

Vinod Khadkikar

List of Publications by Year in descending order

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138
papers

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116194

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138
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138
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138
times ranked

4214
citing authors

#	ARTICLE	IF	CITATIONS
1	Electric Vehicle-to-Vehicle Energy Transfer Using On-Board Converters. IEEE Transactions on Transportation Electrification, 2023, 9, 1263-1272.	5.3	9
2	An Efficient Vehicle-to-Vehicle (V2V) Energy Sharing Framework. IEEE Internet of Things Journal, 2022, 9, 5315-5328.	5.5	34
3	Single-Phase Transfer Delay FLL With Enhanced Performance for Power System Applications. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 349-360.	3.7	6
4	A Novel Multiport Converter Interface for Solar Panels of CubeSat. IEEE Transactions on Power Electronics, 2022, 37, 629-643.	5.4	9
5	A Stable Matching Game for V2V Energy Sharing—A User Satisfaction Framework. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 7601-7613.	4.7	20
6	A Comprehensive Review on CubeSat Electrical Power System Architectures. IEEE Transactions on Power Electronics, 2022, 37, 3161-3177.	5.4	24
7	Improved Power Quality Charging System Based on High Step-Down Gain Bridgeless SEPIC APFC for Light Electric Vehicles. IEEE Transactions on Industry Applications, 2022, 58, 423-434.	3.3	13
8	Enhancing Lifetime of 1U/2U CubeSat Electric Power System With Distributed Architecture and Power-Down Mode. IEEE Transactions on Industry Applications, 2022, 58, 901-913.	3.3	5
9	An Isolated Bridgeless Cuk—SEPIC Converter-Fed Electric Vehicle Charger. IEEE Transactions on Industry Applications, 2022, 58, 2512-2526.	3.3	23
10	Energy Management Strategy of a Reconfigurable Grid-Tied Hybrid AC/DC Microgrid for Commercial Building Applications. IEEE Transactions on Smart Grid, 2022, 13, 1720-1738.	6.2	20
11	Parameter Estimation and Grid Synchronization Using a First-Order Frequency-Locked Loop. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-13.	2.4	8
12	A Novel 1- Dual Input Nine-Level Inverter Topology with Generalized Modulation Technique. IEEE Transactions on Energy Conversion, 2022, , 1-1.	3.7	6
13	Novel Single-Phase Cuk-Derived Bridgeless PFC Converter for On-Board EV Charger With Reduced Number of Components. IEEE Transactions on Industry Applications, 2022, 58, 3999-4010.	3.3	33
14	Electric Vehicle Trip Chain Information-Based Hierarchical Stochastic Energy Management With Multiple Uncertainties. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 18492-18501.	4.7	5
15	Single-Phase Type-1 Frequency-Fixed FLL for Distorted Voltage Condition. IEEE Transactions on Industrial Electronics, 2021, 68, 3865-3875.	5.2	20
16	A Novel Power-Based Orthogonal Signal Generator for Single-Phase Systems. IEEE Transactions on Power Delivery, 2021, 36, 469-472.	2.9	16
17	Energy Management of Grid Interconnected Multi-Microgrids Based on P2P Energy Exchange: A Data Driven Approach. IEEE Transactions on Power Systems, 2021, 36, 1546-1562.	4.6	45
18	A Novel Single-Phase Voltage Boosting Transformerless Inverter Topology for Grid-connected Solar PV Application. , 2021, , .		2

