Yvonnick Le Menach

List of Publications by Year
in descending order

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

#	Article	IF	Citations
1	Determination and utilization of the source field in 3D magnetostatic problems. IEEE Transactions on Magnetics, 1998, 34, 2509-2512.	2.1	48
2	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
3	Numerical model to discretize source fields in the 3D finite element method. IEEE Transactions on Magnetics, 2000, 36, 676-679.	2.1	31
4	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
5	Residual and equilibrated error estimators for magnetostatic problems solved by finite element method. IEEE Transactions on Magnetics, 2013, 49, 5715-5723.	2.1	23
6	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
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	RESIDUAL-BASED *A POSTERIORI* ESTIMATORS FOR THE A - Ï† MAGNETODYNAMIC HARMONIC FORMULATION OF THE MAXWELL SYSTEM. Mathematical Models and Methods in Applied Sciences, 2012, 22, 1150028.	3.3	20
9	Teaching drive control using Energetic Macroscopic Representation - initiation level. , 2007, , .		16
10	Source Field Computation in NDT Applications. IEEE Transactions on Magnetics, 2007, 43, 1785-1788.	2.1	16
11	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
12	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
13	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
14	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
15	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
16	Optimization of Low-Power Line-Start PM Motor Using Gray Wolf Metaheuristic Algorithm. Energies, 2020, 13, 1186.	3.1	12
17	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
18	Study of synchronous generator eccentricities using analytical approach and FEM. , 2010, , .		9

#	Article	IF	Citations
19	Study of synchronous generator static eccentricities &#x2014; FEM results and measurements. , 2012, , .		8
20	Automatic Multi-GPU Code Generation Applied to Simulation of Electrical Machines. IEEE Transactions on Magnetics, 2012, 48, 831-834.	2.1	8
21	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
22	Study of interturn short circuit in rotor windings of a synchronous generator using FEM. , 2010, , .		6
23	Residual Based a Posteriori Error Estimators for Harmonic ${f A}/\varphi$ and ${f T}/\Omega$ Formulations in Eddy Current Problems. IEEE Transactions on Magnetics, 2013, 49, 1721-1724.	2.1	6
24	Comparison of supervised classification algorithms combined with feature extraction and selection: Application to a turbo-generator rotor fault detection. , 2013, , .		6
25	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
26	A mixed finite element/meshless natural element method for simulating rotative electromagnetic machines. EPJ Applied Physics, 2008, 43, 197-208.	0.7	5
27	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
28	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
29	A posteriori error estimator for harmonic Aâ€ formulation. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2013, 32, 1219-1229.	0.9	5
30	A nonlinear model for AC induced corrosion. Advanced Electromagnetics, 2012, 1, 92.	1.0	5
31	Flux density curves variations using an FEM model for turbo-generators diagnostics. , 2008, , .		4
32	Hysteresis Phenomenon Implementation in FIT: Validation With Measurements. IEEE Transactions on Magnetics, 2010, 46, 3285-3288.	2.1	4
33	Alternator Rotor Inter-turn Short-Circuit Identification using FEM Based Learning. IFAC-PapersOnLine, 2015, 48, 1432-1437.	0.9	4
34	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
35	A Three-Dimensional Electromagnetic Shell Finite Element for Coupled Vector-Scalar Potential Formulations. IEEE Transactions on Magnetics, 2012, 48, 823-826.	2.1	3
36	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

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37	Test Harness on a Preconditioned Conjugate Gradient Solver on GPUs: An Efficiency Analysis. IEEE Transactions on Magnetics, 2013, 49, 1729-1732.	2.1	3
38	Comparison of Residual and Hierarchical Finite Element Error Estimators in Eddy Current Problems. IEEE Transactions on Magnetics, 2014, 50, 501-504.	2.1	3
39	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
40	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
41	Computation of Magnetic Forces Using Degenerated Air-Gap Element. IEEE Transactions on Magnetics, 2017, 53, 1-4.	2.1	3
42	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
43	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
44	Iterative Solvers for Singular Symmetric Linear Systems in Low Frequency Electromagnetics. IEEE Transactions on Magnetics, 2009, 45, 1428-1431.	2.1	2
45	Multiphysics topology optimization for laminated busbars. , 2016, , .		2
46	Iron Loss Modeling of Grain-Oriented Electrical Steels in FEM Simulation Environment. IEEE Transactions on Magnetics, 2022, 58, 1-5.	2.1	2
47	Model-order reduction of magneto-harmonic problems based on POD: application to planar magnetic components. EPJ Applied Physics, 2016, 74, 10903.	0.7	2
48	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
49	Source Field Computation in NDT Applications. , 0, , .		1
50	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
51	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
52	<i>A posteriori</i> 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
53	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
54	Computation of magnetic forces using degenerated airgap element. , 2016, , .		1

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55	Study of shaft voltage of a simplified synchronous generator. International Journal of Applied Electromagnetics and Mechanics, 2019, 59, 737-744.	0.6	1
56	A hybrid movement method to model electrical machines with end winding in 3D Finite Element Method. , 0, , .		0
57	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
58	Parallel Direct Solver for the Finite Integration Technique in Electrokinetic Problems. IEEE Transactions on Magnetics, 2010, 46, 3269-3272.	2.1	0
59	3D Stochastic Spectral Finite Element Method in static electromagnetism using vector potential formulation. , 2010, , .		0
60	Nonlinear lamination stacks studied with harmonic balance FEM supplied by magnetic flux arising from PWM. , 2016, , .		0