Thomas Henneron

List of Publications by Year
in descending order

82 papers	595 citations	687363 13 h-index	752698 20 g-index
82 all docs	82 docs citations	82 times ranked	347 citing authors

#	Article	IF	Citations
1	Parametric Geometric Metamodel of Nonlinear Magnetostatic Problem Based on POD and RBF Approaches. IEEE Transactions on Magnetics, 2022, 58, 1-6.	2.1	2
2	Model Order Reduction Applied to a Linear Finite Element Model of a Squirrel Cage Induction Machine Based on POD Approach. IEEE Transactions on Magnetics, 2021, 57, 1-4.	2.1	9
3	Sensor Placement for Field Reconstruction in Rotating Electrical Machines. IEEE Transactions on Magnetics, 2021, 57, 1-4.	2.1	3
4	Finite Element Analysis of the Magneto-Mechanical Coupling Due to Punching Process in Electrical Steel Sheet. IEEE Transactions on Magnetics, 2021, 57, 1-4.	2.1	5
5	Nonlinear Data-Driven Model Order Reduction Applied to Circuit-Field Magnetic Problem. IEEE Transactions on Magnetics, 2021, 57, 1-9.	2.1	2
6	Error Estimators for Proper Generalized Decomposition in Time-Dependent Electromagnetic Field Problems. IEEE Transactions on Magnetics, 2020, 56, 1-4.	2.1	2
7	Structure-Preserved Reduced-Order Modeling for Frequency-Domain Solution of the Darwin Model With a Gauged Potential Formulation. IEEE Transactions on Magnetics, 2020, 56, 1-4.	2.1	3
8	Proper Generalized Decomposition for Edge Elements in Magnetostatics With Adaptive Stopping Criterion. IEEE Transactions on Magnetics, 2020, 56, 1-4.	2.1	1
9	Surrogate Model Based on the POD Combined With the RBF Interpolation of Nonlinear Magnetostatic FE Model. IEEE Transactions on Magnetics, 2020, 56, 1-4.	2.1	12
10	Model order reduction techniques applied to magnetodynamic T-Î©-formulation. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2020, 39, 1057-1069.	0.9	4
11	Effect of Mesh-to-Mesh Projection on the Magnetic Tooth Forces Calculation in Electrical Machines. , 2020, , .		5
12	3-D Numerical Modeling of Claw-Pole Alternators With its Electrical Environment. IEEE Transactions on Magnetics, 2020, 56, 1-4.	2.1	3
13	Finite-Element Modeling of Magnetic Properties Degradation Due to Plastic Deformation. IEEE Transactions on Magnetics, 2020, 56, 1-4.	2.1	10
14	Mesh Deformation Based on Radial Basis Function Interpolation Applied to Low-Frequency Electromagnetic Problem. IEEE Transactions on Magnetics, 2019, 55, 1-4.	2.1	14
15	Matrix Interpolation-Based Reduced-Order Modeling of a Levitation Device With Eddy Current Effects. IEEE Transactions on Magnetics, 2018, 54, 1-7.	2.1	2
16	Application of the Proper Generalized Decomposition to Solve Magnetoelectric Problem. IEEE Transactions on Magnetics, 2018, 54, 1-4.	2.1	6
17	Orthogonal Interpolation Method for Order Reduction of a Synchronous Machine Model. IEEE Transactions on Magnetics, 2018, 54, 1-6.	2.1	15
18	Robust model order reduction of an electrical machine at startup through reduction error estimation. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2018, 31, e2277.	1.9	2

