

# Maria Evelina Mognaschi

## List of Publications by Year in descending order

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83  
papers

787  
citations

516561

16  
h-index

610775

24  
g-index

87  
all docs

87  
docs citations

87  
times ranked

553  
citing authors

#	ARTICLE	IF	CITATIONS
1	Finite element models of dynamic-WPTS: a field-circuit approach. <i>COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering</i> , 2022, 41, 1146-1158.	0.5	4
2	Optimal shape design of a class of permanent magnet motors in a multiple-objectives context. <i>COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering</i> , 2022, 41, 1994-2009.	0.5	2
3	Wireless Power Transfer System in Dynamic Conditions: A Field-Circuit Analysis. <i>Vehicles</i> , 2022, 4, 234-242.	1.7	4
4	Multiobjective optimization of compensation networks for wireless power transfer systems. <i>COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering</i> , 2022, 41, 674-689.	0.5	2
5	Neural metamodelling of fields: Towards a new deal in computational electromagnetics. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2022, 69, 127-137.	0.3	2
6	Cost-effective optimal synthesis of the efficiency map of permanent magnet synchronous motors. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2022, 69, 189-199.	0.3	1
7	Field models for the electromagnetic compatibility of wireless power transfer systems for electric vehicles. <i>Engineering Computations</i> , 2022, 39, 2802-2819.	0.7	3
8	Synthesis of WPTS compensation networks considering multiple criteria. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2022, 69, 319-331.	0.3	0
9	Optimized design of induction heating coils: Technology-adapted solution. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2021, 64, S287-S296.	0.3	0
10	A non-differential method for solving many-objective optimization problems: An application in IPM motor design. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2021, 64, S131-S142.	0.3	1
11	Convolutional Neural Networks for Automated Rolling Bearing Diagnostics in Induction Motors Based on Electromagnetic Signals. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 7878.	1.3	15
12	Numerical Methods for MEMS Design: Automated Optimization. <i>Lecture Notes in Electrical Engineering</i> , 2020, , 101-113.	0.3	0
13	Electric field distribution study in inhomogeneous biological tissues. <i>International Journal of Numerical Modelling: Electronic Networks, Devices and Fields</i> , 2020, 33, e2699.	1.2	2
14	A Benchmark TEAM Problem for Multi-Objective Pareto Optimization in Magnetics: The Time-Harmonic Regime. <i>IEEE Transactions on Magnetics</i> , 2020, 56, 1-4.	1.2	3
15	Optimal design methods for the uniform heating of tube ends for stress relieving. <i>COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering</i> , 2020, 39, 12-20.	0.5	0
16	Many Objective Optimization of a Magnetic Micro-“Electro”-Mechanical (MEMS) Micromirror with Bounded MP-NSGA Algorithm. <i>Mathematics</i> , 2020, 8, 1509.	1.1	7
17	Virtual Reality-Based Training: Case Study in Mechatronics. <i>Technology, Knowledge and Learning</i> , 2020, , 1.	3.1	16
18	Temperature and Torque Measurements of Switched Reluctance Actuator with Composite or Laminated Magnetic Cores. <i>Sensors</i> , 2020, 20, 3065.	2.1	1

