Guillaume Crevecoeur

List of Publications by Year
in descending order

98	955	516561 16	580701 25
papers	citations	h-index	g-index

100	100	100	857
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Analysis of the Local Material Degradation Near Cutting Edges of Electrical Steel Sheets. IEEE Transactions on Magnetics, 2008, 44, 3173-3176.	1.2	60
2	Space Mapping Optimization of the Magnetic Circuit of Electrical Machines Including Local Material Degradation. IEEE Transactions on Magnetics, 2007, 43, 2609-2611.	1.2	50
3	A Two-Level Genetic Algorithm for Electromagnetic Optimization. IEEE Transactions on Magnetics, 2010, 46, 2585-2595.	1.2	45
4	An Inverse Thermal Modeling Approach for Thermal Parameter and Loss Identification in an Axial Flux Permanent Magnet Machine. IEEE Transactions on Industrial Electronics, 2019, 66, 1727-1735.	5.2	39
5	Advancements in Magnetic Nanoparticle Reconstruction Using Sequential Activation of Excitation Coil Arrays Using Magnetorelaxometry. IEEE Transactions on Magnetics, 2012, 48, 1313-1316.	1.2	36
6	Transfer Learning in ECG Classification from Human to Horse Using a Novel Parallel Neural Network Architecture. Scientific Reports, 2020, 10, 186.	1.6	36
7	Local Identification of Magnetic Hysteresis Properties Near Cutting Edges of Electrical Steel Sheets. IEEE Transactions on Magnetics, 2008, 44, 1010-1013.	1.2	31
8	An Efficient 3-D Eddy-Current Solver Using an Independent Impedance Method for Transcranial Magnetic Stimulation. IEEE Transactions on Biomedical Engineering, 2011, 58, 310-320.	2.5	29
9	Wind and Solar Intermittency and the Associated Integration Challenges: A Comprehensive Review Including the Status in the Belgian Power System. Energies, 2021, 14, 2630.	1.6	28
10	Two-Level Response and Parameter Mapping Optimization for Magnetic Shielding. IEEE Transactions on Magnetics, 2008, 44, 301-308.	1.2	25
11	Modeling transcranial magnetic stimulation from the induced electric fields to the membrane potentials along tractography-based white matter fiber tracts. Journal of Neural Engineering, 2016, 13, 026028.	1.8	24
12	Bayesian Convolutional Neural Networks for Remaining Useful Life Prognostics of Solenoid Valves With Uncertainty Estimations. IEEE Transactions on Industrial Informatics, 2021, 17, 8418-8428.	7.2	24
13	Convex Mapping Formulations Enabling Optimal Power Split and Design of the Electric Drivetrain in All-Electric Vehicles. IEEE Transactions on Vehicular Technology, 2017, 66, 9702-9711.	3.9	23
14	Adaptive Control of Excitation Coil Arrays for Targeted Magnetic Nanoparticle Reconstruction Using Magnetorelaxometry. IEEE Transactions on Magnetics, 2012, 48, 2842-2845.	1.2	21
15	Model-based optimized steering and focusing of local magnetic particle concentrations for targeted drug delivery. Drug Delivery, 2021, 28, 63-76.	2.5	19
16	An Inverse Approach for Magnetic Material Characterization of an EI Core Electromagnetic Inductor. IEEE Transactions on Magnetics, 2010, 46, 622-625.	1.2	18
17	The effect of the magnetic nanoparticleâ€™s size dependence of the relaxation time constant on the specific loss power of magnetic nanoparticle hyperthermia. Journal of Magnetism and Magnetic Materials, 2017, 426, 206-210.	1.0	18
18	Rotor Temperature Virtual Sensing for Induction Machines Using a Lumped-Parameter Thermal Network and Dual Kalman Filtering. IEEE Transactions on Energy Conversion, 2021, 36, 1688-1699.	3.7	18

