Thierry Lubin

List of Publications by Year
in descending order

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79	1,882	331259 21	264894 42
papers	citations	h-index	g-index

79	79	79	1047
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	2-D Exact Analytical Model for Surface-Mounted Permanent-Magnet Motors With Semi-Closed Slots. IEEE Transactions on Magnetics, 2011, 47, 479-492.	1.2	210
2	Exact Analytical Method for Magnetic Field Computation in the Air Gap of Cylindrical Electrical Machines Considering Slotting Effects. IEEE Transactions on Magnetics, 2010, 46, 1092-1099.	1.2	140
3	Analytical Computation of the Magnetic Field Distribution in a Magnetic Gear. IEEE Transactions on Magnetics, 2010, 46, 2611-2621.	1.2	133
4	Simple Analytical Expressions for the Force and Torque of Axial Magnetic Couplings. IEEE Transactions on Energy Conversion, 2012, 27, 536-546.	3.7	108
5	Comparison Between Finite-Element Analysis and Winding Function Theory for Inductances and Torque Calculation of a Synchronous Reluctance Machine. IEEE Transactions on Magnetics, 2007, 43, 3406-3410.	1.2	104
6	Steady-State and Transient Performance of Axial-Field Eddy-Current Coupling. IEEE Transactions on Industrial Electronics, 2015, 62, 2287-2296.	5.2	89
7	3-D Analytical Model for Axial-Flux Eddy-Current Couplings and Brakes Under Steady-State Conditions. IEEE Transactions on Magnetics, 2015, 51, 1-12.	1.2	74
8	Two-Dimensional Analytical Calculation of Magnetic Field and Electromagnetic Torque for Surface-Inset Permanent-Magnet Motors. IEEE Transactions on Magnetics, 2012, 48, 2080-2091.	1.2	73
9	Development of a 2-D Analytical Model for the Electromagnetic Computation of Axial-Field Magnetic Gears. IEEE Transactions on Magnetics, 2013, 49, 5507-5521.	1.2	69
10	General Subdomain Model for Predicting Magnetic Field in Internal and External Rotor Multiphase Flux-Switching Machines Topologies. IEEE Transactions on Magnetics, 2013, 49, 5310-5325.	1.2	56
11	Analytical Prediction of Magnetic Field in Parallel Double Excitation and Spoke-Type Permanent-Magnet Machines Accounting for Tooth-Tips and Shape of Polar Pieces. IEEE Transactions on Magnetics, 2012, 48, 2121-2137.	1.2	54
12	Magnetic saturation effects on the control of a synchronous reluctance machine. IEEE Transactions on Energy Conversion, 2002, 17, 356-362.	3.7	50
13	Comparison between inductive and resistive SFCL in terms of current limitation and power system transient stability. Electric Power Systems Research, 2015, 125, 150-158.	2.1	49
14	Analytic Calculation of Eddy Currents in the Slots of Electrical Machines: Application to Cage Rotor Induction Motors. IEEE Transactions on Magnetics, 2011, 47, 4650-4659.	1.2	44
15	Experimental and Theoretical Analyses of Axial Magnetic Coupling Under Steady-State and Transient Operations. IEEE Transactions on Industrial Electronics, 2014, 61, 4356-4365.	5.2	43
16	A New Analytical Torque Formula for Axial Field Permanent Magnets Coupling. IEEE Transactions on Energy Conversion, 2015, 30, 892-899.	3.7	41
17	Improved 3-D Analytical Model for Axial-Flux Eddy-Current Couplings With Curvature Effects. IEEE Transactions on Magnetics, 2017, 53, 1-9.	1.2	35
18	Induction Heating of Aluminum Billets Subjected to a Strong Rotating Magnetic Field Produced by Superconducting Windings. IEEE Transactions on Magnetics, 2009, 45, 2118-2127.	1.2	26

