Adil Sarwar

List of Publications by Citations

91 papers	668 citations	12 h-index	22 g-index
109 ext. papers	1,240 ext. citations	2.4 avg, IF	4.91 L-index

#	Paper	IF	Citations
91	A New Multilevel Inverter Topology With Reduce Switch Count. *IEEE Access*, **2019**, 7, 58584-58594	3.5	82
90	Low Switching Frequency Based Asymmetrical Multilevel Inverter Topology With Reduced Switch Count. *IEEE Access*, **2019**, 7, 86374-86383	3.5	72
89	A Comprehensive review on electric vehicles charging infrastructures and their impacts on power-quality of the utility grid. *ETransportation*, **2019**, 1, 100006	12.7	67
88	Dual asymmetrical dc voltage source based switched capacitor boost multilevel inverter topology. *IET Power Electronics*, **2020**, 13, 1481-1486	2.2	23
87	A new single-phase cascaded multilevel inverter topology with reduced number of switches and voltage stress. *International Transactions on Electrical Energy Systems*, **2020**, 30, e12191	2.2	21
86	Most Valuable Player Algorithm based Maximum Power Point Tracking for a Partially Shaded PV Generation System. *IEEE Transactions on Sustainable Energy*, **2021**, 12, 1876-1890	8.2	18
85	Measurement of Speed and Calibration of Tachometers Using Rotating Magnetic Field. *IEEE Transactions on Instrumentation and Measurement*, **2014**, 63, 848-858	5.2	16
84	A Novel Switched-Capacitor Multilevel Inverter Topology for Energy Storage and Smart Grid Applications. *Electronics (Switzerland)*, **2020**, 9, 1703	2.6	13
83	A New Transformerless Quadratic Boost Converter with High Voltage Gain. *Smart Science*, **2020**, 8, 163-183	1.3	13
82	Performance Analysis and Hardware-in-the-Loop (HIL) Validation of Single Switch High Voltage Gain DC-DC Converters for MPP Tracking in Solar PV System. *IEEE Access*, **2021**, 9, 48811-48830	3.5	13
81	A Non-Inverting High Gain DC-DC Converter With Continuous Input Current. *IEEE Access*, **2021**, 9, 54710-54721	3.5	13
80	Simulation and Analysis of a Multilevel Converter Topology for Solar PV Based Grid Connected Inverter. *Smart Grid and Renewable Energy*, **2011**, 02, 56-62	0.4	12
79	An improved asymmetrical multilevel inverter topology with reduced semiconductor device count. *International Transactions on Electrical Energy Systems*, **2020**, 30, e12587	2.2	12
78	A New High-Gain DC-DC Converter with Continuous Input Current for DC Microgrid Applications. *Energies*, **2021**, 14, 2629	3.1	12
77	Recent trends and review on switched-capacitor-based single-stage boost multilevel inverter. *International Transactions on Electrical Energy Systems*, **2021**, 31, e12730	2.2	12
76	Performance Based Analysis of Solar PV Emulators: A Review **2018**,		12
75	Multilevel converter topology for solar PV based grid-tie inverters **2010**,		10

