

Vincent Lanfranchi

List of Publications by Year in descending order

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68
papers

1,040
citations

623734

14
h-index

477307

29
g-index

70
all docs

70
docs citations

70
times ranked

618
citing authors

#	ARTICLE	IF	CITATIONS
1	Influence of the load angle on magnetic radial forces and torque ripple of a low power permanent magnet synchronous machine. <i>Mathematics and Computers in Simulation</i> , 2021, 184, 153-164.	4.4	5
2	A Novel and Simple Torque Ripple Minimization Method of Synchronous Reluctance Machine Based on Torque Function Method. <i>IEEE Transactions on Industrial Electronics</i> , 2021, 68, 92-102.	7.9	15
3	A 3D Thermal Model of SynRM with Segmented Rotor Considering Anisotropic Conductivity. , 2021, , .		1
4	Axial claw pole motor: harmonic torque estimation using finite element method. <i>COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering</i> , 2020, 39, 1157-1167.	0.9	1
5	Torque Ripple Analysis of Synchronous Reluctance Motor with Different Rotor Topologies for Application with Dimensional Constraint. <i>Journal of Electrical Engineering and Technology</i> , 2020, 15, 2167-2177.	2.0	2
6	Design of silent electric motors: optimization under constraints and parameters uncertainties. , 2020, , .		1
7	Impact of the load angle on magnetic radial pressure and torque ripple of a low power PMSM with trapezoidal control. <i>COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering</i> , 2020, 39, 1255-1270.	0.9	0
8	Simple Method to Reduce Computation Time in Planar Air-Gap 3-D FEM Non-Linear Problems. <i>IEEE Transactions on Magnetics</i> , 2020, 56, 1-4.	2.1	0
9	Influence of the multi-component electrical feed of air-core industrial reactors on their sound radiation. <i>Acta Acustica</i> , 2020, 4, 14.	1.0	4
10	Analysis of torque ripple reduction in a segmented-rotor synchronous reluctance machine by optimal currents. <i>Mathematics and Computers in Simulation</i> , 2019, 158, 130-147.	4.4	6
11	Comparison of radial and tangential forces effect on the radial vibrations of synchronous machines. , 2019, , .		5
12	Multiphysics model for predicting the sound radiation of a single-layer air-core coil. <i>Applied Acoustics</i> , 2019, 146, 327-333.	3.3	3
13	Effect of mechanical stress on magnetization and magnetostriction strain behavior of non-oriented Si-Fe steels at different directions and under pseudo-DC conditions. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2019, 60, 299-312.	0.6	7
14	Preliminary Thermal Evaluation of Actuator for Steer-by-Wire Vehicle. <i>IEEE Transactions on Vehicular Technology</i> , 2018, 67, 11468-11474.	6.3	6
15	Investigation on Mechanical Resonance Induced by Magnetostriction in a Structure Based on Si-Fe Sheets. <i>IEEE Transactions on Magnetics</i> , 2018, 54, 1-12.	2.1	7
16	Noise and vibration of a power transformer under an electrical excitation. <i>Applied Acoustics</i> , 2017, 128, 64-70.	3.3	33
17	Fast electro-mechanical performance evaluation tool for synchronous reluctance machine. <i>International Journal of Precision Engineering and Manufacturing</i> , 2017, 18, 1567-1573.	2.2	3
18	Influence of the Manufacturing Process of a Claw-Pole Alternator on Its Stator Shape and Acoustic Noise. <i>IEEE Transactions on Industry Applications</i> , 2017, 53, 4389-4395.	4.9	5

#	ARTICLE	IF	CITATIONS
19	Comparison of Torque Ripple Reductions and Copper Losses of Three Synchronous Reluctance Machines. , 2017, , .		4
20	An Anisotropic Model for Magnetostriction and Magnetization Computing for Noise Generation in Electric Devices. Sensors, 2016, 16, 553.	3.8	11
21	Vibro-Acoustic Simulation and Optimization of a Claw-Pole Alternator. IEEE Transactions on Industry Applications, 2016, 52, 3878-3885.	4.9	22
22	A hybrid electromagnetic model for acoustic optimization of claw-pole alternators. International Journal of Applied Electromagnetics and Mechanics, 2016, 51, S3-S11.	0.6	6
23	Six-phase Axial Flux Permanent Magnet generator model: Simulation and experimental validation. , 2016, , .		4
24	Vibration and acoustic noise of industrial inductors associated to converters in the railway domain. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2016, 35, 1900-1909.	0.9	1
25	A thermal study on small synchronous reluctance machine in automotive cycle. , 2016, , .		4
26	Modal stability procedure applied to variability in vibration from electromagnetic origin for an electric motor. Finite Elements in Analysis and Design, 2016, 122, 61-74.	3.2	15
27	Influence of the manufacturing process of a claw-pole alternator on its stator shape and acoustic noise. , 2016, , .		4
28	Macroscopic model of magnetostriction based on energy minimization. , 2016, , .		1
29	Skew effect on the radial pressure of induction motor. , 2016, , .		4
30	Macroscopic modeling of anisotropic magnetostriction and magnetization in soft ferromagnetic materials. Journal of Magnetism and Magnetic Materials, 2016, 404, 74-78.	2.3	8
31	Improved method to compute air-gap magnetic pressure of the Interior Permanent Magnet Synchronous Machine. , 2015, , .		2
32	Design and Magnetic Noise Reduction of the Surface Permanent Magnet Synchronous Machine Using Complex Air-Gap Permeance. IEEE Transactions on Magnetics, 2015, 51, 1-9.	2.1	46
33	Vibro-acoustic simulation and optimization of a claw-pole alternator. , 2015, , .		6
34	Noise radiated by a permanent magnet synchronous motor: Simulation methodology and influence of motor defects. , 2014, , .		2
35	Design and magnetic noise reduction of the surface permanent magnet synchronous machine. , 2014, , .		3
36	Thermal model of stator slot for small synchronous reluctance machine. , 2014, , .		3