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19	Enhanced transient response and seamless interconnection of multi- μ microgrids based on an adaptive control scheme. IET Renewable Power Generation, 2021, 15, 2452-2467.	1.7	4
20	Finite State Machine-Based Realization of Sparse Matrix Converter. IEEE Journal of Emerging and Selected Topics in Industrial Electronics, 2021, 2, 196-204.	3.0	2
21	Comparison of Peak Power Tracking Based Electric Power System Architectures for CubeSats. IEEE Transactions on Industry Applications, 2021, 57, 2758-2768.	3.3	13
22	Novel Step-Up Transformerless Inverter Topology for 1- ϕ Grid-Connected Photovoltaic System. IEEE Transactions on Industry Applications, 2021, 57, 2801-2815.	3.3	12
23	Small Signal Analysis and Control of Single-Phase Bridgeless Cuk-based PFC Converter for On-Board EV Charger. , 2021, , .		3
24	ANN Based Power Management Strategy For Standalone Microgrids. , 2021, , .		1
25	Benchmarking of Different Orthogonal Signal Generator Configurations for SOGI PLL Applications. , 2021, , .		5
26	A New Multiport DC-DC Converter for DC Microgrid Applications. , 2021, , .		8
27	High-Efficiency Three-Phase Single-Stage Isolated Flyback-Based PFC Converter With a Novel Clamping Circuit. IEEE Transactions on Industry Applications, 2020, 56, 718-729.	3.3	7
28	Benchmark model for multi-orbital transient analysis of satellite electrical power subsystem. IET Renewable Power Generation, 2020, 14, 286-296.	1.7	3
29	An Improved PQ Zeta Converter with Reduced Switch Voltage Stress for Electric Vehicle Battery Charger. , 2020, , .		7
30	A New Step-Up Transformerless Inverter Topology for 1- ϕ , Grid-connected Solar Photovoltaic System. , 2020, , .		4
31	New Submodule Selection Algorithm for Low Device Switching Frequency Modulation of Medium-Voltage Modular Multilevel Converter. , 2020, , .		0
32	Comparison Study of Electric Power System Architectures for CubeSat. , 2020, , .		5
33	A Type-3 PLL for Single-Phase Applications. IEEE Transactions on Industry Applications, 2020, 56, 5533-5542.	3.3	24
34	Gain compensation approach for low-voltage ride-through and dynamic performance improvement of three-phase type-3 PLL. IET Power Electronics, 2020, 13, 1613-1621.	1.5	9
35	A Novel Single-Stage Buck-Boost Transformerless Inverter for 1- ϕ Grid-Connected Solar PV Systems. , 2020, , .		4
36	Closure to Short-Term Reactive Power Planning to Minimize Cost of Energy Losses Considering PV Systems. IEEE Transactions on Smart Grid, 2020, 11, 1813-1815.	6.2	2

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37	DC-Offset Rejection Approaches for Single-Phase Frequency-Locked Loop. , 2020, , .		3
38	An On-Board Fast Charger using New Bridgeless PFC Converter with Reduced DC-Link Capacitance. , 2020, , .		3
39	Comprehensive design and control methodology for DC-powered satellite electrical subsystem based on PV and battery. IET Renewable Power Generation, 2020, 14, 2202-2210.	1.7	10
40	A Novel EPS Architecture for 1U/2U Cubesats with Enhanced Fault-Tolerant Capability. , 2020, , .		3
41	Improved Power Quality Charging System Based on High Step Down Gain Bridgeless SEPIC APFC for Light Electric Vehicles. , 2020, , .		7
42	A Novel SVM Technique With Enhanced Output Voltage Quality for Indirect Matrix Converters. IEEE Transactions on Industrial Electronics, 2019, 66, 832-841.	5.2	39
43	Modeling and Design of Electrical Power Subsystem for CubeSats. , 2019, , .		8
44	A New Fault Ride-Through (FRT) Topology for Induction Generator Based Wind Energy Conversion Systems. IEEE Transactions on Power Delivery, 2019, 34, 1129-1137.	2.9	26
45	A New High Gain Transformerless Inverter for Single Phase Grid-connected Solar PV Application. , 2019, , .		5
46	Adaptive Control of PV and Diesel Generator Unit in a Standalone Microgrid. , 2019, , .		1
47	A Type-3 PLL for Single-Phase Applications. , 2019, , .		5
48	Short-Term Reactive Power Planning to Minimize Cost of Energy Losses Considering PV Systems. IEEE Transactions on Smart Grid, 2019, 10, 2923-2935.	6.2	40
49	Adaptive Power Management Strategy for Effective Volt-Ampere Utilization of a Photovoltaic Generation Unit in Standalone Microgrids. IEEE Transactions on Industry Applications, 2018, 54, 1784-1792.	3.3	28
50	Adaptive Low-Pass Filter Based DC Offset Removal Technique for Three-Phase PLLs. IEEE Transactions on Industrial Electronics, 2018, 65, 9025-9029.	5.2	31
51	Adaptive planning approach for customer DG installations in smart distribution networks. IET Renewable Power Generation, 2018, 12, 81-89.	1.7	11
52	Obtaining Performance of Type-3 Phase-Locked Loop Without Compromising the Benefits of Type-2 Control System. IEEE Transactions on Power Electronics, 2018, 33, 1788-1796.	5.4	42
53	A Three Phase Isolated Buck-boost Derived PFC Converter with a Novel Clamping Circuit. , 2018, , .		1
54	Dual Storage Electric Vehicle Energy Management Considering Road Grade. , 2018, , .		0