74	A transformerless high gain dc□dc boost converter with reduced voltage stress. *International Transactions on Electrical Energy Systems*, **2021**, 31, e12877	2.2	9
73	Performance of PSO Based Variants in Tracking Optimal Power in a Solar PV based Generation System under Partial Shading Condition. *Smart Science*, **2020**, 8, 1-13	1.5	8
72	Rapid and Robust Adaptive Jaya (Ajaya) Based Maximum Power Point Tracking of a PV-Based Generation System. *IEEE Access*, **2021**, 9, 48679-48703	3.5	8
71	A New Transformerless Ultra High Gain DC□DC Converter for DC Microgrid Application. *IEEE Access*, **2021**, 9, 124560-124582	3.5	8
70	Five parameter modelling and simulation of solar PV cell **2015**,		7
69	Realization of a Generalized Switched-Capacitor Multilevel Inverter Topology with Less Switch Requirement. *Energies*, **2020**, 13, 1556	3.1	7
68	Performance analysis of carrier based PWM technique for three level diode clamped multilevel inverter with different reference signals **2016**,		7
67	Single phase symmetrical and asymmetrical design of multilevel inverter topology with reduced number of switches **2018**,		7
66	A Family of Transformerless Quadratic Boost High Gain DC-DC Converters. *Energies*, **2021**, 14, 4372	3.1	7
65	Hardware-in-the-Loop Implementation of Projectile Target Search Algorithm for Selective Harmonic Elimination in a 3-Phase Multilevel Converter. *IEEE Access*, **2021**, 9, 30626-30635	3.5	7
64	M-Type and CD-Type Carrier Based PWM Methods and Bat Algorithm-Based SHE and SHM for Compact Nine-Level Switched Capacitor Inverter. *IEEE Access*, **2021**, 9, 87731-87748	3.5	7
63	Generalized state-space model for an n-phase interleaved buck-boost converter **2017**,		6
62	A New High Voltage Gain DC to DC Converter with Low Voltage Stress for Energy Storage System Application. *Electronics (Switzerland)*, **2020**, 9, 2067	2.6	6
61	Gravitational Search Algorithm (GSA) based Maximum Power Point Tracking in a Solar PV based Generation System **2019**,		6
60	A Hybrid Nearest Level Combined With PWM Control Strategy: Analysis and Implementation on Cascaded H-Bridge Multilevel Inverter and its Fault Tolerant Topology. *IEEE Access*, **2021**, 9, 44266-44282	3.5	6
59	Implementation and Analysis of a 15-Level Inverter Topology With Reduced Switch Count. *IEEE Access*, **2021**, 9, 40623-40634	3.5	6
58	Asymmetrical Multilevel Inverter Topology with Reduced Number of Components **2018**,		6
57	Maximum Power Point Tracking Techniques under Partial Shading Condition- A Review **2018**,		6

56	Integration of Electric Vehicles and Energy Storage System in Home Energy Management System with Home to Grid Capability. *Energies*, **2021**, 14, 8557	3.1	6
55	A Nine-Level Cascaded Multilevel Inverter with Reduced Switch Count and Lower Harmonics. *Lecture Notes in Electrical Engineering*, **2019**, 723-738	0.2	5
54	Parameter Extraction of a Solar PV Cell Using Projectile Search Algorithm **2020**,		5
53	A Cross Connected Asymmetrical Switched-Capacitor Multilevel Inverter. *IEEE Access*, **2021**, 9, 96416-96429	3.9	5
52	Asymmetric Multilevel Inverter Topology and Its Fault Management Strategy for High-Reliability Applications. *Energies*, **2021**, 14, 4302	3.1	5
51	A Single Source Switched-Capacitor 13-Level Inverter with Triple Voltage Boosting and Reduced Component Count. *Electronics (Switzerland)*, **2021**, 10, 2321	2.6	5
50	Crystal Structure Algorithm (CryStAl) Based Selective Harmonic Elimination Modulation in a Cascaded H-Bridge Multilevel Inverter. *Electronics (Switzerland)*, **2021**, 10, 3070	2.6	4
49	A Transformerless Quadratic Boost High Gain DC-DC Converter **2020**,		4
48	Meta-Heuristic Optimization Techniques Used for Maximum Power Point Tracking in Solar PV System. *Electronics (Switzerland)*, **2021**, 10, 2419	2.6	4
47	A Voltage Multiplier Circuit Based Quadratic Boost Converter for Energy Storage Application. *Applied Sciences (Switzerland)*, **2020**, 10, 8254	2.6	4
46	Generalized Structures for Switched-Capacitor Multilevel Inverter Topology for Energy Storage System Application. *Applied Sciences (Switzerland)*, **2021**, 11, 1319	2.6	4
45	Experimental Validation of Metaheuristic and Conventional Modulation, and Hysteresis Control of the Dual Boost Nine-Level Inverter. *Electronics (Switzerland)*, **2021**, 10, 207	2.6	4
44	Archimedes Optimization Algorithm Based Selective Harmonic Elimination in a Cascaded H-Bridge Multilevel Inverter. *Sustainability*, **2022**, 14, 310	3.6	4
43	A novel constraint-based genetic algorithm solution for SHE technique in modified PUC-5 inverter. *IEEJ Transactions on Electrical and Electronic Engineering*, **2020**, 15, 159-160	1	3
42	A twice boost nine-level switched-capacitor multilevel (2B-9L-SCMLI) inverter with self-voltage balancing capability. *International Journal of Circuit Theory and Applications*, **2021**, 49, 2578	2	3
41	Submodule Capacitor voltage balancing of Modular Multilevel Converter **2019**,		3
40	Design and Analysis of Packed U-Cell and SEPIC Converter Based Solar PV System for Grid Connection **2018**,		3
39	Reliability Analysis and Fault-Tolerant Operation in a Multilevel Inverter for Industrial Application. *Electronics (Switzerland)*, **2022**, 11, 98	2.6	3

