Fabrizio Dughiero

List of Publications by Year
in descending order

56 papers	761 citations	430874 18 h-index	580821 25 g-index
58 all docs	58 docs citations	58 times ranked	654 citing authors

#	Article	IF	Citations
1	Magnetic Field Synthesis in the Design of Inductors for Magnetic Fluid Hyperthermia. IEEE Transactions on Magnetics, 2010, 46, 2931-2934.	2.1	53
2	Synthesis of Ferrofluids Made of Iron Oxide Nanoflowers: Interplay between Carrier Fluid and Magnetic Properties. Nanomaterials, 2017, 7, 373.	4.1	45
3	Coupled Field Synthesis in Magnetic Fluid Hyperthermia. IEEE Transactions on Magnetics, 2011, 47, 914-917.	2.1	41
4	Multiphysics Modeling of Induction Hardening of Ring Gears for the Aerospace Industry. IEEE Transactions on Magnetics, 2011, 47, 918-921.	2.1	39
5	Synthesizing Distributions of Magnetic Nanoparticles for Clinical Hyperthermia. IEEE Transactions on Magnetics, 2012, 48, 263-266.	2.1	33
6	A Paretian Approach to Optimal Design With Uncertainties: Application in Induction Heating. IEEE Transactions on Magnetics, 2014, 50, 917-920.	2.1	32
7	UV-Based Technologies for SARS-CoV2 Inactivation: Status and Perspectives. Electronics (Switzerland), 2021, 10, 1703.	3.1	30
8	A Translational Coupled Electromagnetic and Thermal Innovative Model for Induction Welding of Tubes. IEEE Transactions on Magnetics, 2012, 48, 483-486.	2.1	28
9	Optimal inductor design for nanofluid heating characterisation. Engineering Computations, 2015, 32, 1870-1892.	1.4	27
10	Simplified Approach for 3-D Nonlinear Induction Heating Problems. IEEE Transactions on Magnetics, 2009, 45, 1855-1858.	2.1	25
11	Coupled Magneto-Thermal FEM Model of Direct Heating of Ferromagnetic Bended Tubes. IEEE Transactions on Magnetics, 2010, 46, 3217-3220.	2.1	25
12	Magnetic hyperthermia efficiency and ^{1}H-NMR relaxation properties of iron oxide/paclitaxel-loaded PLGA nanoparticles. Nanotechnology, 2016, 27, 285104.	2.6	24
13	Inactivating SARS-CoV-2 Using 275 nm UV-C LEDs through a Spherical Irradiation Box: Design, Characterization and Validation. Materials, 2021, 14, 2315.	2.9	24
14	Electrothermal heating process applied to c-Si PV recycling. , 2012, , .		21
15	Optimal Needle Positioning for Electrochemotherapy: A Constrained Multiobjective Strategy. IEEE Transactions on Magnetics, 2013, 49, 2141-2144.	2.1	20
16	A prototype of a flexible grid electrode to treat widespread superficial tumors by means of Electrochemotherapy. Radiology and Oncology, 2016, 50, 49-57.	1.7	20
17	Sensitivityâ€based optimal shape design of inductionâ€heating devices. IET Science, Measurement and Technology, 2015, 9, 579-586.	1.6	19
18	Electric field computation and measurements in the electroporation of inhomogeneous samples. Open Physics, 2017, 15, 790-796.	1.7	19