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19	Modeling of a synchronous reluctance machine accounting for space harmonics in view of torque ripple minimization. Mathematics and Computers in Simulation, 2010, 81, 354-366.	2.4	26
20	A review of subdomain modeling techniques in electrical machines: Performances and applications. , 2016, , .		25
21	An Improved 2-D Subdomain Model of Squirrel-Cage Induction Machine Including Winding and Slotting Harmonics at Steady State. IEEE Transactions on Magnetics, 2018, 54, 1-12.	1.2	25
22	Twoâ€dimensional analytical investigation of the parameters and the effects of magnetisation patterns on the performance of coaxial magnetic gears. IET Electrical Systems in Transportation, 2017, 7, 230-245.	1.5	24
23	INDUCTANCE AND FORCE CALCULATION FOR AXISYMMETRIC COIL SYSTEMS INCLUDING AN IRON CORE OF FINITE LENGTH. Progress in Electromagnetics Research B, 2012, 41, 377-396.	0.7	22
24	IMPROVED ANALYTICAL MODEL FOR SURFACE-MOUNTED PM MOTORS CONSIDERING SLOTTING EFFECTS AND ARMATURE REACTION. Progress in Electromagnetics Research B, 2010, 25, 293-314.	0.7	20
25	A Simple and Efficient Tool for Design Analysis of Synchronous Reluctance Motor. IEEE Transactions on Magnetics, 2008, 44, 4648-4652.	1.2	16
26	Analytical Model for the Magnetic Field Distribution in a Flux Modulation Superconducting Machine. IEEE Transactions on Magnetics, 2019, 55, 1-9.	1.2	16
27	Analytical calculation of the flux density distribution in a superconducting reluctance machine with HTS bulks rotor. Mathematics and Computers in Simulation, 2013, 90, 230-243.	2.4	15
28	3-D Modeling of Coils for Pulsed Field Magnetization of HTS Bulk Pellets in an Electrical Machine. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.1	14
29	A New Topology for Induction Heating System With PM Excitation: Electromagnetic Model and Experimental Validations. IEEE Transactions on Magnetics, 2015, 51, 1-11.	1.2	13
30	Test of an Original Superconducting Synchronous Machine Based on Magnetic Shielding. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.1	13
31	Analytical Modeling of an Axial Field Magnetic Coupler With Cylindrical Magnets. IEEE Transactions on Magnetics, 2021, 57, 1-5.	1.2	12
32	Induction Heating of Aluminum Billets With Linear Motion in a Strong DC Magnetic Field: Magnetothermal Analysis in Two-Dimensional. IEEE Transactions on Applied Superconductivity, 2011, 21, 3479-3487.	1.1	11
33	Design optimization of an axial-field eddy-current magnetic coupling based on magneto-thermal analytical model. Open Physics, 2018, 16, 21-26.	0.8	11
34	Test of a Flux Modulation Superconducting Machine for Aircraft. Journal of Physics: Conference Series, 2020, 1590, 012052.	0.3	11
35	Improvement of YBCO Superconductor Magnetic Shielding by Using Multiple Bulks. Journal of Superconductivity and Novel Magnetism, 2014, 27, 903-907.	0.8	10
36	Efficient Design Using Successive Analytical Subproblems Method: Application to Axial Magnetic Couplings. IEEE Transactions on Magnetics, 2015, 51, 1-4.	1.2	10

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37	Magnetically Geared Induction Machines. IEEE Transactions on Magnetics, 2015, 51, 1-4.	1.2	10
38	ANALYTICAL CALCULATION OF PARALLEL DOUBLE EXCITATION AND SPOKE-TYPE PERMANENT-MAGNET MOTORS; SIMPLIFIED VERSUS EXACT MODEL. Progress in Electromagnetics Research B, 2013, 47, 145-178.	0.7	9
39	THREE-DIMENSIONAL ANALYTICAL MODEL FOR AN AXIAL-FIELD MAGNETIC COUPLING. Progress in Electromagnetics Research M, 2014, 35, 173-182.	0.5	9
40	Comparison of transient performances for synchronous and eddy-current torque couplers. , 2016, , .		9
41	Design of a superconducting machine and its cooling system for an aeronautics application. EPJ Applied Physics, 2021, 93, 30901.	0.3	9
42	On-line efficiency optimization of a synchronous reluctance motor. Electric Power Systems Research, 2007, 77, 484-493.	2.1	8
43	Study of HTS Magnetic Coupler Using Analytical and Numerical Computations. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-12.	1.1	8
44	Eddy Current Computation in Translational Motion Conductive Plate of an Induction Heater With Consideration of Finite Length Extremity Effects. IEEE Transactions on Magnetics, 2016, 52, 1-4.	1.2	8
45	Fabrication and test of an axial-field HTS rotating machine with integrated magnetic coupling. Superconductor Science and Technology, 2017, 30, 035015.	1.8	8
46	Experimental Benchmark for Magnetic Noise and Vibrations Analysis in Electrical Machines. , 2018, , .		8
47	Subdomain model for predicting armature reaction field of dual-stator consequent-pole PM machines accounting for tooth-tips. CES Transactions on Electrical Machines and Systems, 2019, 3, 143-150.	2.7	8
48	2D analytical modeling of a wholly superconducting synchronous reluctance motor. Superconductor Science and Technology, 2011, 24, 035014.	1.8	7
49	Axialâ€field eddyâ€current coupling: a 3D test problem for numerical experiments. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2018, 31, e2217.	1.2	7
50	General Analytical Magnetic Model for Partitioned-Stator Flux-Reversal Machines With Four Types of Magnetization Patterns. IEEE Transactions on Magnetics, 2019, 55, 1-21.	1.2	7
51	A Dual-Modulator Magnetic-Geared Machine for Tidal-Power Generation. IEEE Transactions on Magnetics, 2020, 56, 1-7.	1.2	7
52	Axial-Field Synchronous Machine With HTS Armature Windings: Realization and Preliminary Tests. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.1	7
53	Design optimisation of an axialâ€flux reluctance magnetic coupling based on a twoâ€dimensional semiâ€analytical model. IET Electric Power Applications, 2020, 14, 901-910.	1.1	6
54	Analytical model for magneticâ€geared doubleâ€rotor machines and its dâ€“q â€axis determination. IET Electric Power Applications, 2020, 14, 175-183.	1.1	6

