

Mainak Sengupta

List of Publications by Year in descending order

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69
papers

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citations

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all docs

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docs citations

69
times ranked

119
citing authors

#	ARTICLE	IF	CITATIONS
1	Investigations on current waveform unbalance in a conventional switched reluctance motor even under healthy operating conditions at steady state. Sadhana - Academy Proceedings in Engineering Sciences, 2022, 47, .	1.3	3
2	Simulation-Based Power-Loss Optimization of General-Purpose High-Voltage SiC MOSFET Circuit Under High-Frequency Operation. IEEE Access, 2021, 9, 23786-23794.	4.2	6
3	Detailed comparative investigations on levitation prototypes of a ball and a rectangular plate of same mass using a novel analytical model and experiments. Sadhana - Academy Proceedings in Engineering Sciences, 2021, 46, 1.	1.3	1
4	Design, analysis and experimental validation of a variable frequency silicon carbide-based resonant-converter for welding applications. Sadhana - Academy Proceedings in Engineering Sciences, 2021, 46, 1.	1.3	1
5	Analysis and design of efficient SiC-based load-resonant converter with advanced features for arc welding applications. Sadhana - Academy Proceedings in Engineering Sciences, 2021, 46, 1.	1.3	1
6	Investigations on losses and temperature rise in PMAC machines with distributed and concentrated windings and different rotor locations. , 2021, , .		1
7	FEM Modeling and Analysis of the Double Channel Linear Switched Reluctance Motor. , 2021, , .		1
8	Design, Analysis, Fabrication & Testing of SiC Device based High Frequency Synchronous DC-DC Converters. , 2021, , .		6
9	A Voltage Source Inverter based Hardware Emulator to Realise Low Frequency Electromechanical Oscillations in Power Systems. , 2021, , .		0
10	Design, analysis, parameter evaluation and testing of a laboratory-fabricated brush-less DC motor prototype. Sadhana - Academy Proceedings in Engineering Sciences, 2020, 45, 1.	1.3	0
11	Implementation of a novel and versatile initial rotor position estimation method on surface-mounted permanent magnet synchronous motor prototype at zero speed. Sadhana - Academy Proceedings in Engineering Sciences, 2020, 45, 1.	1.3	0
12	Analysis, fabrication and detailed comparative study of surface and interior rotor PMSM prototypes of identical nominal ratings and stators. Sadhana - Academy Proceedings in Engineering Sciences, 2020, 45, 1.	1.3	7
13	Design, analysis, fabrication, control and comparative study of two different-shaped plate levitation prototypes. Sadhana - Academy Proceedings in Engineering Sciences, 2020, 45, 1.	1.3	5
14	Comparative analytical and experimental study of fabricated identical surface and interior permanent magnet BLDC motor prototypes. Sadhana - Academy Proceedings in Engineering Sciences, 2020, 45, 1.	1.3	1
15	A novel and precise on-line digital measurement of unsaturated phase inductance of a switched reluctance motor. Sadhana - Academy Proceedings in Engineering Sciences, 2019, 44, 1.	1.3	1
16	Design, Analysis, Fabrication and Testing of a 30W, 300 kHz Closed-Loop ZCS Buck Converter in voltage-mode control. , 2019, , .		4
17	Design Validation and Performance Evaluation of a BLDC of Commercial Electric Bike and Its Performance Comparison with Different Probable Designs. , 2019, , .		1
18	Analysis, FEM based Simulation and Experimental Validation of a VSI-fed Silicon Carbide based Radio Frequency Induction Heating Prototype. , 2019, , .		1

#	ARTICLE	IF	CITATIONS
19	Design, Finite Element Based Validation of a Multi-channel Axial Flux Double Sided Switched Reluctance Motor and Its Fabrication. , 2019, , .		1
20	Design, fabrication and testing of a fractional-slot non-overlapping winding permanent magnet synchronous generator. , 2019, , .		0
21	Comparative Study of Two Different PMSG with Different Slot Pole Combination Having Non-Overlapping Winding Configuration. , 2019, , .		0
22	Real Time Simulation of a Switched Reluctance Motor on a Miniature Full Spectrum Simulator. , 2019, , .		4
23	Detailed analytical and experimental investigations on voltage source inverter fed Induction Heating prototype. , 2019, , .		0
24	Effects of Including SVC and TCSC in an Existing Power System Under Normal Operating Condition A Case Study. , 2018, , .		6
25	Design, Analysis, Simulation, Fabrication and Experiments on a Voltage Source Inverter Fed Induction Heating Prototype. , 2018, , .		2
26	Parameter estimation and performance evaluation of -aboratory developed Interior Permanent Magnet Motor. , 2018, , .		0
27	Design and FEM validation of Double Sided Axial Flux Switched Reluctance Motor. , 2018, , .		2
28	Design, Analysis and Development of a SiC based 15 KVA General Purpose Inverter Stack for High Frequency Applications. , 2018, , .		8
29	Parameter estimation and performance evaluation of a Linear Permanent Magnet Synchronous Motor prototype. , 2018, , .		1
30	Design, analysis, fabrication and testing of a silicon carbide-based high frequency ZCS buck converter with over current protection. , 2018, , .		5
31	A commutation strategy for IGBT-based CSI-fed parallel resonant circuit for induction heating application. Sadhana - Academy Proceedings in Engineering Sciences, 2017, 42, 153-161.	1.3	3
32	Design, real-time modelling, simulation and digital implementation of phase-locked loop-based auto-synchronising current-sourced converter for an induction heating prototype. Sadhana - Academy Proceedings in Engineering Sciences, 2017, 42, 879-888.	1.3	2
33	Analysis, design and implementation of sensorless V/f control in a surface-mounted PMSM without damper winding. Sadhana - Academy Proceedings in Engineering Sciences, 2017, 42, 1317-1333.	1.3	5
34	Design, analysis and fabrication of a linear permanent magnet synchronous machine. Sadhana - Academy Proceedings in Engineering Sciences, 2017, 42, 1419-1429.	1.3	9
35	Design, performance evaluation, fabrication and testing of a SiC MOSFET gate driver. , 2017, , .		21
36	Design, modelling, fabrication and control of a single-axis attraction type levitation prototype. , 2017, , .		2

