromagnetic Compatibility, 2002, 44, 539-554.	1.4	78
77	FDTD Simulation for Electromagnetic Radiated Emissions in 42 V Vehicle Electrical Systems. , 0, , .		1