Yvonnick Le Menach

List of Publications by Year
in descending order

60 papers	498 citations	687363 13 h-index	794594 19 g-index
60 all docs	60 docs citations	60 times ranked	355 citing authors

#	Article	IF	Citations
1	Iron Loss Modeling of Grain-Oriented Electrical Steels in FEM Simulation Environment. IEEE Transactions on Magnetics, 2022, 58, 1-5.	2.1	2
2	Study of the Combined Effects of the Air-Gap Transfer for Maxwell Tensor and the Tooth Mechanical Modulation in Electrical Machines. IEEE Transactions on Magnetics, 2020, 56, 1-4.	2.1	8
3	Optimization of Low-Power Line-Start PM Motor Using Gray Wolf Metaheuristic Algorithm. Energies, 2020, 13, 1186.	3.1	12
4	An Improved Newton Method Based on Choosing Initial Guess Applied to Scalar Formulation in Nonlinear Magnetostatics. IEEE Transactions on Magnetics, 2019, 55, 1-4.	2.1	3
5	Study of shaft voltage of a simplified synchronous generator. International Journal of Applied Electromagnetics and Mechanics, 2019, 59, 737-744.	0.6	1
6	Computation of Magnetic Forces Using Degenerated Air-Gap Element. IEEE Transactions on Magnetics, 2017, 53, 1-4.	2.1	3
7	Thermal Topology Optimization of a Three-Layer Laminated Busbar for Power Converters. IEEE Transactions on Power Electronics, 2017, 32, 4691-4699.	7.9	21
8	Numerical modelling of PCB planar inductors: impact of 3D modelling on high-frequency copper loss evaluation. IET Power Electronics, 2017, 10, 1966-1974.	2.1	14
9	A method coupling modified vector potential A* and homogenization formulations to model short-circuits in lamination stacks. EPJ Applied Physics, 2016, 75, 30901.	0.7	1
10	Nonlinear lamination stacks studied with harmonic balance FEM supplied by magnetic flux arising from PWM. , 2016, , .		0
11	Computation of magnetic forces using degenerated airgap element. , 2016, , .		1
12	Multiphysics topology optimization for laminated busbars. , 2016, , .		2
13	Finite Element Implementation and Experimental Validation of 2-D/3-D Magnetic Force Formulas. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	3
14	Estimation of FEM Model Parameters Using Data Assimilation and Its Application to an Electrical Machine. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	4
15	Model-order reduction of magneto-harmonic problems based on POD: application to planar magnetic components. EPJ Applied Physics, 2016, 74, 10903.	0.7	2
16	Space-Time Residual-Based <italic>a posteriori</italic> Estimator for the <inline-formula> <tex-math notation="LaTeX">$A-\varphi$ </tex-math></inline-formula> Formulation in Eddy Current Problems. IEEE Transactions on Magnetics, 2015, 51, 1-5.	2.1	1
17	Finite Element Mesh Adaptation Strategy From Residual and Hierarchical Error Estimators in Eddy Current Problems. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	3
18	Residual <italic>a Posteriori</italic> Estimator for Magnetoharmonic Potential Formulations With Global Quantities for the Source Terms. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	1

#	Article	IF	Citations
19	*A posteriori* residual error estimators with mixed boundary conditions for quasi-static electromagnetic problems. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2015, 34, 724-739.	0.9	1
20	Alternator Rotor Inter-turn Short-Circuit Identification using FEM Based Learning. IFAC-PapersOnLine, 2015, 48, 1432-1437.	0.9	4
21	Comparison of Residual and Hierarchical Finite Element Error Estimators in Eddy Current Problems. IEEE Transactions on Magnetics, 2014, 50, 501-504.	2.1	3
22	Residual Based a Posteriori Error Estimators for Harmonic ${\bf A}/\varphi$ and ${\bf T}/\Omega$ Formulations in Eddy Current Problems. IEEE Transactions on Magnetics, 2013, 49, 1721-1724.	2.1	6
23	An Arbitrary Thick Shell Finite Element for Eddy-Current Dual Vector-Scalar Potential Formulations. IEEE Transactions on Magnetics, 2013, 49, 1725-1728.	2.1	3
24	Test Harness on a Preconditioned Conjugate Gradient Solver on GPUs: An Efficiency Analysis. IEEE Transactions on Magnetics, 2013, 49, 1729-1732.	2.1	3
25	Stochastic Nondestructive Testing Simulation: Sensitivity Analysis Applied to Material Properties in Clogging of Nuclear Powerplant Steam Generators. IEEE Transactions on Magnetics, 2013, 49, 1873-1876.	2.1	14
26	Residual and equilibrated error estimators for magnetostatic problems solved by finite element method. IEEE Transactions on Magnetics, 2013, 49, 5715-5723.	2.1	23
27	A posteriori error estimator for harmonic A–† formulation. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2013, 32, 1219-1229.	0.9	5
28	Comparison of supervised classification algorithms combined with feature extraction and selection: Application to a turbo-generator rotor fault detection. , 2013, , .		6
29	RESIDUAL-BASED *A POSTERIORI* ESTIMATORS FOR THE A - ϕ† MAGNETODYNAMIC HARMONIC FORMULATION OF THE MAXWELL SYSTEM. Mathematical Models and Methods in Applied Sciences, 2012, 22, 1150028.	3.3	20
30	Spectral stochastic finite element method for solving 3D stochastic eddy current problems. International Journal of Applied Electromagnetics and Mechanics, 2012, 39, 753-760.	0.6	5
31	Study of synchronous generator static eccentricities — FEM results and measurements. , 2012, , .		8
32	A Three-Dimensional Electromagnetic Shell Finite Element for Coupled Vector-Scalar Potential Formulations. IEEE Transactions on Magnetics, 2012, 48, 823-826.	2.1	3
33	Adaptive Method for Non-Intrusive Spectral Projection—Application on a Stochastic Eddy Current NDT Problem. IEEE Transactions on Magnetics, 2012, 48, 759-762.	2.1	21
34	Automatic Multi-GPU Code Generation Applied to Simulation of Electrical Machines. IEEE Transactions on Magnetics, 2012, 48, 831-834.	2.1	8
35	A nonlinear model for AC induced corrosion. Advanced Electromagnetics, 2012, 1, 92.	1.0	5
36	3-D Stochastic Spectral Finite-Element Method in Static Electromagnetism Using Vector Potential Formulation. IEEE Transactions on Magnetics, 2011, 47, 1250-1253.	2.1	26