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55	A New Ultracapacitor State of Charge Control Concept to Enhance Battery Lifespan of Dual Storage Electric Vehicles. IEEE Transactions on Vehicular Technology, 2018, 67, 10470-10481.	3.9	34
56	Loss Reduction in Radial Distribution Networks Using a Solid-State Transformer. IEEE Transactions on Industry Applications, 2018, 54, 5474-5482.	3.3	28
57	Direct Control of the Inverter Impedance to Achieve Controllable Harmonic Sharing in the Islanded Microgrid. IEEE Transactions on Industrial Electronics, 2017, 64, 827-837.	5.2	85
58	Fault Ride Through and Grid Support Topology for the VSC-HVDC Connected Offshore Wind Farms. IEEE Transactions on Power Delivery, 2017, 32, 1592-1604.	2.9	53
59	Emerging Power Quality Problems and State-of-the-Art Solutions. IEEE Transactions on Industrial Electronics, 2017, 64, 761-763.	5.2	23
60	Replacing the Grid Interface Transformer in Wind Energy Conversion System With Solid-State Transformer. IEEE Transactions on Power Systems, 2017, 32, 2152-2160.	4.6	73
61	Dynamic analysis of OLTC and voltage regulator under active network management considering different load profiles. , 2017, , .		4
62	Simplified power flow modeling approach considering on-load tap changers. , 2017, , .		3
63	Comprehensive harmonic current control in an islanded microgrid. , 2017, , .		1
64	A Nine Switch Converter-Based Fault Ride Through Topology for Wind Turbine Applications. IEEE Transactions on Power Delivery, 2016, 31, 1757-1766.	2.9	27
65	Variable Frequency Transformer Configuration for Decoupled Active-Reactive Powers Transfer Control. IEEE Transactions on Energy Conversion, 2016, 31, 906-914.	3.7	20
66	Incorporating PV inverter control schemes for planning active distribution networks. , 2016, , .		0
67	Adaptive power management strategy for effective VA utilization in a standalone microgrid. , 2016, , .		5
68	SPSAâ€œNC: simultaneous perturbation stochastic approximation localization based on neighbor confidence. Wireless Communications and Mobile Computing, 2016, 16, 1570-1587.	0.8	2
69	A New Virtual Harmonic Impedance Scheme for Harmonic Power Sharing in an Islanded Microgrid. IEEE Transactions on Power Delivery, 2016, 31, 936-945.	2.9	164
70	A Novel Type-1 Frequency-Locked Loop for Fast Detection of Frequency and Phase With Improved Stability Margins. IEEE Transactions on Power Electronics, 2016, 31, 2550-2561.	5.4	92
71	An integrated system configuration for electric springs to enhance the stability in future smart grid. , 2015, , .		5
72	Incorporating PV Inverter Control Schemes for Planning Active Distribution Networks. IEEE Transactions on Sustainable Energy, 2015, 6, 1224-1233.	5.9	51

