## StÃ®phance ClÃ®net

## List of Publications by Year

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Version: 2024-02-01


Model Order Reduction of Non-Linear Magnetostatic Problems Based on POD and DEI Methods. IEEE

6 3-D Spectral Stochastic Finite Element Method in Electromagnetism. IEEE Transactions on Magnetics, 2007, 43, 1209-1212.
8. Numerical model to discretize source fields in the 3D finite element method. IEEE Transactions on 8 Magnetics, 2000, 36, 676-679.

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| 19 | Transient simulation of an electrical rotating machine achieved through model order reduction. Advanced Modeling and Simulation in Engineering Sciences, 2016, 3, | 1.7 | 18 |
| 20 | Methodology to Study the Influence of the Microscopic Structure of Soft Magnetic Composites on Their Clobal Magnetization Curve. IEEE Transactions on Magnetics, 2009, 45, 1178-1181. | 2.1 | 17 |
| 21 | Experimental Characterization of the Iron Losses Variability in Stators of Electrical Machines. IEEE Transactions on Magnetics, 2012, 48, 1629-1632. | 2.1 | 17 |
| 22 | Source Field Computation in NDT Applications. IEEE Transactions on Magnetics, 2007, 43, 1785-1788. | 2.1 | 16 |
| 23 | 3D Spectral Stochastic Finite Element Method in Electromagnetism. , 0, . |  | 15 |
| 24 | Application of the natural-element method to model moving electromagnetic devices. IEEE Transactions on Magnetics, 2006, 42, 727-730. | 2.1 | 15 |
| 25 | Comparison of two 5-phase Permanent Magnet machine winding configurations. Application on naval propulsion specifications.. , 2007, , . |  | 15 |
| 26 | 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 |
| 27 | 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 |
| 28 | 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 |
| 29 | Model Order Reduction of Electrical Machines With Multiple Inputs. IEEE Transactions on Industry Applications, 2017, 53, 3355-3360. | 4.9 | 14 |
| 30 | 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 |
| 31 | Error estimation of finite element solution in nonlinear magnetostatic 2D problems. IEEE Transactions on Magnetics, 1998, 34, 3268-3271. | 2.1 | 13 |
| 32 | Calculation of extra copper losses with imposed current magnetodynamic formulations. IEEE Transactions on Magnetics, 2006, 42, 767-770. | 2.1 | 13 |
| 33 | Current Calculation in Electrokinetics Using a Spectral Stochastic Finite Element Method. IEEE Transactions on Magnetics, 2008, 44, 754-757. | 2.1 | 13 |
| 34 | 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 |
| 35 | Temperature Dependence in the Jilesâ€"Atherton Model for Non-Oriented Electrical Steels: An Engineering Approach. IEEE Transactions on Magnetics, 2018, 54, 1-5. | 2.1 | 13 |
| 36 | Balanced Proper Orthogonal Decomposition Applied to Magnetoquasi-Static Problems Through a Stabilization Methodology. IEEE Transactions on Magnetics, 2017, 53, 1-10. | 2.1 | 12 |

Data-Driven Model-Order Reduction for Magnetostatic Problem Coupled With Circuit Equations. IEEE
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43 Implementation of an Anisotropic Vector Hysteresis Model in a 3-D Finite-Element Code. IEEE
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44 Magnetorheological Brake for Haptic Rendering. Lecture Notes in Computer Science, 2008, , 941-945.

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46 Uncertainty Quantification. IEEE Transactions on Magnetics, 2016, 52, 1-4.
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$2008,320,830-835$.

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Transformation Methods for Static Field Problems With Random Domains. IEEE Transactions on Magnetics, 2011, 47, 1446-1449.

Solution of Large Stochastic Finite Element Problemsâ€"Application to ECT-NDT. IEEE Transactions on Magnetics, 2013, 49, 1605-1608.
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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.
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58 Adaptation of the Frequency Dependent Jiles-Atherton Model with $B$ as entry variable. International Journal of Applied Electromagnetics and Mechanics, 2004, 19, 187-191.
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59 Speeding Up SSFEM Computation Using Kronecker Tensor Products. IEEE Transactions on Magnetics, 2009, 45, 1432-1435.
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60 A global approach for the design of a Rim-Driven marine turbine generator for sail boat. , 2012, , .
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61 A study of the effects of temperature on magnetic and copper losses in electrical machines. , 2016, , .

Proper Generalized Decomposition Applied on a Rotating Electrical Machine. IEEE Transactions on Magnetics, 2018, 54, 1-4.
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63 Modelling of a hysteresis motor using the Jiles-Atherton model. EPJ Applied Physics, 2005, 29, 259-265.
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64 Method to Connect Nonconforming Mesh in 3-D With the Overlapping Method. IEEE Transactions on
Magnetics, 2009, 45, 1420-1423.
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Stochastic postâ€processing calculation of iron losses ấ" application to a PMSM. COMPEL - the
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$2013,32,1383-1392$.

