## Anouar Belahcen

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/8212603/publications.pdf Version: 2024-02-01



#	Article	IF	CITATIONS
1	Research on the Performances and Parameters of Interior PMSM Used for Electric Vehicles. IEEE Transactions on Industrial Electronics, 2016, 63, 3533-3545.	5.2	387
2	FEM for Directly Coupled Magneto-Mechanical Phenomena in Electrical Machines. IEEE Transactions on Magnetics, 2010, 46, 2923-2926.	1.2	59
3	Improving Loss Properties of the Mayergoyz Vector Hysteresis Model. IEEE Transactions on Magnetics, 2010, 46, 918-924.	1.2	58
4	Signatures of electrical faults in the force distribution and vibration pattern of induction motors. IET Electric Power Applications, 2006, 153, 523.	1.4	51
5	Air-gap force distribution and vibration pattern of Induction motors under dynamic eccentricity. Electrical Engineering, 2008, 90, 209-218.	1.2	50
6	A Review of Synchronous Reluctance Motor-Drive Advancements. Sustainability, 2021, 13, 729.	1.6	50
7	A Simple and Efficient Quasi-3D Magnetic Equivalent Circuit for Surface Axial Flux Permanent Magnet Synchronous Machines. IEEE Transactions on Industrial Electronics, 2019, 66, 8318-8333.	5.2	49
8	Vibrations of rotating electrical machines due to magnetomechanical coupling and magnetostriction. IEEE Transactions on Magnetics, 2006, 42, 971-974.	1.2	47
9	Comparative thermal analysis of different rotor types for a high-speed permanent-magnet electrical machine. IET Electric Power Applications, 2009, 3, 279.	1.1	47
10	Model of laminated ferromagnetic cores for loss prediction in electrical machines. IET Electric Power Applications, 2011, 5, 580.	1.1	47
11	A Fast Fixed-Point Method for Solving Magnetic Field Problems in Media of Hysteresis. IEEE Transactions on Magnetics, 2008, 44, 1214-1217.	1.2	46
12	Analysis of the Vibration Magnitude of an Induction Motor With Different Numbers of Broken Bars. IEEE Transactions on Industry Applications, 2017, 53, 2711-2720.	3.3	46
13	Broken rotor bar fault detection of the grid and inverterâ€fed induction motor by effective attenuation of the fundamental component. IET Electric Power Applications, 2019, 13, 2005-2014.	1.1	45
14	Numerical Investigation of the Effects of Loading and Slot Harmonics on the Core Losses of Induction Machines. IEEE Transactions on Magnetics, 2012, 48, 1063-1066.	1.2	44
15	Opportunities and Challenges of Utilizing Additive Manufacturing Approaches in Thermal Management of Electrical Machines. IEEE Access, 2021, 9, 36368-36381.	2.6	44
16	Interdependence of Hysteresis and Eddy-Current Losses in Laminated Magnetic Cores of Electrical Machines. IEEE Transactions on Magnetics, 2010, 46, 306-309.	1.2	43
17	Effect of multi-axial stress on iron losses of electrical steel sheets. Journal of Magnetism and Magnetic Materials, 2019, 469, 19-27.	1.0	41
18	Induction machine fault detection using smartphone recorded audible noise. IET Science, Measurement and Technology, 2018, 12, 554-560.	0.9	39

