

# 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	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
2	A Benchmark TEAM Problem for Multi-Objective Pareto Optimization of Electromagnetic Devices. IEEE Transactions on Magnetics, 2018, 54, 1-4.	1.2	36
3	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
4	Optimization of the MIT Field Exciter by a Multiobjective Design. IEEE Transactions on Magnetics, 2009, 45, 1530-1533.	1.2	31
5	Biogeography-Inspired Multiobjective Optimization and MEMS Design. IEEE Transactions on Magnetics, 2016, 52, 1-4.	1.2	31
6	Non-Linear Multi-Physics Analysis and Multi-Objective Optimization in Electroheating Applications. IEEE Transactions on Magnetics, 2014, 50, 673-676.	1.2	28
7	A benchmark problem of induction heating analysis. International Journal of Applied Electromagnetics and Mechanics, 2017, 53, S139-S149.	0.3	28
8	Industrial Design With Multiple Criteria: Shape Optimization of a Permanent-Magnet Generator. IEEE Transactions on Magnetics, 2009, 45, 1482-1485.	1.2	27
9	Island biogeography as a paradigm for MEMS optimal design. International Journal of Applied Electromagnetics and Mechanics, 2016, 51, S97-S105.	0.3	27
10	Multiphysics field analysis and multiobjective design optimization: a benchmark problem. Inverse Problems in Science and Engineering, 2014, 22, 1214-1225.	1.2	26
11	Hybrid excited synchronous machine with flux control possibility. International Journal of Applied Electromagnetics and Mechanics, 2016, 52, 1615-1622.	0.3	23
12	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
13	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
14	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
15	Electric field computation and measurements in the electroporation of inhomogeneous samples. Open Physics, 2017, 15, 790-796.	0.8	19
16	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
17	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
18	Biogeography-inspired multiobjective optimization for helping MEMS synthesis. Archives of Electrical Engineering, 2017, 66, 607-623.	1.0	17

#	ARTICLE	IF	CITATIONS
19	Virtual Reality-Based Training: Case Study in Mechatronics. <i>Technology, Knowledge and Learning</i> , 2020, , 1.	3.1	16
20	Comparison of multi-objective optimisation approaches for inverse magnetostatic problems. <i>COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering</i> , 2007, 26, 293-305.	0.5	15
21	Optimal Design of Electromagnetically Actuated MEMS Cantilevers. <i>Sensors</i> , 2018, 18, 2533.	2.1	15
22	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
23	3D FE analysis and control of a submerged arc electric furnace. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2012, 39, 555-561.	0.3	14
24	Micro biogeography-inspired multi-objective optimisation for industrial electromagnetic design. <i>Electronics Letters</i> , 2017, 53, 1458-1460.	0.5	14
25	Multiphysics field analysis and evolutionary optimization: Design of an electro-thermo-elastic microactuator. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2017, 54, 433-448.	0.3	12
26	Optimization and measurements of switched reluctance motors exploiting soft magnetic composite. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2018, 57, 83-93.	0.3	12
27	Geometry optimization for a class of switched-reluctance motors: A bi-objective approach. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2018, 56, 107-122.	0.3	11
28	Effect of Tissue Inhomogeneity in Soft Tissue Sarcomas: From Real Cases to Numerical and Experimental Models. <i>Technology in Cancer Research and Treatment</i> , 2018, 17, 153303381878969.	0.8	10
29	Shape synthesis of a well-plate for electromagnetic stimulation of cells. <i>International Journal of Numerical Modelling: Electronic Networks, Devices and Fields</i> , 2019, 32, e2259.	1.2	10
30	Synthesizing a Field Source for Magnetic Stimulation of Peripheral Nerves. <i>IEEE Transactions on Magnetics</i> , 2007, 43, 4023-4029.	1.2	9
31	$\beta^2$ -Adrenergic response is counteracted by extremely-low-frequency pulsed electromagnetic fields in beating cardiomyocytes. <i>Journal of Molecular and Cellular Cardiology</i> , 2016, 98, 146-158.	0.9	9
32	Effect of Electrode Distance in Grid Electrode: Numerical Models and <i>In Vitro</i> Tests. <i>Technology in Cancer Research and Treatment</i> , 2018, 17, 153303381876449.	0.8	9
33	Electromagnetic cantilever reference for the calibration of optical nanodisplacement systems. <i>Sensors and Actuators A: Physical</i> , 2018, 282, 149-156.	2.0	9
34	Non-parallelism of needles in electroporation: 3D computational model and experimental analysis. <i>COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering</i> , 2019, 38, 348-361.	0.5	9
35	The biogeography-inspired optimization for the design of coils for nerve stimulation. , 2017, , .		8
36	Fast Algorithms for the Design of Complex-Shape Devices in Electromechanics. <i>Studies in Computational Intelligence</i> , 2010, , 59-86.	0.7	8

