Chandan Chakraborty

List of Publications by Citations

91 papers	1,387 citations	19 h-index	35 g-index
115 ext. papers	1,872 ext. citations	5.9 avg, IF	5.37 L-index

#	Paper	IF	Citations
91	Model Reference Adaptive Controller-Based Rotor Resistance and Speed Estimation Techniques for Vector Controlled Induction Motor Drive Utilizing Reactive Power. *IEEE Transactions on Industrial Electronics*, **2008**, 55, 594-601	8.9	198
90	A Shunt Active Power Filter With Enhanced Performance Using ANN-Based Predictive and Adaptive Controllers. *IEEE Transactions on Industrial Electronics*, **2011**, 58, 421-428	8.9	189
89	A New Multilevel Inverter Topology With Self-Balancing Level Doubling Network. *IEEE Transactions on Industrial Electronics*, **2014**, 61, 4622-4631	8.9	102
88	A New Formulation of Reactive-Power-Based Model Reference Adaptive System for Sensorless Induction Motor Drive. *IEEE Transactions on Industrial Electronics*, **2015**, 62, 6797-6808	8.9	72
87	Dual Stator Winding Induction Machine: Problems, Progress, and Future Scope. *IEEE Transactions on Industrial Electronics*, **2015**, 62, 4641-4652	8.9	71
86	ZVS□CS High Voltage Gain Integrated Boost Converter for DC Microgrid. *IEEE Transactions on Industrial Electronics*, **2016**, 63, 6898-6908	8.9	62
85	New Voltage Control Strategies for VSC-Based DG Units in an Unbalanced Microgrid. *IEEE Transactions on Sustainable Energy*, **2017**, 8, 1127-1139	8.2	52
84	A Carrier-Based PWM Scheme for Neutral Point Voltage Balancing in Three-Level Inverter Extending to Full Power Factor Range. *IEEE Transactions on Industrial Electronics*, **2017**, 64, 1873-1883	8.9	51
83	A New Asymmetric Multilevel Inverter Topology Suitable for Solar PV Applications With Varying Irradiance. *IEEE Transactions on Sustainable Energy*, **2017**, 8, 1496-1506	8.2	43
82	Integration of Solar PV With Low-Voltage Weak Grid System: Using Normalized Laplacian Kernel Adaptive Kalman Filter and Learning Based InC Algorithm. *IEEE Transactions on Power Electronics*, **2019**, 34, 10746-10758	7.2	31
81	Performance of Three-Phase Asymmetric Cascaded Bridge (16 : 4 : 1) Multilevel Inverter. *IEEE Transactions on Industrial Electronics*, **2015**, 62, 5983-5992	8.9	28
80	A Novel Method of Frequency Regulation in Microgrid. *IEEE Transactions on Industry Applications*, **2019**, 55, 111-121	4.3	27
79	Active Power Flow Control Between DC Microgrids. *IEEE Transactions on Smart Grid*, **2019**, 10, 5712-5723	10.7	24
78	Disturbance Rejection Analysis and FPGA-Based Implementation of a Second-Order Sliding Mode Controller Fed Induction Motor Drive. *IEEE Transactions on Energy Conversion*, **2018**, 33, 1453-1462	5.4	21
77	Three-Phase Hybrid Cascaded Multilevel Inverter Using Topological Modules With 1:7 Ratio of Asymmetry. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2018**, 6, 2302-2314	5.6	20
76	A New Algorithm for Small-Signal Analysis of DC□DC Converters. *IEEE Transactions on Industrial Informatics*, **2014**, 10, 628-636	11.9	20
75	New series of MRAS for speed estimation of vector controlled induction motor drive **2014**,		20