#	Article	IF	CITATIONS
19	Multiphysics thermal design of a high-speed permanent-magnet machine. Applied Thermal Engineering, 2009, 29, 2693-2700.	3.0	37
20	Three-Dimensional Eddy-Current Analysis in Steel Laminations of Electrical Machines as a Contribution for Improved Iron Loss Modeling. IEEE Transactions on Industry Applications, 2013, 49, 2044-2052.	3.3	37
21	Effect of Mechanical Stress on Excess Loss of Electrical Steel Sheets. IEEE Transactions on Magnetics, 2015, 51, 1-4.	1.2	37
22	Locally Convergent Fixed-Point Method for Solving Time-Stepping Nonlinear Field Problems. IEEE Transactions on Magnetics, 2007, 43, 3969-3975.	1.2	36
23	Comprehensive Dynamic Loss Model of Electrical Steel Applied to FE Simulation of Electrical Machines. IEEE Transactions on Magnetics, 2008, 44, 886-889.	1.2	35
24	Modeling of Hysteresis Losses in Ferromagnetic Laminations Under Mechanical Stress. IEEE Transactions on Magnetics, 2016, 52, 1-4.	1.2	35
25	Segregation of Iron Losses From Rotational Field Measurements and Application to Electrical Machine. IEEE Transactions on Magnetics, 2014, 50, 893-896.	1.2	34
26	Hysteresis Measurements and Numerical Losses Segregation of Additively Manufactured Silicon Steel for 3D Printing Electrical Machines. Applied Sciences (Switzerland), 2020, 10, 6515.	1.3	34
27	AC Magnetic Loss Reduction of SLM Processed Fe-Si for Additive Manufacturing of Electrical Machines. Energies, 2021, 14, 1241.	1.6	33
28	Magnetoelastic coupling in rotating electrical machines. IEEE Transactions on Magnetics, 2005, 41, 1624-1627.	1.2	32
29	Computation of additional losses due to rotor eccentricity in electrical machines. IET Electric Power Applications, 2010, 4, 259.	1.1	32
30	On the Importance of Incorporating Iron Losses in the Magnetic Field Solution of Electrical Machines. IEEE Transactions on Magnetics, 2010, 46, 3101-3104.	1.2	31
31	Importance of Iron-Loss Modeling in Simulation of Wound-Field Synchronous Machines. IEEE Transactions on Magnetics, 2012, 48, 2495-2504.	1.2	31
32	Magneto-mechanical modeling of electrical steel sheets. Journal of Magnetism and Magnetic Materials, 2017, 439, 82-90.	1.0	30
33	Broken bar indicators for cage induction motors and their relationship with the number of consecutive broken bars. IET Electric Power Applications, 2013, 7, 633-642.	1.1	29
34	Monte Carlo Analysis of Circulating Currents in Random-Wound Electrical Machines. IEEE Transactions on Magnetics, 2016, 52, 1-12.	1.2	28
35	Challenges of Additive Manufacturing of Electrical Machines. , 2019, , .		26
36	Modified winding functionâ€based model of squirrel cage induction motor for fault diagnostics. IET Electric Power Applications, 2020, 14, 1722-1734.	1.1	26

#	Article	IF	CITATIONS
37	A 2D magnetic and 3D mechanical coupled finite element model for the study of the dynamic vibrations in the stator of induction motors. Mechanical Systems and Signal Processing, 2016, 66-67, 640-656.	4.4	25
38	Bearing Fault Analysis of BLDC Motor for Electric Scooter Application. Designs, 2020, 4, 42.	1.3	25
39	Analytical Solution of the Magnetic Field and EMF Calculation in Ironless BLDC Motor. IEEE Transactions on Magnetics, 2016, 52, 1-10.	1.2	23
40	Inclusion of Eddy Currents in Laminations in Two-Dimensional Finite Element Analysis. IEEE Transactions on Magnetics, 2010, 46, 2915-2918.	1.2	22
41	Rotordynamic analysis of different rotor structures for high-speed permanent-magnet electrical machines. IET Electric Power Applications, 2010, 4, 516.	1.1	21
42	A Novel Vector Control Strategy for a Six-Phase Induction Motor with Low Torque Ripples and Harmonic Currents. Energies, 2019, 12, 1102.	1.6	21
43	Efficient magnetodynamic lamination model for two-dimensional field simulation of rotating electrical machines. Journal of Magnetism and Magnetic Materials, 2008, 320, e1006-e1010.	1.0	20
44	Magnetic properties of reduced Dy NdFeB permanent magnets and their usage in electrical machines. , 2013, , .		20
45	Mixed-Order Finite-Element Modeling of Magnetic Material Degradation Due to Cutting. IEEE Transactions on Magnetics, 2018, 54, 1-8.	1.2	20
46	Broken Rotor Bar Fault Diagnostic of Inverter Fed Induction Motor Using FFT, Hilbert and Park's Vector Approach. , 2018, , .		20
47	Effect of Laser Cutting on Core Losses in Electrical Machines—Measurements and Modeling. IEEE Transactions on Industrial Electronics, 2020, 67, 7354-7363.	5.2	19
48	Permanent magnets models and losses in 2D FEM simulation of electrical machines. , 2010, , .		18
49	Anisotropic and Strain-Dependent Model of Magnetostriction in Electrical Steel Sheets. IEEE Transactions on Magnetics, 2015, 51, 1-4.	1.2	18
50	Lifecycle Analysis of Different Motors from the Standpoint of Environmental Impact. Latvian Journal of Physics and Technical Sciences, 2016, 53, 37-46.	0.4	18
51	Rotational Single Sheet Tester for Multiaxial Magneto-Mechanical Effects in Steel Sheets. IEEE Transactions on Magnetics, 2019, 55, 1-10.	1.2	18
52	The Cluster Computation-Based Hybrid FEM–Analytical Model of Induction Motor for Fault Diagnostics. Applied Sciences (Switzerland), 2020, 10, 7572.	1.3	18
53	Coupled Magneto-Mechanical Analysis of Iron Sheets Under Biaxial Stress. IEEE Transactions on Magnetics, 2016, 52, 1-4.	1.2	17
54	Life cycle analysis of electrical motor-drive system based on electrical machine type. Proceedings of the Estonian Academy of Sciences, 2020, 69, 162.	0.9	17

