Nunzio Salerno

List of Publications by Year
in descending order

81 papers	641 citations	687363 13 h-index	677142 22 g-index
82 all docs	82 docs citations	82 times ranked	293 citing authors

#	Article	IF	Citations
1	Circuit Models of Power MOSFETs Leading the Way of GaN HEMT Modellingâ€”A Review. Energies, 2022, 15, 3415.	3.1	7
2	Optimization of Frequency Selective Surfaces for the Design of Electromagnetic Mantle Cloaks. IEEE Transactions on Magnetics, 2021, 57, 1-4.	2.1	1
3	The Hybrid FEM-DBCI for the Solution of Open-Boundary Low-Frequency Problems. Mathematics, 2021, 9, 1968.	2.2	0
4	Development of a SPICE modelling strategy for power devices in GaN technology. , 2021, , .		3
5	Understanding the Kelvin pin mitigation of the MOSFET turn-on losses by fast-switching and neutralization of the clamp diode. , 2021, , .		1
6	The effect of a metal <scp>PGS</scp> on the <i>Q</i> â€factor of spiral inductors for <scp>RF</scp> and mmâ€wave applications in a 28â€nm <scp>CMOS</scp> technology. International Journal of RF and Microwave Computer-Aided Engineering, 2020, 30, e22368.	1.2	5
7	Thin Conductor Modelling Combined with a Hybrid Numerical Method to Evaluate the Transferred Potential from Isolated Grounding System. Energies, 2019, 12, 1210.	3.1	2
8	Optimization of the shape of an induction heating device in the presence of skin effect in the coils. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2019, 39, 525-531.	0.9	4
9	Reducing Electromagnetic Interferences on Power Planes of High-Speed Circuits by means of a High-Impedance Electromagnetic Surface. , 2019, , .		0
10	Effects of parasitic phenomena in half bridge with Super Junction MOSFETs suitable for UAV. , 2019, , .		7
11	The FEMâ€BCI methods in EMC applications. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2018, 31, e2462.	1.9	2
12	Modeling of the Power Losses due to Coss in SJ MOSFETs Submitted to ZVS: Identification of the Passive Parameters by a Genetic Algorithm. , 2018, , .		3
13	Computation of Transferred Potentials from Grounding Grids by Means of Hybrid Methods. , 2018, , .		1
14	State of the art and emerging solid-state power devices in the perspective of more electric aircraft. , 2018, , .		5
15	Modeling the Hysteresis Power Losses of the Output Parasitic Capacitance in Super Junction MOSFETs. , 2018, , .		14
16	Distribution network topology identification based on synchrophasor. AIMS Energy, 2018, 6, 245-260.	1.9	0
17	Solution of Open-Boundary Problems by Means of the Hybrid FEM-GDBCI Method. IEEE Transactions on Magnetics, 2017, 53, 1-4.	2.1	1
18	Optimization of the magnetic shield of a levitation melting device. , 2017, , .		0