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37	Multiobjective design optimization of an excitation arrangement used in superconducting magnetic bearings. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2009, 30, 127-134.	0.3	7
38	Field-based optimal-design of an electric motor: a new sensitivity formulation. <i>Open Physics</i> , 2017, 15, 924-928.	0.8	7
39	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
40	Non-invasive thermometry for the thermal ablation of liver tumor: A computational methodology. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2007, 25, 407-412.	0.3	6
41	Electrical resistance in inhomogeneous samples during electroporation. , 2017, , .		5
42	Improved solutions to a TEAM problem for multi-objective optimisation in magnetics. <i>IET Science, Measurement and Technology</i> , 2020, 14, 964-968.	0.9	5
43	Source identification based on regularization and evolutionary computing in biomagnetism. <i>COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering</i> , 2010, 29, 1022-1032.	0.5	4
44	Multi-Objective Optimization of a Solenoid for MFH: A Comparison of Methods. , 2018, , .		4
45	Pareto optimal solutions of a wireless power transfer system. <i>EPJ Applied Physics</i> , 2020, 90, 20904.	0.3	4
46	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
47	Wireless Power Transfer System in Dynamic Conditions: A Field-Circuit Analysis. <i>Vehicles</i> , 2022, 4, 234-242.	1.7	4
48	A Source Identification Problem for the Electrical Activity of Brain   During Hand Movement. <i>IEEE Transactions on Magnetics</i> , 2011, 47, 878-881.	1.2	3
49	Wind-driven optimization for the design of switched reluctance motors. , 2017, , .		3
50	The Benchmark TEAM Problem for Multi-Objective Optimization Solved with CFSO. , 2018, , .		3
51	Multi-objective optimization of an electrode pair for electrochemotherapy: M-NSGA and ?-BIMO comparison. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2019, 60, S163-S172.	0.3	3
52	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
53	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
54	Automated optimal design of a hts coreless winding. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2011, 37, 93-99.	0.3	2

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55	Hybrid excited electric machine with axial flux bridges. International Journal of Applied Electromagnetics and Mechanics, 2019, 59, 703-711.	0.3	2
56	Electric field distribution study in inhomogeneous biological tissues. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2020, 33, e2699.	1.2	2
57	ViMeLa Project: an Innovative Concept for Teaching Students in Mechatronics Using Virtual Reality. , 0, , .		2
58	Optimal shape design of a class of permanent magnet motors in a multiple-objectives context. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2022, 41, 1994-2009.	0.5	2
59	Multiobjective optimization of compensation networks for wireless power transfer systems. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2022, 41, 674-689.	0.5	2
60	Neural metamodeling of fields: Towards a new deal in computational electromagnetics. International Journal of Applied Electromagnetics and Mechanics, 2022, 69, 127-137.	0.3	2
61	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
62	Synthesis of the mutual inductor of a Wireless Power Transfer Systems: a field-circuit approach. , 2019, , .		1
63	Thermal measurements of the drive with a switched reluctance motor with a magnetic circuit made of soft magnetic composites. , 2019, , .		1
64	Temperature and Torque Measurements of Switched Reluctance Actuator with Composite or Laminated Magnetic Cores. Sensors, 2020, 20, 3065.	2.1	1
65	A non-differential method for solving many-objective optimization problems: An application in IPM motor design. International Journal of Applied Electromagnetics and Mechanics, 2021, 64, S131-S142.	0.3	1
66	Virtual Reality as a Tool for Electrical Machines Assembling and Testing. , 0, , .		1
67	Cost-effective optimal synthesis of the efficiency map of permanent magnet synchronous motors. International Journal of Applied Electromagnetics and Mechanics, 2022, 69, 189-199.	0.3	1
68	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
69	Field model of electrical activity of the brain during the hand movement: a source identification problem. , 2010, , .		0
70	Improvements in the ModSCA simulator: A tool helping to analyze energy efficiency of a compressed air system. , 2015, , .		0
71	Magnetic field analysis for the optimization of a GMR isolator for data transmission in power applications. , 2016, , .		0
72	A new sensitivity approach in multi-objective design: An application in electromechanics. , 2017, , .		0

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73	The $\mu$ -I-BiMO Method for Needle Pair Optimization in ECT. , 2018, , .		0
74	Free-form optimisation in industrial dielectric design: A comparative approach. International Journal of Applied Electromagnetics and Mechanics, 2019, 60, S101-S113.	0.3	0
75	Stress relieving of tube-ends in induction heating: comparison of optimization problems. , 2019, , .		0
76	Numerical Methods for MEMS Design: Automated Optimization. Lecture Notes in Electrical Engineering, 2020, , 101-113.	0.3	0
77	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.	0.5	0
78	Optimized design of induction heating coils: Technology-adapted solution. International Journal of Applied Electromagnetics and Mechanics, 2021, 64, S287-S296.	0.3	0
79	Virtual Reality Sorting Line: a Scenario for the ViMeLa Project. , 0, , .		0
80	Automated Optimal Design of Wells for Electromagnetic Cell Stimulation. , 0, , .		0
81	Numerical Case Studies: Forward Problems. Lecture Notes in Electrical Engineering, 2020, , 143-168.	0.3	0
82	WPT System Coupling Inductors: Exploring Pareto Optimal Solutions. , 2019, , .		0
83	Synthesis of WPTS compensation networks considering multiple criteria. International Journal of Applied Electromagnetics and Mechanics, 2022, 69, 319-331.	0.3	0