38	A Dual Source Switched-Capacitor Multilevel Inverter with Reduced Device Count. *Electronics (Switzerland)*, **2022**, 11, 67	2.6	3
37	Optimal Placement of Reclosers in a Radial Distribution System for Reliability Improvement. *Electronics (Switzerland)*, **2021**, 10, 3182	2.6	3
36	Aquila Optimization Based Harmonic Elimination in a Modified H-Bridge Inverter. *Sustainability*, **2022**, 14, 929	3.6	2
35	A 13, 11 and 9-Level Boosted Operation of a Single-Source Asymmetrical Inverter with Hybrid PWM Scheme. *IEEE Transactions on Industrial Electronics*, **2022**, 1-1	8.9	2
34	Jellyfish Search Optimization Algorithm for MPP Tracking of PV System. *Sustainability*, **2021**, 13, 11736	3.6	2
33	A switched-capacitor multilevel inverter topology employing a novel variable structure nearest-level modulation. *International Transactions on Electrical Energy Systems*,e13151	2.2	2
32	An MPPT method using hybrid radial movement optimization with teaching-learning based optimization under fluctuating atmospheric conditions. *Journal of Intelligent and Fuzzy Systems*, **2021**, 1-10	1.6	2
31	Analysis and implementation of a new asymmetric double H-bridge multilevel inverter. *International Journal of Circuit Theory and Applications*,	2	2
30	A Modified Asymmetric Switched-Capacitor Multilevel Inverter Topology with voltage boosting Capability **2019**,		2
29	A Maximum Power Point Tracking Method Using a Hybrid PSO and Grey Wolf Optimization Algorithm **2019**,		2
28	Chaos Induced Coyote Algorithm (CICA) for Extracting the Parameters in a Single, Double, and Three Diode Model of a Mono-Crystalline, Polycrystalline, and a Thin-Film Solar PV Cell. *Electronics (Switzerland)*, **2021**, 10, 2094	2.6	2
27	A high gain noninverting DC□DC converter with low voltage stress for industrial applications. *International Journal of Circuit Theory and Applications*,	2	2
26	An Eleven-Level Switched-Capacitor Inverter with Boosting Capability. *Electronics (Switzerland)*, **2021**, 10, 2262	2.6	2
25	Artificial Jellyfish Search Algorithm-Based Selective Harmonic Elimination in a Cascaded H-Bridge Multilevel Inverter. *Electronics (Switzerland)*, **2021**, 10, 2402	2.6	2
24	Implementation of a Novel Variable Structure Nearest Level Modulation on Cascaded H-Bridge Multilevel Inverter. *IEEE Access*, **2021**, 1-1	3.5	2
23	Mathematical Analysis of Various Modulation Strategies Used for Multilevel Inverter. *Lecture Notes in Electrical Engineering*, **2019**, 479-490	0.2	1
22	Self-Balanced Twenty Five Level Switched Capacitor Multilevel Inverter With Reduced Switch Count and Voltage Boosting Capability. *IEEE Transactions on Industry Applications*, **2022**, 58, 2183-2194	4.3	1
21	Maximum Power Point Tracking of a Partially Shaded Solar PV Generation System Using Coyote Optimization Algorithm (COA). *Lecture Notes in Mechanical Engineering*, **2021**, 509-518	0.4	1