#	Article	lF	CITATIONS
55	Comprehensive computations of the response of faulty cage induction machines. , 2014, , .		16
56	Acoustic Noise Computation of Electrical Motors Using the Boundary Element Method. Energies, 2020, 13, 245.	1.6	16
57	Effects of Manufacturing Processes on Core Losses of Electrical Machines. IEEE Transactions on Energy Conversion, 2021, 36, 197-206.	3.7	16
58	Magnetodynamic vector hysteresis model of ferromagnetic steel laminations. Physica B: Condensed Matter, 2008, 403, 428-432.	1.3	15
59	Effect of Punching the Electrical Sheets on Optimal Design of a Permanent Magnet Synchronous Motor. IEEE Transactions on Magnetics, 2018, 54, 1-4.	1.2	15
60	Orthogonal Interpolation Method for Order Reduction of a Synchronous Machine Model. IEEE Transactions on Magnetics, 2018, 54, 1-6.	1.2	15
61	Analytical model for magnetic anisotropy of non-oriented steel sheets. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2015, 34, 1475-1488.	0.5	14
62	Homogenization Technique for Axially Laminated Rotors of Synchronous Reluctance Machines. IEEE Transactions on Magnetics, 2015, 51, 1-6.	1.2	14
63	Review of thermal analysis of permanent magnet assisted synchronous reluctance machines. , 2016, , .		14
64	Domain Decomposition Approach for Efficient Time-Domain Finite-Element Computation of Winding Losses in Electrical Machines. IEEE Transactions on Magnetics, 2017, 53, 1-9.	1.2	14
65	Modeling the Effect of Multiaxial Stress on Magnetic Hysteresis of Electrical Steel Sheets: A Comparison. IEEE Transactions on Magnetics, 2017, 53, 1-4.	1.2	14
66	Model Order Reduction of Electrical Machines With Multiple Inputs. IEEE Transactions on Industry Applications, 2017, 53, 3355-3360.	3.3	14
67	Determination of natural convection heat transfer coefficient over the fin side of a coil system. International Journal of Heat and Mass Transfer, 2018, 126, 677-682.	2.5	14
68	Real-Time Control of an IPMSM Using Model Order Reduction. IEEE Transactions on Industrial Electronics, 2021, 68, 2005-2014.	5.2	14
69	Review of Electrical Machine Diagnostic Methods Applicability in the Perspective of Industry 4.0. Electrical, Control and Communication Engineering, 2018, 14, 108-116.	0.4	14
70	A Survey of Broken Rotor Bar Fault Diagnostic Methods of Induction Motor. Electrical, Control and Communication Engineering, 2018, 14, 117-124.	0.4	14
71	Calorimetric system for measurement of synchronous machine losses. IET Electric Power Applications, 2012, 6, 286.	1.1	13
72	Experimental determination and numerical evaluation of core losses in a 150â€kVA woundâ€field synchronous machine. IET Electric Power Applications, 2013, 7, 97-105.	1.1	13

#	Article	IF	CITATIONS
73	Armature Reaction Field and Inductance Calculation of Ironless BLDC Motor. IEEE Transactions on Magnetics, 2016, 52, 1-14.	1.2	13
74	Determination of forced convection coefficient over a flat side of coil. , 2017, , .		13
75	Additive Manufacturing of Prototype Axial Flux Switched Reluctance Electrical Machine. , 2021, , .		13
76	Optimization of a 3D-Printed Permanent Magnet Coupling Using Genetic Algorithm and Taguchi Method. Electronics (Switzerland), 2021, 10, 494.	1.8	13
77	Additive Manufacturing and Performance of E-Type Transformer Core. Energies, 2021, 14, 3278.	1.6	13
78	Comparison of Finite-Element-Based State-Space Models for PM Synchronous Machines. IEEE Transactions on Energy Conversion, 2014, 29, 535-543.	3.7	12
79	Thermal Analysis of a SynRM Using a Thermal Network and a Hybrid Model. , 2018, , .		12
80	Hybrid thermal model of a synchronous reluctance machine. Case Studies in Thermal Engineering, 2018, 12, 381-389.	2.8	12
81	Rotor Fault Diagnostic of Inverter Fed Induction Motor Using Frequency Analysis. , 2019, , .		12
82	A Parallel Estimation System of Stator Resistance and Rotor Speed for Active Disturbance Rejection Control of Six-Phase Induction Motor. Energies, 2020, 13, 1121.	1.6	12
83	The Oil Spray Cooling System of Automotive Traction Motors: The State of the Art. IEEE Transactions on Transportation Electrification, 2023, 9, 428-451.	5.3	12
84	Iron Losses, Magnetoelasticity and Magnetostriction in Ferromagnetic Steel Laminations. IEEE Transactions on Magnetics, 2013, 49, 2041-2044.	1.2	11
85	Computation of stator vibration of an induction motor using nodal magnetic forces. , 2016, , .		11
86	Equivalent Strain and Stress Models for the Effect of Mechanical Loading on the Permeability of Ferromagnetic Materials. IEEE Transactions on Magnetics, 2019, 55, 1-4.	1.2	11
87	Effect of Magnetic Forces and Magnetostriction on the Stator Vibrations of a Bearingless Synchronous Reluctance Motor. IEEE Transactions on Magnetics, 2019, 55, 1-4.	1.2	11
88	Effect of Different Cutting Techniques on Magnetic Properties of Grain Oriented Steel Sheets and Axial Flux Machines. , 2019, , .		11
89	Analytical thermal model and flow network analysis suitable for open selfâ€ventilated machines. IET Electric Power Applications, 2020, 14, 929-936.	1.1	11
90	Re-Use and Recycling of Different Electrical Machines. Latvian Journal of Physics and Technical Sciences, 2018, 55, 13-23.	0.4	11