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19	Data-Driven Model-Order Reduction for Magnetostatic Problem Coupled With Circuit Equations. IEEE Transactions on Magnetics, 2018, 54, 1-4.	2.1	12
20	Stabilized Reduced-Order Model of a Non-Linear Eddy Current Problem by a Gappy-POD Approach. IEEE Transactions on Magnetics, 2018, 54, 1-8.	2.1	7
21	Finite-Element Model Reduction of Surface-Mounted Permanent Magnet Machines by Exploitation of Geometrical Periodicity. IEEE Transactions on Magnetics, 2018, 54, 1-11.	2.1	0
22	Proper Generalized Decomposition Applied on a Rotating Electrical Machine. IEEE Transactions on Magnetics, 2018, 54, 1-4.	2.1	7
23	POD-Based Reduced-Order Model of an Eddy-Current Levitation Problem. Mathematics in Industry, 2018, , 219-229.	0.3	0
24	Waveform relaxationâ€“Newton method to determine steady state of an electromagnetic structure. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2017, 36, 729-740.	0.9	4
25	Comparison of DEIM and BPIM to Speed Up a POD-Based Nonlinear Magnetostatic Model. IEEE Transactions on Magnetics, 2017, 53, 1-4.	2.1	3
26	Structure Preserving Model Reduction of Low-Frequency Electromagnetic Problem Based on POD and DEIM. IEEE Transactions on Magnetics, 2017, 53, 1-4.	2.1	6
27	Rotation Movement Based on the Spatial Fourier Interpolation Method. IEEE Transactions on Magnetics, 2017, 53, 1-4.	2.1	1
28	Balanced Proper Orthogonal Decomposition Applied to Magnetoquasi-Static Problems Through a Stabilization Methodology. IEEE Transactions on Magnetics, 2017, 53, 1-10.	2.1	12
29	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
30	Structure preserving model reduction of low frequency electromagnetic problem based on POD and DEIM. , 2016, , .		0
31	Nonlinear lamination stacks studied with harmonic balance FEM supplied by magnetic flux arising from PWM. , 2016, , .		0
32	Numerical modeling of steady state of magnetostatic problems coupled with nonlinear electric circuit. , 2016, , .		0
33	Rotation movement based on the spatial fourier interpolation method (SFIM). , 2016, , .		0
34	Error Estimation for Model-Order Reduction of Finite-Element Parametric Problems. IEEE Transactions on Magnetics, 2016, 52, 1-10.	2.1	5
35	Optimization of the TEAM 22 problem using POD-EIM reduced model. , 2016, , .		1
36	Parametric analysis of magnetoharmonic problem based on proper generalized decomposition. , 2016, , .		0

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37	Comparison of DEIM and BPIM to speed up a POD-based nonlinear magnetostatic model. , 2016, , .		0
38	Transient simulation of an electrical rotating machine achieved through model order reduction. Advanced Modeling and Simulation in Engineering Sciences, 2016, 3, .	1.7	18
39	Multidisciplinary Optimization Formulation for the Optimization of Multirate Systems. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	0
40	Application of the PGD and DEIM to Solve a 3-D Non-Linear Magnetostatic Problem Coupled With the Circuit Equations. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	14
41	Space-Time Field Projection: Finite-Element Analysis Coupled Between Different Meshes and Different Time-Step Settings. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	1
42	Reduction of a Finite-Element Parametric Model Using Adaptive POD Methodsâ€"Application to Uncertainty Quantification. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	10
43	Time-Periodicity Condition of Nonlinear Magnetostatic Problem Coupled With Electric Circuit Imposed by Waveform Relaxation Method. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	3
44	Multirate Coupling of Controlled Rectifier and Non-Linear Finite Element Model Based on Waveform Relaxation Method. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	1
45	Model-order reduction of magneto-harmonic problems based on POD: application to planar magnetic components. EPJ Applied Physics, 2016, 74, 10903.	0.7	2
46	Energetic Mesh-to-Mesh Projection of Magnetic Fields With Respect to Nonlinear B-H Curves. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	1
47	Model-Order Reduction of Magnetoquasi-Static Problems Based on POD and Arnoldi-Based Krylov Methods. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	22
48	Model-Order Reduction of Multiple-Input Non-Linear Systems Based on POD and DEI Methods. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	30
49	End-Region Leakage Fluxes and Losses Analysis of Cage Induction Motors Using 3-D Finite-Element Method. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	26
50	Proper Generalized Decomposition Method Applied to Solve 3-D Magnetoquasi-Static Field Problems Coupling With External Electric Circuits. IEEE Transactions on Magnetics, 2015, 51, 1-10.	2.1	14
51	Error estimation of a proper orthogonal decomposition reduced model of a permanent magnet synchronous machine. IET Science, Measurement and Technology, 2015, 9, 172-177.	1.6	6
52	Error estimation of POD reduced model - application to a permanent magnet synchronous machine. , 2014, , .		0
53	Comparison of implementation techniques for Galerkin projection between different meshes. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2014, 27, 517-526.	1.9	4
54	Model order reduction applied to the numerical study of electrical motor based on POD method taking into account rotation movement. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2014, 27, 485-494.	1.9	26