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37	Parallel direct solver for the finite integration technique in electromagnetics. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2010, 29, 941-949.	0.9	0
38	Study of Static and Dynamic Eccentricities of a Synchronous Generator Using 3-D FEM. IEEE Transactions on Magnetics, 2010, 46, 3516-3519.	2.1	44
39	Parallel Direct Solver for the Finite Integration Technique in Electrokinetic Problems. IEEE Transactions on Magnetics, 2010, 46, 3269-3272.	2.1	0
40	Hysteresis Phenomenon Implementation in FIT: Validation With Measurements. IEEE Transactions on Magnetics, 2010, 46, 3285-3288.	2.1	4
41	3D Stochastic Spectral Finite Element Method in static electromagnetism using vector potential formulation. , 2010, , .		0
42	Study of interturn short circuit in rotor windings of a synchronous generator using FEM. , 2010, , .		6
43	Study of synchronous generator eccentricities using analytical approach and FEM. , 2010, , .		9
44	Iterative Solvers for Singular Symmetric Linear Systems in Low Frequency Electromagnetics. IEEE Transactions on Magnetics, 2009, 45, 1428-1431.	2.1	2
45	Comparison Between the Mortar Element Method and the Polynomial Interpolation Method to Model Movement in the Finite Element Method. IEEE Transactions on Magnetics, 2008, 44, 1314-1317.	2.1	13
46	Numerical solutions in primal and dual meshes of magnetostatic problems solved with the finite integration technique. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2008, 27, 47-55.	0.9	5
47	Study of an Electromagnetic Gearbox Involving Two Permanent Magnet Synchronous Machines Using 3-D-FEM. IEEE Transactions on Magnetics, 2008, 44, 4381-4384.	2.1	16
48	Flux density curves variations using an FEM model for turbo-generators diagnostics. , 2008, , .		4
49	A mixed finite element/meshless natural element method for simulating rotative electromagnetic machines. EPJ Applied Physics, 2008, 43, 197-208.	0.7	5
50	Implementation of a vector hysteresis model in 2D finite element analysis: Study of a RSST with anisotropic sample. International Journal of Applied Electromagnetics and Mechanics, 2008, 28, 41-47.	0.6	5
51	Teaching drive control using Energetic Macroscopic Representation - initiation level. , 2007, , .		16
52	Source Field Computation in NDT Applications. IEEE Transactions on Magnetics, 2007, 43, 1785-1788.	2.1	16
53	Comparison of slip surface and moving band techniques for modelling movement in 3D with FEM. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2006, 25, 17-30.	0.9	15
54	Consideration of the coupling of the magnetic and electric equations with Finite Integration Technique (FIT). EPJ Applied Physics, 2005, 30, 17-21.	0.7	2

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55	3-D Approaches to Determine the End Winding Inductances of a Permanent-Magnet Linear Synchronous Motor. IEEE Transactions on Magnetics, 2004, 40, 758-761.	2.1	9
56	3D compatible magnetostatic potential formulations coupled with electrical circuits. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2000, 19, 776-786.	0.9	1
57	Numerical model to discretize source fields in the 3D finite element method. IEEE Transactions on Magnetics, 2000, 36, 676-679.	2.1	31
58	Determination and utilization of the source field in 3D magnetostatic problems. IEEE Transactions on Magnetics, 1998, 34, 2509-2512.	2.1	48
59	A hybrid movement method to model electrical machines with end winding in 3D Finite Element Method. , 0, , .		0
60	Source Field Computation in NDT Applications. , 0, , .		1