#	Article	IF	CITATIONS
91	Inclusion of hysteresis and eddy current losses in nonlinear time-domain inductance models. , 2011, , .		10
92	Analysis of the eccentricity in a low-speed slotless permanent-magnet wind generator. , 2012, , .		10
93	Constrained Algorithm for the Selection of Uneven Snapshots in Model Order Reduction of a Bearingless Motor. IEEE Transactions on Magnetics, 2017, 53, 1-4.	1.2	10
94	Adjusted electrical equivalent circuit model of induction motor with broken rotor bars and eccentricity faults. , 2017, , .		10
95	Finite-Element Modeling of Magnetic Properties Degradation Due to Plastic Deformation. IEEE Transactions on Magnetics, 2020, 56, 1-4.	1.2	10
96	Transient Modeling and Recovery of Non-Stationary Fault Signature for Condition Monitoring of Induction Motors. Applied Sciences (Switzerland), 2021, 11, 2806.	1.3	10
97	Determination of Heat Transfer Coefficient from Housing Surface of a Totally Enclosed Fan-Cooled Machine during Passive Cooling. Machines, 2021, 9, 120.	1.2	10
98	Oil Spray Cooling with Hairpin Windings in High-Performance Electric Vehicle Motors. , 2021, , .		10
99	Possible manufacturing tolerance faults in design and construction of low speed slotless permanent magnet generator. , 2014, , .		9
100	Model of Magnetic Anisotropy of Non-Oriented Steel Sheets for Finite-Element Method. IEEE Transactions on Magnetics, 2016, 52, 1-4.	1.2	9
101	Comparative study of field-oriented control model in application for induction and synchronous reluctance motors for life-cycle analysis. , 2018, , .		9
102	A High-Performance Open-Source Finite Element Analysis Library for Magnetics in MATLAB. , 2018, , .		9
103	Hybrid FEA-Simulink Modelling of Permanent Magnet Assisted Synchronous Reluctance Motor with Unbalanced Magnet Flux. , 2019, , .		9
104	Technologies for Additive Manufacturing of Electrical Machines. , 2019, , .		9
105	Electrical Resistivity of Additively Manufactured Silicon Steel for Electrical Machine Fabrication. , 2019, , .		9
106	A Modified Dynamic Model of Single-Sided Linear Induction Motors Considering Longitudinal and Transversal Effects. Electronics (Switzerland), 2021, 10, 933.	1.8	9
107	A 2D FEM analysis of electromechanical signatures in induction motors under dynamic eccentricity. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2014, 27, 555-571.	1.2	8

108 Effect of magnet materials on optimal design of a high speed PMSM. , 2015, , .

8

#	Article	IF	CITATIONS
109	3D permeance model of induction machines taking into account saturation effects and its connection with stator current and shaft speed spectra. IET Electric Power Applications, 2015, 9, 20-29.	1.1	8
110	Necessity for implementation of inverse problem theory in electric machine fault diagnosis. , 2015, , .		8
111	Combined FE and Particle Swarm algorithm for optimization of high speed PM synchronous machine. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2015, 34, 475-484.	0.5	8
112	Identification of Synchronous Machine Magnetization Characteristics From Calorimetric Core-Loss and No-Load Curve Measurements. IEEE Transactions on Magnetics, 2015, 51, 1-4.	1.2	8
113	Steady-State Thermal Model of a Synchronous Reluctance Motor. , 2018, , .		8
114	Thermographic Measurement and Simulation of Power Losses Due to Interlaminar Contacts in Electrical Sheets. IEEE Transactions on Instrumentation and Measurement, 2018, 67, 2628-2634.	2.4	8
115	Determination of stress dependent magnetostriction from a macroscopic magneto-mechanical model and experimental magnetization curves. Journal of Magnetism and Magnetic Materials, 2020, 500, 166299.	1.0	8
116	Comparison of Anisotropic Energy-Based and Jiles–Atherton Models of Ferromagnetic Hysteresis. IEEE Transactions on Magnetics, 2020, 56, 1-7.	1.2	8
117	Improved Analytical Model of Induction Machine for Digital Twin Application. , 2020, , .		8
118	Thermal Analysis of Salient Pole Synchronous Machines by Multiple Model Planes Approach. , 2020, , .		8
119	Hairpin Windings Manufacturing, Design, and AC Losses Analysis Approaches for Electric Vehicle Motors. , 2021, , .		8
120	3-D eddy current analysis in steel laminations of electrical machines as a contribution for improved iron loss modeling. , 2012, , .		7
121	Effect of Rotor Pole-Shoe Construction on Losses of Inverter-Fed Synchronous Motors. IEEE Transactions on Industry Applications, 2014, 50, 208-217.	3.3	7
122	Finite element analysis for bearingless operation of a multi flux barrier synchronous reluctance motor. , 2015, , .		7
123	Coupled field and space-vector equations of bearingless synchronous reluctance machine. , 2016, , .		7
124	Model for Stress-Dependent Hysteresis in Electrical Steel Sheets Including Orthotropic Anisotropy. IEEE Transactions on Magnetics, 2017, 53, 1-4.	1.2	7
125	Modelling anisotropy in non-oriented electrical steel sheet using vector Jiles–Atherton model. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2017, 36, 764-773.	0.5	7
126	A review of electrical machine design processes from the standpoint of software selection. , 2017, , .		7