68 Structure Preserving Model Reduction of Low-Frequency Electromagnetic Problem Based on POD and DEIM. IEEE Transactions on Magnetics, 2017, 53, 1-4.
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Application of the Proper Generalized Decomposition to Solve Magnetoelectric Problem. IEEE
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magnetic origin of permanent magnet machines. IEEE Transactions on Magnetics, 1995, 31, 1837-1842.
73 A mixed finite element/meshless natural element method for simulating rotative electromagnetic machines. EPJ Applied Physics, 2008, 43, 197-208.
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81 A direct identification method of the hysteresis model for the design of SMC transformers. IEEE
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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.
83 Analysis of a rotational single sheet tester using 3D finite element model taking into account 83 hysteresis effect. COMPEL - the International Journal for Computation and Mathematics in Electrical 0.9 ..... 4 and Electronic Engineering, 2007, 26, 1037-1048.
Comparison of Error Estimators in Eddy Current Testing. IEEE Transactions on Magnetics, 2009, 45,968-971.
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| 91 | Model order reduction techniques applied to magnetodynamic <i>T-î@</i>-formulation. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2020, 39, 1057-1069. | 0.9 | 4 |
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| 92 | Magneto-thermal characterization of bulk forged magnetic steel used in claw pole machine. Journal of Magnetism and Magnetic Materials, 2020, 502, 166526. | 2.3 | 4 |
| 93 | A Novel and General Approach for Solving the lon-Flow Field Problem by a Regularization Technique. IEEE Transactions on Power Delivery, 2021, 36, 3774-3783. | 4.3 | 4 |
| 94 | Comparison between finite element method and magnetic equivalent scheme to model an induction machine. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 1996, 15, 82-87. | 0.9 | 3 |
| 95 | Error estimator in linear magnetostatic 2D. EPJ Applied Physics, 1998, 1, 203-209. | 0.7 | 3 |
| 96 | Inclusion of a stressâ€dependent Preisach model in 2D FE calculations. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2006, 25, 81-90. | 0.9 | 3 |
| 97 | Comparison of two approaches to compute magnetic field in problems with random domains. IET Science, Measurement and Technology, 2012, 6, 331. | 1.6 | 3 |
| 98 | A Priori Error Indicator in the Transformation Method for Problems With Geometric Uncertainties. IEEE Transactions on Magnetics, 2013, 49, 1597-1600. | 2.1 | 3 |
| 99 | Residual-based a posteriori error estimation for stochastic magnetostatic problems. Journal of Computational and Applied Mathematics, 2015, 289, 51-67. | 2.0 | 3 |

100 Comparison of DEIM and BPIM to Speed Up a POD-Based Nonlinear Magnetostatic Model. IEEE
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| 109 | 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 |
| 110 | Approximation Methods to Solve Stochastic Problems in Computational Electromagnetics. Mathematics in Industry, 2016, , 199-214. | 0.3 | 2 |
| 111 | Characterization of the Local Incremental Permeability of a Ferromagnetic Plate Based on a Four Needles Technique. IEEE Transactions on Magnetics, 2016, , 1-1. | 2.1 | 2 |
| 112 | Study of the Influence of the Fabrication Process Imperfections on the Performance of a Claw Pole Synchronous Machine Using a Stochastic Approach. IEEE Transactions on Magnetics, 2016, 52, 1-4. | 2.1 | 2 |
| 113 | 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 |
| 114 | Model Order Reduction Techniques applied to Magnetodynamic Scalar Potential Formulation. , 2019, , . |  | 2 |
| 115 | Punching effect directly on electrical machine stator strips. International Journal of Applied Electromagnetics and Mechanics, 2019, 61, S107-S114. | 0.6 | 2 |
| 116 | Error Estimators for Proper Generalized Decomposition in Time-Dependent Electromagnetic Field Problems. IEEE Transactions on Magnetics, 2020, 56, 1-4. | 2.1 | 2 |
| 117 | MÃ@thode de mesure des frÃ@quences propres et des coefficients d'amortissement d'une machine synchrone a aimants permanents. Journal De Physique III, 1994, 4, 1431-1447. | 0.3 | 2 |
| 118 | Adaptive meshing in 3D multi-static problem with variable sources. EPJ Applied Physics, 2000, 12, 187-193. | 0.7 | 1 |
| 119 | 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 |
| 120 | Model with source terms in the constitutive relationship. IEEE Transactions on Magnetics, 2002, 38, 481-484. | 2.1 | 1 |
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122 Transformation methods for static field problems with random domains. , 2010, ,. 1

123 Modelling and inversion-based control of a magnetorheological vehicle suspension. , 2010, , .
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124 Calculation of field distribution in electromagnetic problems with random domains. , 2011, , .

Stochastic modeling of anhysteretic magnetic curve using random inter-dependant coefficients.
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127 Model order reduction of electrical machines with multiple inputs. , 2016, , .1
128 Optimization of the TEAM 22 problem using POD-EIM reduced model. , 2016, , . ..... 1
Multirate Coupling of Controlled Rectifier and Non-Linear Finite Element Model Based on Waveform Relaxation Method. IEEE Transactions on Magnetics, 2016, 52, 1-4.$2.1 \quad 1$Rotation Movement Based on the Spatial Fourier Interpolation Method. IEEE Transactions onMagnetics, 2017, 53, 1-4.Influence of Material and Geometric Parameters on the Sensor Based on Active Materials. IEEETransactions on Magnetics, 2018, 54, 1-4.$2.1 \quad 1$Influence of laser powder bed fusion process conditions and resulting microstructures on theelectromagnetic properties of a 16 MnCr 5 steel. Additive Manufacturing, 2021, 41, 101945.3.0
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139Influence of the Source Potential Distribution on FEM Potential Formulations in Magnetostatics. , 0, ,0
141 Computation of the magnetic flux in the finite elements method. EPJ Applied Physics, 2007, 39, 119-128. ..... 0.7 ..... 03D Stochastic Spectral Finite Element Method in static electromagnetism using vector potential0formulation. , 2010, , .

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