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19	Stochastic Uncertainty Quantification of the Conductivity in EEG Source Analysis by Using Polynomial Chaos Decomposition. IEEE Transactions on Magnetics, 2010, 46, 3457-3460.	1.2	16
20	Robust Stability Analysis of Interval Fractional-Order Plants With Interval Time Delay and General Form of Fractional-Order Controllers. , 2022, 6, 1268-1273.		16
21	Eddy-Current Simulations Using an Independent Impedance Method in Anisotropic Biological Tissues. IEEE Transactions on Magnetics, 2011, 47, 3845-3848.	1.2	14
22	Selection of Measurement Modality for Magnetic Material Characterization of an Electromagnetic Device Using Stochastic Uncertainty Analysis. IEEE Transactions on Magnetics, 2011, 47, 4564-4573.	1.2	14
23	Quantifying the Effect of Repetitive Transcranial Magnetic Stimulation in the Rat Brain by Î¼SPECT CBF Scans. Brain Stimulation, 2013, 6, 554-562.	0.7	14
24	Model Predictive Control With a Cascaded Hammerstein Neural Network of a Wind Turbine Providing Frequency Containment Reserve. IEEE Transactions on Energy Conversion, 2022, 37, 198-209.	3.7	14
25	Characterization and optimization of a permanent magnet synchronous machine. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2009, 28, 272-285.	0.5	13
26	Reduced Conductivity Dependence Method for Increase of Dipole Localization Accuracy in the EEG Inverse Problem. IEEE Transactions on Biomedical Engineering, 2011, 58, 1430-1440.	2.5	13
27	Quantitative model selection for enhanced magnetic nanoparticle imaging in magnetorelaxometry. Medical Physics, 2015, 42, 6853-6862.	1.6	13
28	Neural Network Augmented Physics Models for Systems With Partially Unknown Dynamics: Application to Sliderâ€“Crank Mechanism. IEEE/ASME Transactions on Mechatronics, 2022, 27, 103-114.	3.7	13
29	Harvesting wind gust energy with small and medium wind turbines using a bidirectional control strategy. Journal of Engineering, 2019, 2019, 4261-4266.	0.6	12
30	Inverse Thermal Identification of a Thermally Instrumented Induction Machine Using a Lumped-Parameter Thermal Model. Energies, 2020, 13, 37.	1.6	11
31	Magnetic material identification of a switched reluctance motor. International Journal of Applied Electromagnetics and Mechanics, 2011, 37, 35-49.	0.3	10
32	A Numerical Study on Conductivity Estimation of the Human Head in the Low Frequency Domain Using Induced Current MR Phase Imaging EIT With Multiple Gradients. IEEE Transactions on Magnetics, 2013, 49, 5004-5010.	1.2	10
33	Experimental ex-vivo validation of PMMA-based bone cements loaded with magnetic nanoparticles enabling hyperthermia of metastatic bone tumors. AIP Advances, 2017, 7, .	0.6	10
34	Multi-Objective Predictive Control Optimization with Varying Term Objectives: A Wind Farm Case Study. Processes, 2019, 7, 778.	1.3	10
35	A hybrid algorithm for solving the EEG inverse problem from spatio-temporal EEG data. Medical and Biological Engineering and Computing, 2008, 46, 767-777.	1.6	8
36	Prediction of follower jumps in cam-follower mechanisms: The benefit of using physics-inspired features in recurrent neural networks. Mechanical Systems and Signal Processing, 2022, 166, 108453.	4.4	8

