# 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 | A self-adaptive niching genetic algorithm for multimodal optimization of electromagnetic devices. IEEE Transactions on Magnetics, 2006, 42, 1203-1206. | 2.1 | 70 |
| 2 | 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 |
| 3 | 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 |
| 4 | 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 |
| 5 | FEM analysis of unbounded electromagnetic scattering by the Robin iteration procedure. Electronics Letters, 1996, 32, 1768. | 1.0 | 24 |
| 6 | An improved solution scheme for open-boundary skin effect problems. IEEE Transactions on Magnetics, 2001, 37, 3474-3477. | 2.1 | 22 |
| 7 | 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 |
| 8 | Simulated annealing with restarts for the optimization of electromagnetic devices. IEEE Transactions on Magnetics, 2006, 42, 1115-1118. | 2.1 | 17 |
| 9 | Comparing FEM-BEM and FEM-DBCI for open-boundary electrostatic field problems. EPJ Applied Physics, 2007, 39, 143-148. | 0.7 | 17 |
| 10 | An Iterative Solution to FEM-BEM Algebraic Systems for Open-Boundary Electrostatic Problems. IEEE Transactions on Magnetics, 2007, 43, 1249-1252. | 2.1 | 17 |
| 11 | 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 |
| 12 | 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 |
| 13 | 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 |
| 14 | A Non-Standard Family of Boundary Elements for the Hybrid FEM-BEM Method. IEEE Transactions on Magnetics, 2009, 45, 1312-1315. | 2.1 | 14 |
| 15 | Modeling the Hysteresis Power Losses of the Output Parasitic Capacitance in Super Junction MOSFETs. , 2018, , . | | 14 |
| 16 | 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 |
| 17 | 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 |
| 18 | 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 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | A fast solving strategy for two-dimensional skin effect problems. IEEE Transactions on Magnetics, 2003, 39, 1119-1122. | 2.1 | 12 |
| 20 | Improved Selection of the Integration Surface in the Hybrid FEM-DBCI Method. IEEE Transactions on Magnetics, 2010, 46, 3357-3360. | 2.1 | 12 |
| 21 | Axisymmetric unbounded electrical field computation by charge iteration. IEEE Transactions on Magnetics, 1993, 29, 2043-2046. | 2.1 | 10 |
| 22 | AÂWeaklyÂParetoÂCompliantÂQualityÂIndicator. Mathematical and Computational Applications, 2017, 22, 25. | 1.3 | 10 |
| 23 | SALHE-EA: A New Evolutionary Algorithm for Multi-Objective Optimization of Electromagnetic Devices. Studies in Computational Intelligence, 2008, , 37-45. | 0.9 | 10 |
| 24 | Transient Thermal Analysis of an Eddy-Current Heated Conductor Applying FEM-DBCI. IEEE Transactions on Magnetics, 2013, 49, 1861-1864. | 2.1 | 9 |
| 25 | 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 |
| 26 | Finite element analysis of unbounded non-linear transient magnetic fields. IEEE Transactions on Magnetics, 1997, 33, 1318-1321. | 2.1 | 8 |
| 27 | Overrelaxing the charge iteration procedure. IEEE Transactions on Magnetics, 1996, 32, 694-697. | 2.1 | 7 |
| 28 | 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 |
| 29 | Effects of parasitic phenomena in half bridge with Super Junction MOSFETs suitable for UAV. , 2019, , . | | 7 |
| 30 | Circuit Models of Power MOSFETs Leading the Way of GaN HEMT Modellingâ€"A Review. Energies, 2022, 15, 3415. | 3.1 | 7 |
| 31 | Convergence analysis of the charge iteration procedure for unbounded electrical fields. IEEE Transactions on Magnetics, 1994, 30, 2873-2876. | 2.1 | 6 |
| 32 | Treatment of unbounded skin-effect problems in the presence of material inhomogeneities. IEEE Transactions on Magnetics, 1995, 31, 1504-1507. | 2.1 | 6 |
| 33 | 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 |
| 34 | A Modified FEM-DBCI Method for Static and Quasi-Static Electromagnetic Field Problems. IEEE Transactions on Magnetics, 2010, 46, 2803-2806. | 2.1 | 6 |
| 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 | GMRES Solution of FEM-BEM Global Systems for Electrostatic Problems Without Voltaged Conductors. IEEE Transactions on Magnetics, 2013, 49, 1701-1704. | 2.1 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | 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 |
| 38 | State of the art and emerging solid-state power devices in the perspective of more electric aircraft. , 2018, , . | | 5 |
| 39 | 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 |