8

#	Article	IF	CITATIONS
127	Computation of Hysteresis Torque and Losses in a Bearingless Synchronous Reluctance Machine. IEEE Transactions on Magnetics, 2018, 54, 1-4.	1.2	7
128	Loss Model for the Effects of Steel Cutting in Electrical Machines. , 2018, , .		7
129	Effect of mechanical stress on magnetization and magnetostriction strain behavior of non-oriented Si-Fe steels at different directions and under pseudo-DC conditions. International Journal of Applied Electromagnetics and Mechanics, 2019, 60, 299-312.	0.3	7
130	Effects of stator core welding on an induction machine – Measurements and modeling. Journal of Magnetism and Magnetic Materials, 2020, 499, 166280.	1.0	7
131	Representation of anisotropic magnetic characteristic observed in a non-oriented silicon steel sheet. AIP Advances, 2020, 10, .	0.6	7
132	A constraint-based optimization technique for estimating physical parameters of Jiles – Atherton hysteresis model. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2020, 39, 1281-1298.	0.5	7
133	Experimental Prototype of High-Efficiency Wind Turbine Based on Magnus Effect. , 2020, , .		7
134	Modeling of multi-axial stress dependent iron losses in electrical steel sheets. Journal of Magnetism and Magnetic Materials, 2020, 504, 166612.	1.0	7
135	Safe Turn-Off Strategy for Electric Drives in Automotive Applications. IEEE Transactions on Transportation Electrification, 2022, 8, 9-22.	5.3	7
136	Hysteresis Loss Evaluation of Additively Manufactured Soft Magnetic Core. , 2020, , .		7
137	Improving Legibility of Motor Current Spectrum for Broken Rotor Bars Fault Diagnostics. Electrical, Control and Communication Engineering, 2019, 15, 1-8.	0.4	7
138	Changing of Magnetic Flux Density Distribution in a Squirrel-Cage Induction Motor with Broken Rotor Bars. Elektronika Ir Elektrotechnika, 2014, 20, .	0.4	7
139	Influence of Magnet Material Selection on the Design of Slow-Speed Permanent Magnet Synchronous Generators for Wind Applications. Elektronika Ir Elektrotechnika, 2017, 23, .	0.4	7
140	Properties of electrical steel sheets under strong mechanical stress. Pollack Periodica, 2006, 1, 93-104.	0.2	7
141	Multi-Sensor Fault Diagnosis of Induction Motors Using Random Forests and Support Vector Machine. , 2020, , .		7
142	Combined FE and two dimensional spectral analysis of broken cage faults in induction motors. , 2013, ,		6
143	Comparative study of slow-speed slotless synchronous generator using SmCo and NdFeB permanent magnets. , 2014, , .		6
144	Estimation of additional losses due to random contacts at the edges of stator of an electrical machine. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2015, 34, 1501-1510.	0.5	6