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73	Nonlinear load sharing in low voltage microgrid using negative virtual harmonic impedance. , 2015, , .		7
74	A Novel Ten-Switch Topology for Unified Power Quality Conditioner. IEEE Transactions on Power Electronics, 2015, , 1-1.	5.4	30
75	Integrated Photovoltaic and Dynamic Voltage Restorer System Configuration. IEEE Transactions on Sustainable Energy, 2015, 6, 400-410.	5.9	69
76	Characteristic comparison of reduced switch converter based energy conversion systems. , 2015, , .		1
77	Four-Axis Vector-Controlled Dual-Rotor PMSM for Plug-in Electric Vehicles. IEEE Transactions on Industrial Electronics, 2015, 62, 3202-3212.	5.2	75
78	A Low Component Count Series Voltage Compensation Scheme for DFIG WTs to Enhance Fault Ride-Through Capability. IEEE Transactions on Energy Conversion, 2015, 30, 208-217.	3.7	43
79	A Hierarchical Control Strategy With Fault Ride-Through Capability for Variable Frequency Transformer. IEEE Transactions on Energy Conversion, 2015, 30, 132-141.	3.7	23
80	Optimal Control of Shunt Active Power Filter to Meet IEEE Std. 519 Current Harmonic Constraints Under Nonideal Supply Condition. IEEE Transactions on Industrial Electronics, 2015, 62, 724-734.	5.2	68
81	An Enhanced Voltage Sag Compensation Scheme for Dynamic Voltage Restorer. IEEE Transactions on Industrial Electronics, 2015, 62, 2683-2692.	5.2	179
82	Constrained Cross Entropy Localization Technique for Wireless Sensor Networks. International Journal of Distributed Sensor Networks, 2015, 11, 267369.	1.3	2
83	Control and SRF-q based re-synchronization of a master DG for microgrids. , 2014, , .		1
84	A novel control strategy to operate inverter based distributed generation unit as shunt APF in an islanded microgrid. , 2014, , .		0
85	Control and SRF-q based re-synchronization of a master DG for microgrids. , 2014, , .		0
86	An improved Extremum-Seeking based MPPT for grid-connected PV systems with partial shading. , 2014, , .		9
87	A Dynamic Voltage Restorer (DVR) based interface scheme for microgrids. , 2014, , .		3
88	Planning Active Distribution Networks Considering Multi-DG Configurations. IEEE Transactions on Power Systems, 2014, 29, 785-793.	4.6	138
89	Dynamic Modeling and Control of Interleaved Flyback Module-Integrated Converter for PV Power Applications. IEEE Transactions on Industrial Electronics, 2014, 61, 1377-1388.	5.2	123
90	A Novel Fault-Tolerant DFIG-Based Wind Energy Conversion System for Seamless Operation During Grid Faults. IEEE Transactions on Power Systems, 2014, 29, 1296-1305.	4.6	55

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91	Two Degrees of Freedom Active Damping Technique for LCL Filter-Based Grid Connected PV Systems. IEEE Transactions on Industrial Electronics, 2014, 61, 2795-2803.	5.2	160
92	Planning active distribution networks considering multi-DG configurations. , 2014, , .		2
93	ADALINE based control strategy for three-phase three-wire UPQC system. , 2014, , .		5
94	Optimal Current Harmonic Extractor Based on Unified ADALINs for Shunt Active Power Filters. IEEE Transactions on Power Electronics, 2014, 29, 6383-6393.	5.4	61
95	Application of Artificial Neural Networks for Shunt Active Power Filter Control. IEEE Transactions on Industrial Informatics, 2014, 10, 1765-1774.	7.2	128
96	Optimal Sizing of UPQC Considering VA Loading and Maximum Utilization of Power-Electronic Converters. IEEE Transactions on Power Delivery, 2014, 29, 1490-1498.	2.9	63
97	Artificial-Neural-Network-Based Phase-Locking Scheme for Active Power Filters. IEEE Transactions on Industrial Electronics, 2014, 61, 3857-3866.	5.2	77
98	Demand Response Mismatch (DRM): Concept, Impact Analysis, and Solution. IEEE Transactions on Smart Grid, 2014, 5, 1734-1743.	6.2	26
99	Voltage Booster Schemes for Fault Ride-Through Enhancement of Variable Speed Wind Turbines. IEEE Transactions on Sustainable Energy, 2013, 4, 1071-1081.	5.9	79
100	A comprehensive design and implementation of Doubly Fed Induction Generator for a micro-level Wind Energy Conversion System. , 2013, , .		2
101	Basic design of UAE's smart microgrid and the simulation analysis using PSCAD. , 2013, , .		4
102	A Noniterative Optimized Algorithm for Shunt Active Power Filter Under Distorted and Unbalanced Supply Voltages. IEEE Transactions on Industrial Electronics, 2013, 60, 5376-5390.	5.2	67
103	A New P - Q - V Droop Control Method for an Interline Photovoltaic (I-PV) Power System. IEEE Transactions on Power Delivery, 2013, 28, 658-668.	2.9	43
104	A Protection Coordination Index for Evaluating Distributed Generation Impacts on Protection for Meshed Distribution Systems. IEEE Transactions on Smart Grid, 2013, 4, 1523-1532.	6.2	127
105	Fixed and variable power angle control methods for unified power quality conditioner: operation, control and impact assessment on shunt and series inverter kVA loadings. IET Power Electronics, 2013, 6, 1299-1307.	1.5	34
106	Enhancing power quality and stability of future smart grid with intermittent renewable energy sources using electric springs. , 2013, , .		50
107	Adaptive control of grid connected photovoltaic inverter for maximum VA utilization. , 2013, , .		19
108	Localization in Wireless Sensor Networks by Cross Entropy Method. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2013, , 103-118.	0.2	3