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19	Numerical model for RF capacitive regional deep hyperthermia in pelvic tumors. Medical and Biological Engineering and Computing, 2007, 45, 459-466.	2.8	18
20	Field synthesis for the optimal treatment planning in Magnetic Fluid Hyperthermia. Archiwum Elektrotechniki, 2012, 61, 57-67.	0.5	18
21	Cell-seeded 3D scaffolds as in vitro models for electroporation. Bioelectrochemistry, 2019, 125, 15-24.	4.6	15
22	3D FE analysis and control of a submerged arc electric furnace. International Journal of Applied Electromagnetics and Mechanics, 2012, 39, 555-561.	0.6	14
23	Identification of Equivalent Material Properties for 3-D Numerical Modeling of Induction Heating of Ferromagnetic Workpieces. IEEE Transactions on Magnetics, 2009, 45, 1851-1854.	2.1	12
24	Effect of Prior Microstructure and Heating Rate on the Austenitization Kinetics of 39NiCrMo3 Steel. Steel Research International, 2017, 88, 1600267.	1.8	12
25	Improved solution to a multi-objective benchmark problem of inverse induction heating. International Journal of Applied Electromagnetics and Mechanics, 2015, 49, 279-288.	0.6	11
26	Numerical Simulation of Solid–Solid Phase Transformations During Induction Hardening Process. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	11
27	Migration-corrected NSGA-II for improving multiobjective design optimization in electromagnetics. International Journal of Applied Electromagnetics and Mechanics, 2016, 51, 161-172.	0.6	10
28	Effect of Tissue Inhomogeneity in Soft Tissue Sarcomas: From Real Cases to Numerical and Experimental Models. Technology in Cancer Research and Treatment, 2018, 17, 153303381878969.	1.9	10
29	Effect of Electrode Distance in Grid Electrode: Numerical Models and *In Vitro* Tests. Technology in Cancer Research and Treatment, 2018, 17, 153303381876449.	1.9	9
30	Non-parallellism of needles in electroporation: 3D computational model and experimental analysis. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2019, 38, 348-361.	0.9	9
31	Self-adaptive migration NSGA and optimal design of inductors for magneto-fluid hyperthermia. Engineering Computations, 2018, 35, 1727-1746.	1.4	8
32	Iron oxide/PLGA nanoparticles for magnetically controlled drug release. International Journal of Applied Electromagnetics and Mechanics, 2017, 53, S53-S60.	0.6	7
33	Parameter–free Paretian optimisation in electromagnetics: a kinematic formulation. IET Science, Measurement and Technology, 2013, 7, 93-103.	1.6	6
34	Multi rotors permanent Magnet Heater for controlling temperature distribution in aluminum billets. , 2014, , .		6
35	Full Optical Contactless Thermometry Based on LED Photoluminescence. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-8.	4.7	6
36	Numerical models of RF-thermal ablation treatments. International Journal of Applied Electromagnetics and Mechanics, 2007, 25, 429-433.	0.6	5

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37	A 3-D Cell Method Formulation for Coupled Electric and Thermal Problems. IEEE Transactions on Magnetics, 2007, 43, 1197-1200.	2.1	5
38	Optimal design of inductors for magnetic- fluid hyperthermia by means of migration- assisted NSGA. International Journal of Applied Electromagnetics and Mechanics, 2016, 51, S125-S134.	0.6	5
39	A model for distribution of iron impurity during silicon purification by directional solidification. Vacuum, 2017, 145, 251-257.	3.5	5
40	Efficiency optimization of a two-port microwave oven: a robust automated procedure. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2015, 34, 1213-1228.	0.9	4
41	Self-adaptive NGSA algorithm and optimal design of inductors for magneto-fluid hyperthermia. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2017, 36, 535-545.	0.9	4
42	Multi-Objective Optimization of a Solenoid for MFH: A Comparison of Methods. , 2018, , .		4
43	SELF-adaptive Migration-NSGA algorithm: An application in uncertainty-tolerant magnetic field synthesis for MFH inductor design. International Journal of Applied Electromagnetics and Mechanics, 2018, 56, 17-32.	0.6	3
44	Multi-objective optimization of an electrode pair for electrochemotherapy: M-NSGA and ?-BIMO comparison. International Journal of Applied Electromagnetics and Mechanics, 2019, 60, S163-S172.	0.6	3
45	Clinical electrochemotherapy for chest wall recurrence from breast cancer. , 2014, , 3-33.		2
46	Permanent magnet heater for aluminum billets: Experimental results. , 2015, , .		2
47	Colour fading of denim with atmospheric pressure plasma jet using air. International Journal of Applied Electromagnetics and Mechanics, 2020, 63, S79-S84.	0.6	2
48	Multiphysics modeling of induction hardening of ring gears for the aerospace industry. , 2010, , .		1
49	Multi-crystalline silicon ingots growth with an innovative induction heating directional solidification furnace. , 2011, , .		1
50	A buck-boost DC-DC converter for single module photovoltaic application to vehicle recharge. , 2018, , .		1
51	Experimental validation of coupled electromagnetic thermal FEM model of transverse flux heaters. , 2008, , .		0
52	A new DSS furnace for energy saving in the production of multi-crystalline Silicon. , 2010, , .		0
53	Permanent Magnet Heater for Special Applications. Applied Mechanics and Materials, 2015, 792, 476-481.	0.2	0
54	Optimization Inspired Design of Induction Heating Coils: a Technology Adapted Solution. , 2019, , .		0

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55	Optimal design methods for the uniform heating of tube ends for stress relieving. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2020, 39, 12-20.	0.9	0
56	Optimized design of induction heating coils: Technology-adapted solution. International Journal of Applied Electromagnetics and Mechanics, 2021, 64, S287-S296.	0.6	0