| 40 | Stochastic optimization of an electromagnetic actuator by means of Dirichlet boundary condition iteration. IEEE Transactions on Magnetics, 2000, 36, 1110-1114. | 2.1 | 4 |
| 41 | Optimization of Hybrid Solar Wind Power Systems. International Journal of Applied Electromagnetics and Mechanics, 2007, 26, 225-231. | 0.6 | 4 |
| 42 | 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 |
| 43 | Eddy Current Computation by the FEM-SDBCI Method. IEEE Transactions on Magnetics, 2016, 52, 1-4. | 2.1 | 4 |
| 44 | 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 |
| 45 | 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 |
| 46 | 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 |
| 47 | 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 |
| 48 | 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 |
| 49 | Electromagnetic Scattering Computation by Means of the Hybrid FEM-SRBCI Method. IEEE Transactions on Magnetics, 2015, 51, 1-4. | 2.1 | 3 |
| 50 | Multi-Objective Optimization of Thin-Film Silicon Solar Cells with Metallic and Dielectric Nanoparticles. Energies, 2017, 10, 53. | 3.1 | 3 |
| 51 | 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 |
| 52 | Development of a SPICE modelling strategy for power devices in GaN technology. , 2021, , . | | 3 |
| 53 | A generalization of the charge iteration procedure. IEEE Transactions on Magnetics, 1997, 33, 1204-1207. | 2.1 | 2 |
| 54 | Computing spatially-periodic electrical fields by charge iteration. IEEE Transactions on Magnetics, 1998, 34, 2501-2504. | 2.1 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | 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 |
| 56 | Optimization of Plasmon-Enhanced Thin-Film Heterojunction Solar Cells. IEEE Transactions on Magnetics, 2015, 51, 1-4. | 2.1 | 2 |
| 57 | The FEMâ€BCI methods in EMC applications. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2018, 31, e2462. | 1.9 | 2 |
| 58 | 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 |
| 59 | An Optimized Generator of Finite Element Meshes Based on a Neural Network. IEEE Transactions on Magnetics, 2008, 44, 1278-1281. | 2.1 | 1 |
| 60 | FEM analysis of a naval PLC system. , 2010, , . | | 1 |
| 61 | Unbounded electromagnetic field problem solution by means of virtual GMRES. , 2010, , . | | 1 |
| 62 | 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 |
| 63 | Solution of Open-Boundary Problems by Means of the Hybrid FEM-GDBCI Method. IEEE Transactions on Magnetics, 2017, 53, 1-4. | 2.1 | 1 |
| 64 | Computation of Transferred Potentials from Grounding Grids by Means of Hybrid Methods. , 2018, , . | | 1 |
| 65 | Optimization of Frequency Selective Surfaces for the Design of Electromagnetic Mantle Cloaks. IEEE Transactions on Magnetics, 2021, 57, 1-4. | 2.1 | 1 |
| 66 | Non-Standard Nodal Boundary Elements for FEM-BEM. Studies in Computational Intelligence, 2008, , 47-54. | 0.9 | 1 |
| 67 | Understanding the Kelvin pin mitigation of the MOSFET turn-on losses by fast-switching and neutralization of the clamp diode. , 2021, , . | | 1 |
| 68 | 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 |
| 69 | A predictor-corrector scheme for open boundary problems. IEEE Transactions on Magnetics, 1998, 34, 2573-2576. | 2.1 | 0 |
| 70 | 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 |
| 71 | Improving the integral equation of the hybrid FEM-RBCI method. , 2011, , . | | 0 |
| 72 | Plasmon analysis of systems of metallic nanorings by means of FEM-RBCI. , 2012, , . | | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Solution of unbounded skin effect problems by means of the singular FEM-DBCI method. , 2012, , . | | 0 |
| 74 | Solution of open-boundary problems by means of the hybrid FEM-GDBCI method. , 2016, , . | | 0 |
| 75 | Optimization of the magnetic shield of a levitation melting device. , 2017, , . | | 0 |
| 76 | Reducing Electromagnetic Interferences on Power Planes of High-Speed Circuits by means of a High-Impedance Electromagnetic Surface. , 2019, , . | | 0 |
| 77 | The Hybrid FEM-DBCI for the Solution of Open-Boundary Low-Frequency Problems. Mathematics, 2021, 9, 1968. | 2.2 | 0 |
| 78 | Application of Screening Analysis to the Optimization of an Electromagnetic Induction Heating Device. , 2003, , 213-221. | | 0 |
| 79 | Treatment of Non-Homogeneous Regions in Charge Iteration. , 1995, , 209-212. | | 0 |
| 80 | Distribution network topology identification based on synchrophasor. AIMS Energy, 2018, 6, 245-260. | 1.9 | 0 |
| 81 | 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 |