74	An Improved PWM Scheme for Three-Level Inverter Extending Operation Into Overmodulation Region With Neutral-Point Voltage Balancing for Full Power-Factor Range. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2018**, 6, 1527-1539	5.6	19
73	Symmetry-Breaking Bifurcation in Series-Parallel Load Resonant DC-DC Converters. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2013**, 60, 778-787	3.9	19
72	A New Optimal Current Control Technique for Dual Stator Winding Induction Generator. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2017**, 5, 820-832	5.6	18
71	Synchronous Generator With Embedded Brushless Synchronous Exciter. *IEEE Transactions on Energy Conversion*, **2019**, 34, 1242-1254	5.4	17
70	An Improved Modulation Strategy for Fast Capacitor Voltage Balancing of Three-Level NPC Inverters. *IEEE Transactions on Industrial Electronics*, **2019**, 66, 7498-7509	8.9	16
69	Asymmetric Cascaded H-Bridge Multilevel Inverter With Single DC Source per Phase. *IEEE Transactions on Industrial Electronics*, **2020**, 67, 5398-5409	8.9	16
68	A Direct PWM Technique for a Single-Phase Full-Bridge Inverter Through Controlled Capacitor Charging. *IEEE Transactions on Industrial Electronics*, **2008**, 55, 2912-2922	8.9	14
67	A New Configuration of Dual Stator Induction Generator Employing Series and Shunt Capacitors. *IEEE Transactions on Energy Conversion*, **2018**, 33, 762-772	5.4	13
66	A Series Voltage Regulator for the Radial DC Microgrid. *IEEE Transactions on Sustainable Energy*, **2019**, 10, 127-136	8.2	13
65	Cascaded H-Bridge & neutral point clamped hybrid asymmetric multilevel inverter topology for grid interactive transformerless photovoltaic power plant **2012**,		13
64	Performance of Brushless Induction Excited Synchronous Generator. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2019**, 7, 2571-2582	5.6	12
63	A new model reference adaptive formulation to estimate stator resistance in field oriented induction motor drive **2013**,		10
62	A hybrid multilevel inverter topology with third harmonic injection for grid connected photovoltaic central inverters **2012**,		9
61	Adaptive Estimation of Speed and Rotor Time Constant for the Vector Controlled Induction Motor Drive Using Reactive Power **2007**,		8
60	A Unified Control Structure for Grid Connected and Islanded Mode of Operation of Voltage Source Converter Based Distributed Generation Units Under Unbalanced and Non-Linear Conditions. *IEEE Transactions on Power Delivery*, **2020**, 35, 1758-1768	4.3	8
59	Brushless Induction Excited Synchronous Generator With Induction Machine Operating in Plugging Mode. *IEEE Transactions on Industry Applications*, **2018**, 54, 5748-5759	4.3	8
58	Seven-Level Packed U-Cell (PUC) Converter With Natural Balancing of Capacitor Voltages. *IEEE Transactions on Industry Applications*, **2020**, 56, 5234-5244	4.3	7
57	An Alternative Adaptation Mechanism for Model Reference Adaptive System Based Sensorless Induction Motor Drive. *Electric Power Components and Systems*, **2010**, 38, 710-736	1	7

56	Performance and Analysis of a New Brushless Synchronous Generator for DC Microgrid Application. *IEEE Transactions on Industry Applications*, **2020**, 56, 3137-3148	4.3	5
55	Capacitor Size Reduction of Multilevel Inverters by Utilizing Neutral Shifting. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2019**, 7, 2243-2254	5.6	5
54	Asymmetric multilevel inverter with quasi-linear power distribution ratio for grid connected photovoltaic converters **2013**,		4
53	Dual stator induction generator with controllable reactive power capability **2014**,		4
52	A novel control principle for a high frequency transformer based multiport converter for integration of renewable energy sources **2013**,		4
51	A novel method of frequency regulation in microgrid **2016**,		3
50	A hybrid modular multilevel converter for solar power integration **2016**,		3
49	ANN based sensorless vector controlled induction motor drive suitable for four quadrant operation **2014**,		3
48	A new series of brushless and permanent magnetless synchronous machines **2017**,		3
47	Multilevel inverters with level doubling network: A new topological variation **2013**,		3
46	A novel model reference adaptive controller for estimation of speed and stator resistance for vector controlled induction motor drives **2010**,		3
45	A New V □ based adaptive speed sensorless four quadrant vector controlled induction motor drive **2010**,		3
44	Third harmonic injected binary hybrid multilevel inverter for grid connected photovoltaic system **2011**,		3
43	Experimental validation of very-low and zero speed operation of a flux-eliminated adaptive estimator for vector controlled IM drive **2009**,		3
42	Predictive and Adaptive ANN (Adaline) Based Harmonic Compensation for Shunt Active Power Filter **2008**,		3
41	MRAS-based speed estimation techniques for vector controlled double inverter-fed slipring induction motor drive **2008**,		3
40	Hybrid modulation technique for binary asymmetrical cascaded multilevel inverter for PV application **2016**,		3
39	Full-Bridge Converter With Naturally Balanced Modular Cascaded H-Bridge Waveshapers for Offshore HVDC Transmission. *IEEE Transactions on Sustainable Energy*, **2020**, 11, 271-281	8.2	3