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19	Pareto optimal solutions of a wireless power transfer system. EPJ Applied Physics, 2020, 90, 20904.	0.3	4
20	Numerical Case Studies: Forward Problems. Lecture Notes in Electrical Engineering, 2020, , 143-168.	0.3	0
21	Improved solutions to a TEAM problem for multi-objective optimisation in magnetics. IET Science, Measurement and Technology, 2020, 14, 964-968.	0.9	5
22	Many-objective shape optimisation of IPM motors for electric vehicle traction. International Journal of Applied Electromagnetics and Mechanics, 2019, 60, S149-S162.	0.3	19
23	Free-form optimisation in industrial dielectric design: A comparative approach. International Journal of Applied Electromagnetics and Mechanics, 2019, 60, S101-S113.	0.3	0
24	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.	0.3	3
25	A Parallel Surrogate Model Assisted Evolutionary Algorithm for Electromagnetic Design Optimization. IEEE Transactions on Emerging Topics in Computational Intelligence, 2019, 3, 93-105.	3.4	58
26	Stress relieving of tube-ends in induction heating: comparison of optimization problems. , 2019, , .		0
27	Synthesis of the mutual inductor of a Wireless Power Transfer Systems: a field-circuit approach. , 2019, , .		1
28	Thermal measurements of the drive with a switched reluctance motor with a magnetic circuit made of soft magnetic composites. , 2019, , .		1
29	Non-parallelism 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.	0.5	9
30	Hybrid excited electric machine with axial flux bridges. International Journal of Applied Electromagnetics and Mechanics, 2019, 59, 703-711.	0.3	2
31	Shape synthesis of a well-plate for electromagnetic stimulation of cells. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2019, 32, e2259.	1.2	10
32	WPT System Coupling Inductors: Exploring Pareto Optimal Solutions. , 2019, , .		0
33	Geometry optimization for a class of switched-reluctance motors: A bi-objective approach. International Journal of Applied Electromagnetics and Mechanics, 2018, 56, 107-122.	0.3	11
34	Optimization and measurements of switched reluctance motors exploiting soft magnetic composite. International Journal of Applied Electromagnetics and Mechanics, 2018, 57, 83-93.	0.3	12
35	A Benchmark TEAM Problem for Multi-Objective Pareto Optimization of Electromagnetic Devices. IEEE Transactions on Magnetics, 2018, 54, 1-4.	1.2	36
36	Effect of Electrode Distance in Grid Electrode: Numerical Models and In Vitro Tests. Technology in Cancer Research and Treatment, 2018, 17, 153303381876449.	0.8	9

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37	Multi-Objective Optimization of a Solenoid for MFH: A Comparison of Methods. , 2018, , .		4
38	The Benchmark TEAM Problem for Multi-Objective Optimization Solved with CFSO. , 2018, , .		3
39	Electromagnetic cantilever reference for the calibration of optical nanodisplacement systems. Sensors and Actuators A: Physical, 2018, 282, 149-156.	2.0	9
40	The $\mu$ -l-BiMO Method for Needle Pair Optimization in ECT. , 2018, , .		0
41	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.	0.8	10
42	Optimal Design of Electromagnetically Actuated MEMS Cantilevers. Sensors, 2018, 18, 2533.	2.1	15
43	Multiphysics field analysis and evolutionary optimization: Design of an electro-thermo-elastic microactuator. International Journal of Applied Electromagnetics and Mechanics, 2017, 54, 433-448.	0.3	12
44	Electrical resistance in inhomogeneous samples during electroporation. , 2017, , .		5
45	Wind-driven optimization for the design of switched reluctance motors. , 2017, , .		3
46	A benchmark problem of induction heating analysis. International Journal of Applied Electromagnetics and Mechanics, 2017, 53, S139-S149.	0.3	28
47	The biogeography-inspired optimization for the design of coils for nerve stimulation. , 2017, , .		8
48	Micro biogeography-inspired multi-objective optimisation for industrial electromagnetic design. Electronics Letters, 2017, 53, 1458-1460.	0.5	14
49	A new sensitivity approach in multi-objective design: An application in electromechanics. , 2017, , .		0
50	Model of Murine Ventricular Cardiac Tissue for In Vitro Kinematic-Dynamic Studies of Electromagnetic and $\beta^2$ -Adrenergic Stimulation. Journal of Healthcare Engineering, 2017, 2017, 1-7.	1.1	1
51	Electric field computation and measurements in the electroporation of inhomogeneous samples. Open Physics, 2017, 15, 790-796.	0.8	19
52	Field-based optimal-design of an electric motor: a new sensitivity formulation. Open Physics, 2017, 15, 924-928.	0.8	7
53	Biogeography-inspired multiobjective optimization for helping MEMS synthesis. Archives of Electrical Engineering, 2017, 66, 607-623.	1.0	17
54	Island biogeography as a paradigm for MEMS optimal design. International Journal of Applied Electromagnetics and Mechanics, 2016, 51, S97-S105.	0.3	27