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55	Using and enhancing the cogging torque of PM machines in valve positioning applications. IET Electric Power Applications, 2020, 14, 2516-2524.	1.1	6
56	A model of double star induction motors under rotor bar defect for diagnosis purpose. , 0, , .		4
57	A Fast Analytical Method to Compute the Radial Flux Density Distribution in the Airgap of a Superconducting Inductor. IEEE Transactions on Applied Superconductivity, 2011, 21, 1114-1118.	1.1	4
58	High temperature superconducting axial field magnetic coupler: realization and test. Superconductor Science and Technology, 2015, 28, 095003.	1.8	4
59	Computation of Wound Rotor Induction Machines Based on Coupled Finite Elements and Circuit Equation Under a First Space Harmonic Approximation. IEEE Transactions on Magnetics, 2016, 52, 1-4.	1.2	4
60	Application of a novel approach of resistiveâ€type superconducting fault current limiter with a fast protection system in multiâ€terminal direct current network. International Transactions on Electrical Energy Systems, 2020, 30, e12568.	1.2	4
61	3-D Semi-Analytical Model of a Superconducting Axial Flux Modulation Machine. IEEE Transactions on Magnetics, 2021, 57, 1-15.	1.2	3
62	Sensitivity-Based Optimization of Interior Permanent Magnet Synchronous Motor for Torque Characteristic Enhancement. Energies, 2021, 14, 2240.	1.6	3
63	Magnetic Saturation Effects on the Control of a Synchronous Reluctance Machine. IEEE Power Engineering Review, 2002, 22, 51-51.	0.1	2
64	Analytical computation of Flux Concentration PM Machines: Study of the influence of the magnets shape. , 2012, , .		2
65	Steady-state and transient analysis of an axial-field magnetic coupling. , 2012, , .		2
66	A new kind of superconducting machine. IEEE Transactions on Applied Superconductivity, 2016, , 1-1.	1.1	2
67	Design and Analysis of a Magnetically Geared Induction Machine. , 2018, , .		2
68	Simulation analysis and experimental evaluation of the transient behaviour of a reluctance magnetic coupling. IET Electric Power Applications, 2020, 14, 391-397.	1.1	2
69	Study and test of a new superconducting inductor structure for a synchronous machine. , 2014, , .		1
70	Magnetically geared induction machines. , 2015, , .		1
71	3D Analytical Computation of the Torque in Axial Flux Permanent Magnets Couplings Based on Charges Model and Images Method. , 2018, , .		1
72	Design of a 500 kW partially superconducting flux modulation machine for aircraft propulsion. Journal of Physics: Conference Series, 2021, 1975, 012033.	0.3	1

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73	Dynamic behaviour of a Magnetically Geared Induction Machine. , 2019, , .		1
74	Magnetic saturation effects on the control of a synchronous reluctance machine. , 0, , .		0
75	Eddy current in a rotating cylinder in a static field by a stochastic method. EPJ Applied Physics, 2012, 57, 30901.	0.3	0
76	Thin-Layer Insulation of HTS: Analytical Study. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-5.	1.1	0
77	Improved 3D electromagnetic analytical model for planar induction heater with consideration of transverse edge effects. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2020, 39, 1169-1184.	0.5	0
78	Transient performance of a magnetically geared induction machine. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2020, 39, 1113-1130.	0.5	0
79	Improved 3D Electromagnetic Analytical Model for Translational Motion Induction Heater with Consideration of Finite Length Effects. , 2019, , .		0