38	Performance and Stability of Brushless Induction Excited Synchronous Generator Operating in Self-Excited Mode for Wind Energy Conversion System. *IEEE Transactions on Energy Conversion*, **2021**, 36, 919-929	5.4	3
37	Universal Active Power Control Converter for DC-Microgrids With Common Energy Storage. *IEEE Open Journal of Industry Applications*, **2021**, 2, 21-35	4.7	3
36	Modular Multilevel Converter for Multifunctional Battery Management System of Electric Vehicle **2018**,		3
35	Brushless induction excited synchronous generator with induction machine operating in plugging mode **2016**,		2
34	Electro-thermal modeling of Lithium-ion cell for higher discharge rate applications **2016**,		2
33	A Switched Capacitor Series Voltage Controller with Fault Current Limiting Capability for DC Microgrid Application **2019**,		2
32	Design of a 4/6-pole Synchronous Machine with Embedded Brushless Synchronous Exciter (SEBSE) **2019**,		2
31	Improving the performance of speed sensorless induction motor drive with rotor broken bar failure by stator current signature analysis **2014**,		2
30	A new control technique for dual stator induction generator used in standalone applications **2015**,		2
29	Sensorless control of grid-connected doubly-fed slip-ring induction motor drive **2009**,		2
28	Harmonic elimination and reactive power compensation through a shunt active power filter by twin neural networks with predictive and adaptive properties **2009**,		2
27	ANN (Adaline) Based Harmonic Compensation for Shunt Active Power Filter with Capacitor Voltage Based Predictive Technique **2008**,		2
26	Reactive Power Based Speed Sensorless Controller for Permanent Magnet Synchronous Motor Drive **2006**,		2
25	Single Phase, Full Bridge, Controlled Capacitor Charging (CCC) Type Inverter **2006**,		2
24	Full bridge level doubling network assisted multilevel DC link inverter **2016**,		2
23	Dynamic voltage compensation using Series Voltage Regulator for DC-microgid **2016**,		2
22	Voltage Fault Ride-Through Operation of Solar PV Units: A Review and Way Forward **2019**,		2
21	Buck-Boost Buck CCM-DCM Converter for PV Based DC Standalone System **2018**,		2

20	Performance Improvement of PV-Fed Hybrid Modular Multilevel Converter Under Partial Shading Condition. *IEEE Transactions on Industrial Electronics*, **2021**, 68, 9652-9664	8.9	2
19	A brushless generation system for microgrid operation utilizing dual stator induction generator **2014**,		1
18	A new technique for capacitor balancing of three-level flying-capacitor multilevel inverter **2017**,		1
17	Photovoltaic central inverters: Performance evaluation and comparative assessment **2017**,		1
16	Non-isolated high-frequency-link to feed auxiliary bridges of asymmetrical cascaded multilevel inverter **2014**,		1
15	Shunt active power filter/STATCOM topology for medium/high power applications: Parallel inverters operating at different switching frequencies **2010**,		1
14	A static synchronous compensator (STATCOM) using parallel inverters operating at different switching frequencies **2011**,		1
13	A reduced switch transformer-less dual hybrid active power filter **2009**,		1
12	Brushless Synchronous Generator-Unidirectional Rectifier for Offshore Wind Energy Conversion System. *IEEE Transactions on Energy Conversion*, **2021**, 1-1	5.4	1
11	Brushless and Magnetless Synchronous Generator for Standalone DC load with Vienna Rectifier **2020**,		1
10	Mathematical Modelling of a System for Solar PV Efficiency Improvement Using Compressed Air for Panel Cleaning and Cooling. *Energies*, **2021**, 14, 4072	3.1	1
9	A Brushless Synchronous Generator for Standalone DC Applications **2019**,		1
8	An E-STATCOM based solution for smoothing Photovoltaic and Wind Power fluctuations in a Microgrid under unbalanced conditions. *IEEE Transactions on Power Systems*, **2021**, 1-1	7	1
7	Seven-Level Packed U-Cell (PUC) Converter with Natural Balancing of Capacitor Voltages **2018**,		1
6	A New Brushless Synchronous Generator for DC Micro-grid Application **2018**,		1
5	A New Model for Estimation of Energy Extraction from Bifacial Photovoltaic Modules. *Energies*, **2021**, 14, 5089	3.1	0
4	Three-Phase Trinary Asymmetric Multilevel Inverter With Single DC Source and Open-Loop Control. *IEEE Open Journal of Industry Applications*, **2021**, 2, 259-277	4.7	0
3	PV-Supercapacitor Cascaded Topology for Primary Frequency Responses and Dynamic Inertia Emulation. *Energies*, **2021**, 14, 8347	3.1	0

2	Performance of Reduced DC Source Based Three-Phase High Resolution Multilevel Inverter with Optimal Asymmetry. *IEEE Transactions on Power Electronics*, **2022**, 1-1	7.2	0
1	Three-level Vienna Rectifier with a Brushless and Permanent Magnetless Generator for Wind Energy Conversion Systems. *Power Electronics and Drives*, **2022**, 7, 84-102	0.5	