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55	Hybrid excited synchronous machine with flux control possibility. International Journal of Applied Electromagnetics and Mechanics, 2016, 52, 1615-1622.	0.3	23
56	Magnetic field analysis for the optimization of a GMR isolator for data transmission in power applications. , 2016, , .		0
57	$\beta$ -Adrenergic response is counteracted by extremely-low-frequency pulsed electromagnetic fields in beating cardiomyocytes. Journal of Molecular and Cellular Cardiology, 2016, 98, 146-158.	0.9	9
58	Biogeography-Inspired Multiobjective Optimization and MEMS Design. IEEE Transactions on Magnetics, 2016, 52, 1-4.	1.2	31
59	Pulsed Electromagnetic Field with Temozolomide Can Elicit an Epigenetic Pro-apoptotic Effect on Glioblastoma T98G Cells. Anticancer Research, 2016, 36, 5821-5826.	0.5	22
60	Improvements in the ModSCA simulator: A tool helping to analyze energy efficiency of a compressed air system. , 2015, , .		0
61	Multiphysics field analysis and multiobjective design optimization: a benchmark problem. Inverse Problems in Science and Engineering, 2014, 22, 1214-1225.	1.2	26
62	Field models and numerical dosimetry inside an extremely-low-frequency electromagnetic bioreactor: the theoretical link between the electromagnetically induced mechanical forces and the biological mechanisms of the cell tensegrity. SpringerPlus, 2014, 3, 473.	1.2	17
63	Non-Linear Multi-Physics Analysis and Multi-Objective Optimization in Electroheating Applications. IEEE Transactions on Magnetics, 2014, 50, 673-676.	1.2	28
64	Design optimization of a permanent-magnet excited synchronous machine for electrical automobiles. International Journal of Applied Electromagnetics and Mechanics, 2012, 39, 889-895.	0.3	35
65	3D FE analysis and control of a submerged arc electric furnace. International Journal of Applied Electromagnetics and Mechanics, 2012, 39, 555-561.	0.3	14
66	Automated optimal design of a hts coreless winding. International Journal of Applied Electromagnetics and Mechanics, 2011, 37, 93-99.	0.3	2
67	A Source Identification Problem for the Electrical Activity of Brain   During Hand Movement. IEEE Transactions on Magnetics, 2011, 47, 878-881.	1.2	3
68	Source identification based on regularization and evolutionary computing in biomagnetism. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2010, 29, 1022-1032.	0.5	4
69	Field model of electrical activity of the brain during the hand movement: a source identification problem. , 2010, , .		0
70	Fast Algorithms for the Design of Complex-Shape Devices in Electromechanics. Studies in Computational Intelligence, 2010, , 59-86.	0.7	8
71	Multiobjective design optimization of an excitation arrangement used in superconducting magnetic bearings. International Journal of Applied Electromagnetics and Mechanics, 2009, 30, 127-134.	0.3	7
72	Industrial Design With Multiple Criteria: Shape Optimization of a Permanent-Magnet Generator. IEEE Transactions on Magnetics, 2009, 45, 1482-1485.	1.2	27

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73	Optimization of the MIT Field Exciter by a Multiobjective Design. IEEE Transactions on Magnetics, 2009, 45, 1530-1533.	1.2	31
74	Sorting Pareto solutions: a principle of optimal design for electrical machines. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2009, 28, 1227-1235.	0.5	21
75	Comparison of multi-objective optimisation approaches for inverse magnetostatic problems. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2007, 26, 293-305.	0.5	15
76	Non-invasive thermometry for the thermal ablation of liver tumor: A computational methodology. International Journal of Applied Electromagnetics and Mechanics, 2007, 25, 407-412.	0.3	6
77	Synthesizing a Field Source for Magnetic Stimulation of Peripheral Nerves. IEEE Transactions on Magnetics, 2007, 43, 4023-4029.	1.2	9
78	Identifying material properties of a dielectric motor. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2005, 24, 796-804.	0.5	0
79	Recent experiences of multiobjective optimisation in electromagnetics. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2005, 24, 921-930.	0.5	19
80	Virtual Reality as a Tool for Electrical Machines Assembling and Testing. , 0, , .		1
81	Virtual Reality Sorting Line: a Scenario for the ViMeLa Project. , 0, , .		0
82	ViMeLa Project: an Innovative Concept for Teaching Students in Mechatronics Using Virtual Reality. , 0, , .		2
83	Automated Optimal Design of Wells for Electromagnetic Cell Stimulation. , 0, , .		0