#	Article	IF	CITATIONS
145	Condition monitoring of electrical machines and its relation to industrial internet. , 2015, , .		6
146	Review of loss calculation reduction control methods of permanent magnet assisted reluctance drive. , 2016, , .		6
147	Thermal analysis of electromagnetic levitation coil. , 2016, , .		6
148	Steady state and transient thermal analysis of the stator coil of a permanent magnet generator. , 2017, , .		6
149	Influence of the rotor eccentricity on the torque of a cage induction machine. Archives of Electrical Engineering, 2017, 66, 383-396.	1.0	6
150	Harmonic Spectrum Analysis of Induction Motor With Broken Rotor Bar Fault. , 2018, , .		6
151	Investigation of the causes behind the vibrations of a high-speed solid-rotor induction motor. Journal of Sound and Vibration, 2019, 463, 114976.	2.1	6
152	Harmonics Distortion in Inverter-Fed Motor-Drive Systems: Case Study. , 2019, , .		6
153	Thermal Analysis of Totally Enclosed Fan Cooled Synchronous Reluctance Motor-state of art. , 2019, , $\cdot$		6
154	Artificial Intelligence in Monitoring and Diagnostics of Electrical Energy Conversion Systems. , 2020, ,		6
155	Comparison of Model Order Reduction Methods for a Switched Reluctance Machine Characterization. IEEE Transactions on Magnetics, 2021, 57, 1-6.	1.2	6
156	Alternating and rotational loss prediction accuracy of vector Jiles-Atherton model. Journal of Magnetism and Magnetic Materials, 2021, 527, 167690.	1.0	6
157	Contribution of Maxwell Stress in Air on the Deformations of Induction Machines. Journal of Electrical Engineering and Technology, 2012, 7, 336-341.	1.2	6
158	Improved sampling algorithm for stochastic modelling of randomâ€wound electrical machines. Journal of Engineering, 2019, 2019, 3976-3980.	0.6	6
159	AC Losses Analysis Approaches for Electric Vehicle Motors with Hairpin Winding Configuration. , 2021, , .		6
160	The Modeling and Investigation of Slot Skews and Supply Imbalance on the Development of Principal Slotting Harmonics in Squirrel Cage Induction Machines. IEEE Access, 2021, 9, 165932-165946.	2.6	6
161	Experimental characterization of the effect of uniaxial stress on magnetization and iron losses of electrical steel sheets cut by punching process. Journal of Magnetism and Magnetic Materials, 2022, 549, 168983.	1.0	6
162	Signatures of Electromechanical Faults in Stress Distribution and Vibration of Induction Motors. , 2007, , .		5

#	Article	IF	CITATIONS
163	A posteriori iron loss computation with a vector hysteresis model. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2010, 29, 1493-1503.	0.5	5
164	Modelling eddy urrent in laminated nonâ€linear magnetic circuits. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2011, 30, 1082-1091.	0.5	5
165	Detection of broken bars in frequency converter fed induction motor using Park's vector approach. , 2012, , .		5
166	Modeling of Losses Due to Inter-Laminar Short-Circuit Currents in Lamination Stacks. Electrical, Control and Communication Engineering, 2013, 3, 31-36.	0.4	5
167	Proper orthogonal decomposition for order reduction of permanent magnet machine model. , 2015, , .		5
168	Environmental considerations in lifecycle based optimization of electrical machines. , 2015, , .		5
169	Effect of PM parameters variability on the operation quantities of a wind generator. , 2015, , .		5
170	Environmental and life cycle cost analysis of a synchronous reluctance machine. , 2016, , .		5
171	Adjusted electrical equivalent circuit model of induction motor with broken rotor bars. , 2016, , .		5
172	Mechanical vibration analysis of induction machine under dynamic rotor eccentricity. , 2016, , .		5
173	Multiaxial magneto-mechanical modelling of electrical machines with hysteresis. , 2016, , .		5
174	Dynamic state space model based analysis of a three-phase induction motor using nonlinear magnetization inductance. , 2018, , .		5
175	Natural convection from flat side's of coil system. , 2018, , .		5
176	Homogenization of Multiscale Eddy Current Problem by Localized Orthogonal Decomposition Method. IEEE Transactions on Magnetics, 2019, 55, 1-4.	1.2	5
177	Winding Function Based Analytical Model of Squirrel Cage Induction Motor for Fault Diagnostics. , 2019, , .		5
178	Influence of magnetic forces and magnetostriction on the vibration behavior of an induction motor. International Journal of Applied Electromagnetics and Mechanics, 2019, 59, 825-834.	0.3	5
179	Analysis of the Magneto-Mechanical Anisotropy of Steel Sheets in Electrical Applications. IEEE Transactions on Magnetics, 2020, 56, 1-4.	1.2	5
180	Determination of heat transfer coefficient of finned housing of a TEFC variable speed motor. Electrical Engineering, 2021, 103, 1009-1017.	1.2	5