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19	AÂWeaklyÂParetoÂCompliantÂQualityÂIndicator. Mathematical and Computational Applications, 2017, 22, 25.	1.3	10
20	Multi-Objective Optimization of Thin-Film Silicon Solar Cells with Metallic and Dielectric Nanoparticles. Energies, 2017, 10, 53.	3.1	3
21	Solution of open-boundary problems by means of the hybrid FEM-GDBCI method. , 2016, , .		0
22	Eddy Current Computation by the FEM-SDBCI Method. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	4
23	FEM-DBCI Solution of Open-Boundary Electrostatic Problems in the Presence of Floating Potential Conductors. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	4
24	Electromagnetic Scattering Computation by Means of the Hybrid FEM-SRBCI Method. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	3
25	Optimization of Plasmon-Enhanced Thin-Film Heterojunction Solar Cells. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	2
26	Efficient Analysis of Grounding Systems by Means of the Hybrid FEMâ€“DBCI Method. IEEE Transactions on Industry Applications, 2015, 51, 5159-5166.	4.9	5
27	Solution of skin-effect problems by means of the hybrid SDBCI method. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2014, 33, 1935-1949.	0.9	4
28	A Parallel Version of the Self-Adaptive Low-High Evaluation Evolutionary-Algorithm for Electromagnetic Device Optimization. IEEE Transactions on Magnetics, 2014, 50, 633-636.	2.1	15
29	GMRES Solution of FEM-BEM Global Systems for Electrostatic Problems Without Voltaged Conductors. IEEE Transactions on Magnetics, 2013, 49, 1701-1704.	2.1	5
30	Transient Thermal Analysis of an Eddy-Current Heated Conductor Applying FEM-DBCI. IEEE Transactions on Magnetics, 2013, 49, 1861-1864.	2.1	9
31	A comparison between hybrid methods: FEM-BEM versus FEM-DBCI. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2013, 32, 1901-1911.	0.9	9
32	Plasmon analysis of systems of metallic nanorings by means of FEM-RBCI. , 2012, , .		0
33	Solution of unbounded skin effect problems by means of the singular FEM-DBCI method. , 2012, , .		0
34	Improving the integral equation in the hybrid FEMâ€RBCI method for scalar electromagnetic scattering problems. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2012, 31, 1318-1327.	0.9	1
35	Applying FEM-RBCI to the analysis of plasmons in metallic nanoparticles. International Journal of Applied Electromagnetics and Mechanics, 2012, 39, 13-20.	0.6	5
36	Improving the integral equation of the hybrid FEM-RBCI method. , 2011, , .		0

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37	Improved Selection of the Integration Surface in the Hybrid FEM-DBCI Method. IEEE Transactions on Magnetics, 2010, 46, 3357-3360.	2.1	12
38	A Modified FEM-DBCI Method for Static and Quasi-Static Electromagnetic Field Problems. IEEE Transactions on Magnetics, 2010, 46, 2803-2806.	2.1	6
39	FEM analysis of a naval PLC system. , 2010, , .		1
40	Unbounded electromagnetic field problem solution by means of virtual GMRES. , 2010, , .		1
41	A Non-Standard Family of Boundary Elements for the Hybrid FEM-BEM Method. IEEE Transactions on Magnetics, 2009, 45, 1312-1315.	2.1	14
42	Stochastic Optimization of Magnetic Shields in Induction Heating Applications by Means of the FEM-DBCI Method and the SALHE Evolutionary Algorithm. IEEE Transactions on Magnetics, 2009, 45, 1752-1755.	2.1	3
43	An Optimized Generator of Finite Element Meshes Based on a Neural Network. IEEE Transactions on Magnetics, 2008, 44, 1278-1281.	2.1	1
44	Efficient Solution of Skin-Effect Problems by Means of the GMRES-Accelerated FEM-BEM Method. IEEE Transactions on Magnetics, 2008, 44, 1274-1277.	2.1	16
45	A GMRES iterative solution of FEMâ€BEM global systems in skin effect problems. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2008, 27, 1286-1295.	0.9	13
46	Thermal analysis of an eddyâ€current heated piece by means of the FEMâ€DBCI method. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2008, 27, 427-435.	0.9	0
47	Numerical implementations of the FEMâ€DBCI integral equation. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2008, 27, 879-886.	0.9	2
48	SALHE-EA: A New Evolutionary Algorithm for Multi-Objective Optimization of Electromagnetic Devices. Studies in Computational Intelligence, 2008, , 37-45.	0.9	10
49	Non-Standard Nodal Boundary Elements for FEM-BEM. Studies in Computational Intelligence, 2008, , 47-54.	0.9	1
50	Development of a Finite Element Code for Non-Destructive Evaluation of Concrete Structures by Means of Ultrasonic Waves. Lecture Notes in Computer Science, 2008, , 555-565.	1.3	0
51	Comparing FEM-BEM and FEM-DBCI for open-boundary electrostatic field problems. EPJ Applied Physics, 2007, 39, 143-148.	0.7	17
52	Optimization of Hybrid Solar Wind Power Systems. International Journal of Applied Electromagnetics and Mechanics, 2007, 26, 225-231.	0.6	4
53	An Iterative Solution to FEM-BEM Algebraic Systems for Open-Boundary Electrostatic Problems. IEEE Transactions on Magnetics, 2007, 43, 1249-1252.	2.1	17
54	Improving the accuracy of the integral equation in the hybrid FEM-DBCI method for open boundary electrostatic problems. IEEE Transactions on Magnetics, 2006, 42, 579-582.	2.1	13