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37	A Robust Inverse Approach for Magnetic Material Characterization in Electromagnetic Devices With Minimum Influence of the Air-Gap Uncertainty. IEEE Transactions on Magnetics, 2011, 47, 4364-4367.	1.2	7
38	A sensor sensitivity and correlation analysis through polynomial chaos in the EEG problem. IMA Journal of Applied Mathematics, 2014, 79, 163-174.	0.8	7
39	A wave emulator for ocean wave energy, a Froude-scaled dry power take-off test setup. Renewable Energy, 2017, 105, 712-721.	4.3	7
40	Quasi-Static Torque Profile Expressions for Magnetic Resonance-Based Remote Actuation. IEEE Transactions on Energy Conversion, 2019, 34, 1255-1263.	3.7	7
41	Physics-Based Neural Network Models for Prediction of Cam-Follower Dynamics Beyond Nominal Operations. IEEE/ASME Transactions on Mechatronics, 2022, 27, 2345-2355.	3.7	7
42	Real-Time Energy-Efficient Actuation of Induction Motor Drives Using Approximate Dynamic Programming. IEEE Transactions on Industrial Electronics, 2021, 68, 11837-11846.	5.2	7
43	Adaptive Control of a Mechatronic System Using Constrained Residual Reinforcement Learning. IEEE Transactions on Industrial Electronics, 2022, 69, 10447-10456.	5.2	7
44	Validation of the Two-Level Approach for the Solution of the EEG Inverse Problem in an Anisotropic Realistic Head Model. IEEE Transactions on Magnetics, 2009, 45, 1670-1673.	1.2	6
45	EEG Inverse Problem Solution Using a Selection Procedure on a High Number of Electrodes With Minimal Influence of Conductivity. IEEE Transactions on Magnetics, 2011, 47, 874-877.	1.2	6
46	A priori experimental design for inverse identification of magnetic material properties of an electromagnetic device using uncertainty analysis. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2012, 31, 972-984.	0.5	6
47	Two-level refined direct optimization scheme using intermediate surrogate models for electromagnetic optimization of a switched reluctance motor. Engineering With Computers, 2012, 28, 199-207.	3.5	6
48	Inverse Methodology for the Parameter Identification of a Lumped Parameter Thermal Network for an Induction Machine. , 2018, , .		6
49	Dataâ€driven online temperature compensation for robust fieldâ€oriented torqueâ€controlled induction machines. IET Electric Power Applications, 2019, 13, 1954-1963.	1.1	6
50	Delay dependent criteria for the consensus of secondâ€order multiâ€agent systems subject to communication delay. IET Control Theory and Applications, 2021, 15, 1724-1735.	1.2	6
51	Design and Control of a Quasi-Direct Drive Robotic Gripper for Collision Tolerant Picking At High Speed. IEEE Robotics and Automation Letters, 2022, 7, 7692-7699.	3.3	6
52	Low-parametric Induced Current - Magnetic Resonance Electrical Impedance Tomography for quantitative conductivity estimation of brain tissues using a priori information: A simulation study. , 2010, 2010, 5669-72.		5
53	Application of the drag force method to evaluate magnetic property degradation near the cut edges of electrical steels. Journal of Applied Physics, 2011, 109, 07E518.	1.1	5
54	Overload Clutch Design for Collision Tolerant Highâ€“Speed Industrial Robots. IEEE Robotics and Automation Letters, 2021, 6, 863-870.	3.3	5

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55	Efficiency Enhancements of Wind Energy Conversion Systems Using Soft Switching Multiple Model Predictive Control. IEEE Transactions on Energy Conversion, 2022, 37, 1187-1199.	3.7	5
56	A trajectoryâ€based sampling strategy for sequentially refined metamodel management of metamodelâ€based dynamic optimization in mechatronics. Optimal Control Applications and Methods, 2018, 39, 1786-1801.	1.3	4
57	On Entropy Regularized Path Integral Control for Trajectory Optimization. Entropy, 2020, 22, 1120.	1.1	4
58	Data-Driven Prognostics of Alternating Current Solenoid Valves. , 2020, , .		4
59	Physics-informed Recurrent Neural Networks for The Identification of a Generic Energy Buffer System. , 2021, , .		4
60	Scalable Distributed State Estimation for a Class of State-Saturated Systems Subject to Quantization Effects. IEEE Access, 2021, 9, 138724-138733.	2.6	4
61	Robust Stability Analysis of Unstable Second Order Plus Time-Delay (SOPTD) Plant by Fractional-Order Proportional Integral (FOPI) Controllers. Mathematics, 2022, 10, 567.	1.1	4
62	A Mesoscopic Hysteresis Model Based on the Unconstrained Minimization of the Gibbs Free Energy. IEEE Transactions on Magnetics, 2010, 46, 220-223.	1.2	3
63	Magnetic nanoparticle imaging by random and maximum length sequences of inhomogeneous activation fields. , 2013, 2013, 3258-60.		3
64	Robustness Assessment of 1-D Electron Paramagnetic Resonance for Improved Magnetic Nanoparticle Reconstructions. IEEE Transactions on Biomedical Engineering, 2015, 62, 1635-1643.	2.5	3
65	Model-based optimal design of a magnetic nanoparticle tomographic imaging setup. , 2018, , .		3
66	A Data-Driven Approach Using Deep Learning Time Series Prediction for Forecasting Power System Variables. , 2019, , .		3
67	Path Integral Policy Improvement with Differential Dynamic Programming. , 2019, , .		3
68	Computationally efficient modeling for assessing the energy efficiency of electric drivetrains using convex formulations. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2019, 32, e2275.	1.2	3
69	Comparison of Collision Detection Techniques for Highâ€“Speed Industrial Robot Actuators with Overload Clutch. , 2021, , .		3
70	Physics-Informed LSTM Network for Flexibility Identification in Evaporative Cooling System. IEEE Transactions on Industrial Informatics, 2023, 19, 1484-1494.	7.2	3
71	Optimization of an Octangular Double-Layered Shield Using Multiple Forward Models. IEEE Transactions on Magnetics, 2009, 45, 1586-1589.	1.2	2
72	Nondestructive Detection of Inhomogeneity in the Magnetic Properties of Materials With a Moving Magnet Hysteresis Comparator. IEEE Transactions on Magnetics, 2012, 48, 4409-4412.	1.2	2