20	Control Techniques of Packed U-Cell Multilevel Inverter: A Comprehensive Review. *Advances in Intelligent Systems and Computing*, **2020**, 442-452	0.4	1
19	Comprehensive Analysis of Different Modulation Techniques on a Multi-level Neutral Point Clamped Inverter in a Solar PV System. *Advances in Intelligent Systems and Computing*, **2020**, 434-441	0.4	1
18	Design and Validation of a Reduced Switching Components Step-Up Multilevel Inverter (RSCS-MLI). *Processes*, **2021**, 9, 1948	2.9	1
17	Seven-Level Switched-Capacitor Based Multilevel Inverter With Lesser Number of Power Electronic Components and Reduced Voltage Stress **2020**,		1
16	Review of Thyristor Based Grid Tied Inverters for Solar PV Applications **2019**,		1
15	Genetic Algorithm based Optimal Operation of a Modified H-bridge single phase Multilevel Inverter **2019**,		1
14	High Gain DC-DC Converter for Modular Multilevel Converter Applications. *Lecture Notes in Electrical Engineering*, **2021**, 605-614	0.2	1
13	Level Shifted Carrier-Based Pulse Width Modulation for Modular Multilevel Converter. *Lecture Notes in Electrical Engineering*, **2021**, 639-646	0.2	1
12	A General Review of the Recently Proposed Asymmetrical Multilevel Inverter Topologies. *Lecture Notes in Electrical Engineering*, **2021**, 675-686	0.2	1
11	Open-Circuit Fault Detection in a Multilevel Inverter Using Sub-Band Wavelet Energy. *Electronics (Switzerland)*, **2022**, 11, 123	2.6	1
10	A Robust Multilevel Inverter Topology for Operation under Fault Conditions. *Electronics (Switzerland)*, **2021**, 10, 3099	2.6	1
9	A Non-Pulsating Input Current Step-Up DC/DC Converter With Common Ground Structure for Photovoltaic Applications. *IEEE Access*, **2021**, 9, 159432-159446	3.5	0
8	An Improved 15-Level Asymmetrical Multilevel Inverter with Reduced Switch Count. *Lecture Notes in Electrical Engineering*, **2021**, 709-718	0.2	0
7	A Symbiotic Organism Search-Based Selective Harmonic Elimination in a Switched Capacitor Multilevel Inverter. *Energies*, **2022**, 15, 89	3.1	0
6	Maximum power point tracking in a solar PV system: Current trends towards nature-inspired optimization techniques. *International Transactions on Electrical Energy Systems*,e13197	2.2	
5	An Improved Maximum Power Point Tracking (MPPT) of a Partially Shaded Solar PV System Using PSO with Constriction Factor (PSO-CF). *Lecture Notes in Mechanical Engineering*, **2021**, 499-507	0.4	
4	A Resilient Hybrid Output Converter with Inherent Cross-Regulation Avoidance Feature. *Lecture Notes in Electrical Engineering*, **2021**, 263-273	0.2	
3	Parameter Extraction of PV Cell: A Review. *Lecture Notes in Electrical Engineering*, **2021**, 1-11	0.2	

List of Publications

2	Realization of a Flyback DC–DC Converter for Experimentation-Assisted Teaching in Power Electronics. *Lecture Notes in Electrical Engineering*, **2021**, 387-396	0.2
1	Simulation and Analysis of Rectifier-Based Four-Level Grid-Connected Inverter Using Genetic Algorithm. *Studies in Big Data*, **2021**, 329-338	0.9