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55	A self-adaptive niching genetic algorithm for multimodal optimization of electromagnetic devices. IEEE Transactions on Magnetics, 2006, 42, 1203-1206.	2.1	70
56	Simulated annealing with restarts for the optimization of electromagnetic devices. IEEE Transactions on Magnetics, 2006, 42, 1115-1118.	2.1	17
57	A fast solving strategy for two-dimensional skin effect problems. IEEE Transactions on Magnetics, 2003, 39, 1119-1122.	2.1	12
58	Application of Screening Analysis to the Optimization of an Electromagnetic Induction Heating Device. , 2003, , 213-221.		0
59	An improved solution scheme for open-boundary skin effect problems. IEEE Transactions on Magnetics, 2001, 37, 3474-3477.	2.1	22
60	A proposal for a universal parameter configuration for genetic algorithm optimization of electromagnetic devices. IEEE Transactions on Magnetics, 2001, 37, 3208-3211.	2.1	14
61	Stochastic optimization of an electromagnetic actuator by means of Dirichlet boundary condition iteration. IEEE Transactions on Magnetics, 2000, 36, 1110-1114.	2.1	4
62	Some considerations about the perfectly matched layer for static fields. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 1999, 18, 337-347.	0.9	6
63	Iteratively-improved Robin boundary conditions for the finite element solution of scattering problems in unbounded domains. International Journal for Numerical Methods in Engineering, 1998, 42, 601-629.	2.8	45
64	Computing spatially-periodic electrical fields by charge iteration. IEEE Transactions on Magnetics, 1998, 34, 2501-2504.	2.1	2
65	A predictor-corrector scheme for open boundary problems. IEEE Transactions on Magnetics, 1998, 34, 2573-2576.	2.1	0
66	An iterative solution to scattering from cavity-backed apertures in a perfectly conducting wedge. IEEE Transactions on Magnetics, 1998, 34, 2704-2707.	2.1	12
67	Shape optimization of the magnetic channel of a superconducting cyclotron. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 1998, 17, 123-127.	0.9	3
68	Accelerating the Robin iteration procedure by means of GMRES. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 1998, 17, 49-54.	0.9	7
69	Finite element analysis of unbounded non-linear transient magnetic fields. IEEE Transactions on Magnetics, 1997, 33, 1318-1321.	2.1	8
70	A generalization of the charge iteration procedure. IEEE Transactions on Magnetics, 1997, 33, 1204-1207.	2.1	2
71	Combining non-linearity and current iterations for the solution of boundless skin-effect problems. IEEE Transactions on Magnetics, 1997, 33, 1291-1294.	2.1	0
72	Overrelaxing the charge iteration procedure. IEEE Transactions on Magnetics, 1996, 32, 694-697.	2.1	7

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73	FEM analysis of unbounded electromagnetic scattering by the Robin iteration procedure. Electronics Letters, 1996, 32, 1768.	1.0	24
74	Finite element iterative solution of skin effect problems in open boundaries. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 1996, 9, 125-143.	1.9	47
75	A theoretical study of charge iteration. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 1996, 15, 22-46.	0.9	19
76	Finite element iterative solution of skin effect problems in open boundaries. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 1996, 9, 125-143.	1.9	29
77	Placement of the fictitious boundary in the charge iteration procedure for unbounded electrical field problems. IEEE Transactions on Magnetics, 1995, 31, 1392-1395.	2.1	3
78	Treatment of unbounded skin-effect problems in the presence of material inhomogeneities. IEEE Transactions on Magnetics, 1995, 31, 1504-1507.	2.1	6
79	Treatment of Non-Homogeneous Regions in Charge Iteration. , 1995, , 209-212.		0
80	Convergence analysis of the charge iteration procedure for unbounded electrical fields. IEEE Transactions on Magnetics, 1994, 30, 2873-2876.	2.1	6
81	Axisymmetric unbounded electrical field computation by charge iteration. IEEE Transactions on Magnetics, 1993, 29, 2043-2046.	2.1	10