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109	Localization in wireless sensor networks by constrained simultaneous perturbation stochastic approximation technique. , 2012, , .		5
110	Intelligent edge detector based on multiple edge maps. , 2012, , .		1
111	Interline photovoltaic (I-PV) power plants for voltage unbalance compensation. , 2012, , .		7
112	Control of single-phase UPQC in synchronous d-q reference frame. , 2012, , .		10
113	Reactive power estimation based control of self supported dynamic voltage restorer (DVR). , 2012, , .		9
114	Enhancing Electric Power Quality Using UPQC: A Comprehensive Overview. IEEE Transactions on Power Electronics, 2012, 27, 2284-2297.	5.4	567
115	Novel control strategies for SSR mitigation and damping power system oscillations in a series compensated wind park. , 2012, , .		14
116	Topology review of single phase grid-connected module integrated converters for PV applications. , 2012, , .		37
117	Achieving maximum possible power factor with single-phase shunt active power filter under distorted supply condition. , 2012, , .		4
118	Impact of distributed generation penetration on grid current harmonics considering non-linear loads. , 2012, , .		27
119	Overview of maximum power point tracking technologies for photovoltaic power systems. , 2011, , .		79
120	Effect of variable PV power on the grid power factor under different load conditions. , 2011, , .		7
121	Estimating power losses in Dual Active Bridge DC-DC converter. , 2011, , .		19
122	Photovoltaic power plant as FACTS devices in multi-feeder systems. , 2011, , .		10
123	UPQC-S: A Novel Concept of Simultaneous Voltage Sag/Swell and Load Reactive Power Compensations Utilizing Series Inverter of UPQC. IEEE Transactions on Power Electronics, 2011, 26, 2414-2425.	5.4	196
124	Grid Interconnection of Renewable Energy Sources at the Distribution Level With Power-Quality Improvement Features. IEEE Transactions on Power Delivery, 2011, 26, 307-315.	2.9	392
125	Grid synchronisation with harmonics and reactive power compensation capability of a permanent magnet synchronous generator-based variable speed wind energy conversion system. IET Power Electronics, 2011, 4, 122.	1.5	122
126	Power quality enhancement utilising single-phase unified power quality conditioner: digital signal processor-based experimental validation. IET Power Electronics, 2011, 4, 323.	1.5	80

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127	Digital signal processor implementation and performance evaluation of split capacitor, four-leg and three H-bridge-based three-phase four-wire shunt active filters. IET Power Electronics, 2011, 4, 463.	1.5	87
128	Interline Photovoltaic (I-PV) power system " A novel concept of power flow control and management. , 2011, , .		16
129	Three-Phase and Single-Phase p-q Theories Applied to Three-Phase Shunt Active Power Filter under Different Operating Conditions: A Comparative Evaluation. International Journal of Emerging Electric Power Systems, 2010, 11, .	0.6	3
130	Implementation of single-phase synchronous d-q reference frame controller for shunt active filter under distorted voltage condition. , 2010, , .		17
131	Generalised single-phase p-q theory for active power filtering: simulation and DSP-based experimental investigation. IET Power Electronics, 2009, 2, 67-78.	1.5	185
132	A Novel Structure for Three-Phase Four-Wire Distribution System Utilizing Unified Power Quality Conditioner (UPQC). IEEE Transactions on Industry Applications, 2009, 45, 1897-1902.	3.3	133
133	Nighttime Application of PV Solar Farm as STATCOM to Regulate Grid Voltage. IEEE Transactions on Energy Conversion, 2009, 24, 983-985.	3.7	222
134	A New Control Philosophy for a Unified Power Quality Conditioner (UPQC) to Coordinate Load-Reactive Power Demand Between Shunt and Series Inverters. IEEE Transactions on Power Delivery, 2008, 23, 2522-2534.	2.9	162
135	An independent control approach for three-phase four-wire shunt active filter based on three H-bridge topology under unbalanced load conditions. Power Electronics Specialist Conference (PESC), IEEE, 2008, , .	0.0	32
136	Conceptual Study of Unified Power Quality Conditioner (UPQC). , 2006, , .		40
137	Analysis of Power Flow in UPQC during Voltage Sag and Swell Conditions for Selection of Device Ratings. , 2006, , .		29
138	A simple new control technique for unified power quality conditioner (UPQC). , 0, , .		69