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37	Design, analysis, fabrication and practical testing of a lab developed power converter prototype in electric arc welding. , 2017, , .		3
38	Design, analysis, FEM validation and fabrication of a switched reluctance motor. , 2017, , .		7
39	Design and implementation of sensorless vector control of surface mounted PMSM using back-EMF estimation and PLL based technique. , 2017, , .		5
40	Closed loop speed control of a laboratory fabricated brush-less DC motor drive prototype using position sensor. , 2017, , .		3
41	Design, analysis, fabrication and testing of a 3kW power factor correction boost rectifier. , 2016, , .		5
42	Design, analysis, fabrication and comparison of linear induction motor and linear permanent magnet synchronous motor. , 2016, , .		10
43	Planning of dynamic channel allocation in HetNet under IEEE 1900.4 framework. , 2015, , .		0
44	Design and implementation of a PI-controller on a 10 kVA STATCOM prototype. International Journal of Power and Energy Conversion, 2015, 6, 85.	0.3	1
45	Design and implementation of current mode control in a switched reluctance drive. , 2014, , .		8
46	Design, fabrication and analytical investigations on a permanent magnet synchronous generator. , 2014, , .		3
47	Design, fabrication, simulation and testing of a Phase Modulated Resonant Transition Converter. , 2014, , .		3
48	Design, fabrication, simulation and testing of a repulsion type lévitation prototype. , 2014, , .		0
49	Design, modelling, fabrication and control of an attraction type lévitation prototype. , 2014, , .		2
50	Design, analysis and fabrication of a brush-less DC motor. , 2014, , .		12
51	Design, fabrication and parameter evaluation of a surface mounted permanent magnet synchronous motor. , 2014, , .		7
52	Application of FPGA based PLL in a CSI fed induction heating prototype. , 2014, , .		4
53	Modelling, Simulation, Fabrication, Experiments and Real-Time Linear State Variable Feedback Control of Cuk Converter using Pole Placement Technique. Journal of the Institution of Engineers (India): Series B, 2014, 95, 55-62.	1.9	0
54	Simulated annealing based solution for limited spectrum availability in composite wireless network. , 2014, , .		1

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55	Design, Analysis and Implementation of a Small Signal Control Strategy on a 10kVA STATCOM Prototype Connected to Inductive Load. Journal of the Institution of Engineers (India): Series B, 2013, 94, 61-69.	1.9	3
56	Electromagnetic Investigations and Power Converter Efficiency Studies on a Laboratory Made Induction Heating Prototype. Journal of the Institution of Engineers (India): Series B, 2013, 94, 153-160.	1.9	3
57	Experimental study of induction motor misalignment and its online detection through data fusion. IET Electric Power Applications, 2013, 7, 58-67.	1.8	15
58	Experimental investigations on a novel laboratory prototype of axial flux switched reluctance motor. , 2012, , .		6
59	Real-time simulation of an induction motor in different reference frames on a FPGA platform. , 2012, , .		5
60	Fabrication, simulation and testing of a zero voltage switching strategy based high frequency buck converter. , 2012, , .		2
61	Design, Fabrication and Testing of Two Different Laboratory Prototypes of CSI-based Induction Heating Units. Journal of the Institution of Engineers (India): Series B, 2012, 93, 133-141.	1.9	6
62	Practical tests on a novel series-connected CSI prototype for controlled induction heating application. , 2012, , .		1
63	A simplified averaged dynamic model of a permanent magnet synchronous motor driven by a two-level, three-phase, self-controlled transistorized voltage source inverter under 120° conduction mode. , 2008, , .		1
64	Implementation of a universal logic system of generating commutating pulses in matrix converters using FPGAs. , 2006, , .		3
65	Theory, performance prediction and indirect sensing of rotor position of a switched reluctance motor under saturation. IET Electric Power Applications, 1999, 146, 667.	1.4	19
66	A position sensor using analogue devices for a SR motor without shaft mounted encoder. , 0, , .		0
67	Development and experimental validation of a novel analytical model for performance prediction of SR motors under saturation. , 0, , .		2
68	Design, fabrication, testing and finite element analysis of a lab-scale LIM. , 0, , .		2
69	Design fabrication and testing of power converter and its associated circuits for a 4KW SRM drive. , 0, , .		0