#	Article	IF	CITATIONS
181	IoT Based Tools for Data Acquisition in Electrical Machines and Robotics. , 2021, , .		5
182	Finite Element Analysis of the Magneto-Mechanical Coupling Due to Punching Process in Electrical Steel Sheet. IEEE Transactions on Magnetics, 2021, 57, 1-4.	1.2	5
183	Application of Surrogate Optimization Routine with Clustering Technique for Optimal Design of an Induction Motor. Energies, 2021, 14, 5042.	1.6	5
184	Determination of Heat Transfer Coefficient for the Air Forced Cooling Over a Flat Side of Coil. Electrical, Control and Communication Engineering, 2019, 15, 15-20.	0.4	5
185	Locally coupled magnetoâ€mechanical model of electrical steel. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2008, 27, 1451-1462.	0.5	4
186	Lifecycle-based design and optimization of electrical motor-drives - Challenges and possibilities. , 2013,		4
187	Magnetomechanical coupled FE simulations of rotating electrical machines. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2013, 32, 1484-1499.	0.5	4
188	Vibration and stator current spectral analysis of induction machine operating under dynamic eccentricity. , 2015, , .		4
189	Implementation of different magnetic materials in outer rotor PM generator. , 2015, , .		4
190	Experimental and theoretical study of interlaminar eddy current loss in laminated cores. , 2017, , .		4
191	Magnus Wind Turbine: Finite Element Analysis and Control System. , 2020, , .		4
192	Development of analytical thermal analysis tool for synchronous reluctance motors. IET Electric Power Applications, 2020, 14, 1828-1836.	1.1	4
193	A Comparison of the Vector Control of Synchronous Reluctance Motor and Permanent Magnet-Assisted Synchronous Reluctance Motor. , 2021, , .		4
194	Finite-Element Modeling and Characterization of Iron Losses in 12 mm Thick Steel Laminations Including the Effect of Cutting. IEEE Access, 2021, 9, 115710-115718.	2.6	4
195	Cost efficiency analysis of slow-speed slotless permanent magnet synchronous generator using different magnetic materials. , 2014, , .		3
196	Computation of Magnetic Forces Using Degenerated Air-Gap Element. IEEE Transactions on Magnetics, 2017, 53, 1-4.	1.2	3
197	Analytical Model Including Rotor Eccentricity for Bearingless Synchronous Reluctance Motors. , 2018, , .		3
198	Flux-Weakening Control for IPMSM Employing Model Order Reduction. , 2018, , .		3

#	Article	IF	CITATIONS
199	Hilbert Transform, an Effective Replacement of Park's Vector Modulus for the Detection of Rotor Faults. , 2019, , .		3
200	Flexible identification procedure for thermodynamic constitutive models for magnetostrictive materials. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2019, 475, 20180280.	1.0	3
201	Axial Synchronous Magnetic Coupling Modeling and Printing with Selective Laser Melting. , 2019, , .		3
202	Analysis of Electromagnetic Force Ripple in a Bearingless Synchronous Reluctance Motor. IEEE Transactions on Magnetics, 2021, 57, 1-8.	1.2	3
203	Design of a Research Laboratory Drive System for a Synchronous Reluctance Motor for Vector Control and Performance Analysis. Inventions, 2021, 6, 64.	1.3	3
204	The Low Voltage Start-up Test of Induction Motor for the Detection of Broken Bars. , 2020, , .		3
205	Simulation-Based Comparative Assessment of a Multi-Speed Transmission for an E-Retrofitted Heavy-Duty Truck. Energies, 2022, 15, 2407.	1.6	3
206	2-D Analytical Model for Computing Eddy-Current Loss in Nonlinear Thick Steel Laminations. IEEE Transactions on Magnetics, 2022, 58, 1-4.	1.2	3
207	Effect of rotor pole-shoe construction on losses of inverter-fed synchronous motors. , 2012, , .		2
208	Comparative analysis of wind generator energy efficiency based on machine design. , 2014, , .		2
209	Impact of magnet losses on optimal design of a high speed synchronous machine. , 2014, , .		2
210	Air-gap eccentricity analysis of slow-speed slotless permanent magnet synchronous generator. , 2014, ,		2
211	Design of slow-speed slotless SmCo permanent magnet synchronous generator for wind applications. , 2014, , .		2
212	Magneto-mechanical analysis of an axially laminated synchronous reluctance machine. , 2016, , .		2
213	Reduced basis finite element modelling of electrical machines with multi-conductor windings. , 2016, ,		2
214	Reduced Basis Finite Element Modeling of Electrical Machines with Multiconductor Windings. IEEE Transactions on Industry Applications, 2017, 53, 4252-4259.	3.3	2
215	Computational and experimental segregation of deformations due to magnetic forces and magnetostriction. , 2017, , .		2