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37	Influence of temperature on the vibro-acoustic behavior of claw-pole alternators. , 2014, , .		12
38	Wavelet-based non-stationary near-field acoustical holography. Applied Acoustics, 2013, 74, 1226-1233.	3.3	9
39	Fault-tolerant control of six-phase induction machines using combined fuzzy logic and genetic algorithms. , 2013, , .		5
40	Simple lumped parameter thermal model with practical experimental fitting method for synchronous reluctance machine. , 2013, , .		4
41	Rotor and stator shape optimization of a synchronous machine to reduce iron losses and acoustic noise. , 2012, , .		30
42	Characterisation of radial vibration force and electromagnetic noise behaviour of a PWM-fed permanent magnet synchronous machine. , 2012, , .		5
43	Numerical simulations of rotor dynamic eccentricity effects on synchronous machine vibrations for full run up. , 2012, , .		6
44	Active reduction of electrical machines magnetic noise by the control of low frequency current harmonics. , 2012, , .		31
45	Coupled Numerical Simulation Between Electromagnetic and Structural Models. Influence of the Supply Harmonics for Synchronous Machine Vibrations. IEEE Transactions on Magnetics, 2012, 48, 983-986.	2.1	67
46	Sensorless position control of six-phase induction machine using fuzzy-PI system. , 2011, , .		4
47	Intelligent sensorless speed control of six-phase induction machine. , 2011, , .		4
48	Mixed-variable optimal design of induction motors including efficiency, noise and thermal criteria. Optimization and Engineering, 2011, 12, 55-72.	2.4	6
49	Prediction of Audible Magnetic Noise Radiated by Adjustable-Speed Drive Induction Machines. IEEE Transactions on Industry Applications, 2010, 46, 1367-1373.	4.9	68
50	Multiphysics Modeling: Electro-Vibro-Acoustics and Heat Transfer of PWM-Fed Induction Machines. IEEE Transactions on Industrial Electronics, 2010, 57, 1279-1287.	7.9	61
51	Characterization and Reduction of Audible Magnetic Noise Due to PWM Supply in Induction Machines. IEEE Transactions on Industrial Electronics, 2010, 57, 1288-1295.	7.9	131
52	Influence of the load angle on the magnetic pressure harmonic content of a WRSM. , 2010, , .		8
53	Characterization and Reduction of Magnetic Noise Due to Saturation in Induction Machines. IEEE Transactions on Magnetics, 2009, 45, 2003-2008.	2.1	36
54	Optimal Slot Numbers for Magnetic Noise Reduction in Variable-Speed Induction Motors. IEEE Transactions on Magnetics, 2009, 45, 3131-3136.	2.1	62

#	ARTICLE	IF	CITATIONS
55	Characterisation of radial vibration force and vibration behaviour of a pulse-width modulation-fed fractional-slot induction machine. IET Electric Power Applications, 2009, 3, 197.	1.8	36
56	Comparison of optimization algorithms for the design of a brushless DC machine with travel-time minimization. , 2009, , .		3
57	Optimal Slot Opening Width for Magnetic Noise Reduction in Induction Motors. IEEE Transactions on Energy Conversion, 2009, 24, 869-874.	5.2	48
58	Prediction of audible magnetic noise radiated by adjustable speed drive induction machines. , 2009, , .		7
59	Characterization of the audible magnetic noise emitted by traction motors in railway rolling stock. Noise Control Engineering Journal, 2009, 57, 391.	0.3	10
60	Multiobjective Optimization of Induction Machines Including Mixed Variables and Noise Minimization. IEEE Transactions on Magnetics, 2008, 44, 1102-1105.	2.1	66
61	Acoustic noise of electromagnetic origin in a fractionalâ€slot induction machine. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2008, 27, 1033-1052.	0.9	34
62	Multiphysics modeling: electro-vibro-acoustics and heat transfer of induction machines. , 2008, , .		14
63	Inverter topology comparison for remedial solution in transistor faulty case. , 2007, , .		2
64	Multi-objective optimization of the induction machine with minimization of audible electromagnetic noise. EPJ Applied Physics, 2007, 39, 101-107.	0.7	11
65	Vibratory and acoustic behavior of induction traction motors, machine design improvement. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2006, , .	0.0	1
66	Spread spectrum strategies study for induction motor vibratory and acoustic behavior. Industrial Electronics Society (IECON), Annual Conference of IEEE, 2006, , .	0.0	6
67	Mitigation of induction motors constraints in ASD applications. , 0, , .		1
68	Twoâ€level global sensitivity analysis of the excitation contributions leading to acoustic noise in an electric motor for the purpose of robust optimisation. IET Electric Power Applications, 0, , .	1.8	1