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55	Model Order Reduction of Non-Linear Magnetostatic Problems Based on POD and DEI Methods. IEEE Transactions on Magnetics, 2014, 50, 33-36.	2.1	66
56	Energetic Galerkin Projection of Electromagnetic Fields Between Different Meshes. IEEE Transactions on Magnetics, 2014, 50, 613-616.	2.1	4
57	Benefits of Waveform Relaxation Method and Output Space Mapping for the Optimization of Multirate Systems. IEEE Transactions on Magnetics, 2014, 50, 653-656.	2.1	2
58	Electromagnetic Field Projection on Finite Element Overlapping Domains. IEEE Transactions on Magnetics, 2013, 49, 1290-1298.	2.1	8
59	Model order reduction of quasi-static problems based on POD and PGD approaches. EPJ Applied Physics, 2013, 64, 24514.	0.7	21
60	Interlaminar short circuit detection: modeling and measurement. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2012, 31, 1448-1457.	0.9	2
61	Nonlinear Proper Generalized Decomposition Method Applied to the Magnetic Simulation of a SMC Microstructure. IEEE Transactions on Magnetics, 2012, 48, 3242-3245.	2.1	13
62	Mortar Method Using Bi-Orthogonal Nodal Functions Applied to ${m A}hbox{-}varphi$ Formulation. IEEE Transactions on Magnetics, 2012, 48, 491-494.	2.1	5
63	An Approach to Determine the Circulation of Magnetic Field in FEM Computation Code With Vector Potential Formulation. IEEE Transactions on Magnetics, 2011, 47, 1354-1357.	2.1	5
64	Overlapping Finite Elements Used to Connect Non-Conforming Meshes in 3-D With a Vector Potential Formulation. IEEE Transactions on Magnetics, 2011, 47, 1218-1221.	2.1	10
65	Periodic and Anti-Periodic Boundary Conditions With the Lagrange Multipliers in the FEM. IEEE Transactions on Magnetics, 2010, 46, 3417-3420.	2.1	14
66	An approach to determine the circulation of magnetic field in FEM computation code with vector potential formulation. , 2010, , .		0
67	Overlapping finite elements used to connect non-conforming meshes in 3D with a vector potential formulation. , 2010, , .		2
68	Preconditioner for Mortar method applied to the FEM. , 2010, , .		0
69	Electromagnetic modelling of short circuited coreplates. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2009, 28, 762-771.	0.9	8
70	Discrete finite element characterizations of source fields for volume and boundary constraints in electromagnetic problems. Journal of Computational and Applied Mathematics, 2008, 215, 438-447.	2.0	9
71	Identification of a 7-phase claw-pole starter-alternator for a micro-hybrid automotive application. , 2008, , .		8
72	Analysis of a rotational single sheet tester using 3D finite element model taking into account hysteresis effect. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2007, 26, 1037-1048.	0.9	4

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73	Computation of the magnetic flux in the finite elements method. EPJ Applied Physics, 2007, 39, 119-128.	0.7	0
74	Source Field Computation in NDT Applications. IEEE Transactions on Magnetics, 2007, 43, 1785-1788.	2.1	16
75	Calculation of extra copper losses with imposed current magnetodynamic formulations. IEEE Transactions on Magnetics, 2006, 42, 767-770.	2.1	13
76	Dual finite element formulations for lumped reluctances coupling. IEEE Transactions on Magnetics, 2005, 41, 1396-1399.	2.1	24
77	Estimation of Numerical Errors Due to Time and Space Discretizations. IEEE Transactions on Magnetics, 2004, 40, 1061-1064.	2.1	0
78	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
79	Evaluation of 3-D Finite Element Method to Study and Design a Soft Magnetic Composite Machine. IEEE Transactions on Magnetics, 2004, 40, 786-789.	2.1	10
80	Comparison of 3D magnetodynamic formulations in terms of potentials with imposed electric global quantities. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2004, 23, 885-893.	0.9	4
81	Source Field Computation in NDT Applications. , 0, , .		1
82	Influence of the Source Potential Distribution on FEM Potential Formulations in Magnetostatics. , 0, , .		0