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73	A Simple Magnetostatic Sensing Method for Assessing the Local Hysteresis Properties in Ferromagnetic Sheet Materials. Journal of Sensors, 2012, 2012, 1-7.	0.6	2
74	About Satisfying String Stability Using Heterogenous Unidirectional Controllers. , 2019, , .		2
75	Hybrid derivative functions for identification of unknown loads and physical parameters with application on slider-crank mechanism. , 2019, , .		2
76	A framework for robust quadratic optimal control with parametric dynamic model uncertainty using polynomial chaos. Optimal Control Applications and Methods, 2020, 41, 833-848.	1.3	2
77	Improving Torque in a Magnetic Resonance Based Motoring System by Detuning From Resonance. IEEE Transactions on Energy Conversion, 2021, 36, 1188-1196.	3.7	2
78	Influence of noise on EEG source analysis using space mapping techniques. International Journal of Applied Electromagnetics and Mechanics, 2007, 25, 383-387.	0.3	1
79	A priori error estimation of magnetic material characteristics using stochastic uncertainty analysis. , 2010, , .		1
80	Coupled electrical-thermal model for monopolar and bipolar radiofrequency liver tumor ablation. , 2016, , .		1
81	Adaptive state space representations enabling reliable and robust decision-making in asynchronous drives for mechatronic applications. , 2017, , .		1
82	Data-Driven Optimal Power Flow Management in an Electric Dual-Drive Topology for Vehicle Electrification. , 2018, , .		1
83	Data-driven discovery of the heat equation in an induction machine via sparse regression. , 2019, , .		1
84	Adaptive Approximate Dynamic Optimization : a slider-crank case study. , 2019, , .		1
85	Inverse Stochastic Quadcopter Trajectory Generation using Flat Inverse Dynamics and Polynomial Chaos Uncertainty Propagation. , 2019, , .		1
86	Series and Parallel Capacitor Compensation of the Transmitter in a Magnetic Resonance Based Motoring System. , 2019, , .		1
87	Effect of Transmitter Position on the Torque Generation of a Magnetic Resonance Based Motoring system. , 2019, , .		1
88	EEG inverse problem solution using a selection procedure on a high number of electrodes with minimal influence of conductivity. , 2010, , .		0
89	Subspace electrode selection methodology for EEG multiple source localization error reduction due to uncertain conductivity values. , 2013, 2013, 6191-4.		0
90	The effect of inaccurate targeting of the left dorsolateral prefrontal cortex on TMS response. , 2013, , .		0

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91	On cost function transformations for the reduction of uncertain model parametersâ€™ impact towards the optimal solutions. Journal of Computational and Applied Mathematics, 2015, 289, 392-399.	1.1	0
92	Computational analysis of the effect of superparamagnetic nanoparticle properties on bioheat transfer in magnetic nanoparticle hyperthermia. , 2016, , .		0
93	Adaptive Convex Loss Mappings for Enhanced Loss Assessment in Asynchronous Drives. IEEE Transactions on Control Systems Technology, 2019, 27, 1991-2003.	3.2	0
94	A Multi-Channel Temperature Monitoring System for Inverter-Fed Electrical Machines. , 2019, , .		0
95	Integrated Offline Reinforcement Learning for Optimal Power Flow Management in an Electric Dual-Drive Vehicle. , 2019, , .		0
96	Towards accelerated robotic deployment by supervised learning of latent space observer and policy from simulated experiments with expert policies. , 2020, , .		0
97	Sparse Multi-sensor Monitoring System Design for Vehicle Application. , 2021, , .		0
98	A Radial Basis Function-Based Optimization Algorithm with Regular Simplex Set Geometry in Ellipsoidal Trust-Regions. Mathematical Problems in Engineering, 2022, 2022, 1-21.	0.6	0