216 Model Order Reduction of Bearingless Reluctance Motor Including Eccentricity. , 2018, , .

2

#	Article	IF	CITATIONS
217	The FEM Based Modeling and Corresponding Test Rig Preparation for Broken Rotor Bars Analysis. , 2019, , .		2
218	Comparative study of inner and outer rotor bearingless synchronous reluctance motors. Journal of Engineering, 2019, 2019, 4375-4379.	0.6	2
219	Topology Optimization for Coils of Electric Machine with Level-set Method. , 2019, , .		2
220	Domain decomposition with subdomain pre-processing for finite element modelling of transformers with stranded conductors. AIP Advances, 2020, 10, .	0.6	2
221	Design Optimization of Permanent Magnet Clutch with Ārtap Framework. Periodica Polytechnica Electrical Engineering and Computer Science, 2021, 65, 106-112.	0.6	2
222	Losses in an eccentric rotor induction machine fed from frequency converter. , 2008, , .		1
223	Particle swarm optimization of the stator of a high speed PM synchronous machine. , 2010, , .		1
224	Overview of control methods of reluctance machines with sensors and sensorless. , 2014, , .		1
225	Computation of the Inverse Magnetostriction and its Application in Mechanical Stress Sensing. , 2014, , $\cdot$		1
226	Design of permanent magnet assisted synchronous reluctance machine. , 2014, , .		1
227	Coupled wave-equation and eddy-current model for modelling and measuring propagating stress-waves. Archives of Electrical Engineering, 2015, 64, 215-226.	1.0	1
228	Measurement of torque harmonics of a cage induction machine under rotor eccentricity. , 2015, , .		1
229	Full-Scale Power Hardware-In-the-Loop Simulation of an Electric Vehicle Using Energetic Macroscopic Representation. , 2015, , .		1
230	Uncertainty propagation of iron loss from characterization measurements to computation of electrical machines. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2015, 34, 624-636.	0.5	1
231	Model order reduction of electrical machines with multiple inputs. , 2016, , .		1
232	Modelling the effect of multiaxial stress on magnetic hysteresis of electrical steel sheets: A comparison. , 2016, , .		1
233	Computation of magnetic forces using degenerated airgap element. , 2016, , .		1
234	Anisotropic model for Villari effect in non-oriented electrical steel sheets. , 2016, , .		1

Anisotropic model for Villari effect in non-oriented electrical steel sheets. , 2016, , . 234

#	Article	IF	CITATIONS
235	Power Losses Analysis in Thermal Design of a Synchronous Reluctance Motor. , 2019, , .		1
236	Review of the Analytical Flow Model to Predict the Hydraulic Behaviour in Electrical Machine. , 2019, , .		1
237	Sliding Mean Value Subtraction-Based DC Drift Correction of B-H Curve for 3D-Printed Magnetic Materials. Energies, 2021, 14, 284.	1.6	1
238	Corrections to "Opportunities and Challenges of Utilizing Additive Manufacturing Approaches in Thermal Management of Electrical Machinesâ€: IEEE Access, 2021, 9, 62532-62532.	2.6	1
239	Determination of Core Losses Using an Inverse Modeling Technique. IEEE Access, 2022, 10, 29224-29232.	2.6	1
240	Coupled magneto-elastic FE model for simulation of electrical machines. International Journal of Applied Electromagnetics and Mechanics, 2004, 19, 135-138.	0.3	0
241	Magnetoelastic coupling and Rayleigh damping. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2004, 23, 647-654.	0.5	0
242	Local Magneto-Mechanical Coupling in Electrical Machines. , 0, , .		0
243	Coupled 3D-2D model for heat equation. , 2014, , .		0
244	Effect of stress on excess loss of electrical steel sheets. , 2015, , .		0
245	Force computation of a synchronous reluctance motor by model order reduction with constraint based uneven snapshot matrix. , 2016, , .		0
246	Demagnetization field in a uniformly magnetized ellipsoid embedded in an infinite anisotropic media. , 2016, , .		0
247	Modelling of magnetic and electric circuits. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2017, 36, 578-579.	0.5	0
248	EMSA 2016 Publications Chair's Preface. IEEE Transactions on Magnetics, 2017, 53, 1-3.	1.2	0
249	Lightning Over-voltages in Nuclear Power Plants. , 2019, , .		0
250	Parameter Estimation of Inter-Laminar Fault-Region in Laminated Sheets Through Inverse Approach. Energies, 2020, 13, 3251.	1.6	0
251	Design optimization of Permanent Magnet Clutch. , 2020, , .		0
252	LOD Homogenization of Multiscale Eddy Current Problem in Time Domain. IEEE Transactions on Magnetics, 2021, 57, 1-4.	1.2	0

#	Article	IF	CITATIONS
253	BASIC ALGORITHM FOR INDUCTION MOTORS ROTOR FAULTS PRE-DETERMINATION. Environment Technology Resources Proceedings of the International Scientific and Practical Conference, 0, 3, 254.	0.0	0
254	Analysis of the Local and Global Forces Acting on the Coil Structure of a Modular Slotless Permanent Magnet Generator. Electrical, Control and Communication Engineering, 2019, 15, 9-14.	0.4	0
255	A Computationally Effective Method for Iron Loss Estimation in a Synchronous Machine from a Static Field Solution. , 2020, , .		0
256	Thermal Modeling of a TEFC Synchronous Reluctance Motor. , 2021, , .		0
257	Uncertainty Quantification of Input Parameters in a 2-D Finite-Element Model for Broken Rotor Bar in an Induction Machine. IEEE Transactions on Magnetics, 2022, 58, 1-4.	1.2	0