

# Sayed Ali Khajehoddin

## List of Publications by Year in descending order

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92  
papers

2,496  
citations

346980

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232693

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92  
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92  
docs citations

92  
times ranked

2354  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Fault Compensation Scheme for Cascaded H-Bridge Inverter With Reduced Common Mode Voltage. IEEE Transactions on Industrial Electronics, 2023, 70, 3257-3267.	5.2	3
2	Fully Soft-Switched Non-Isolated High Step-Down DC-DC Converter With Reduced Voltage Stress and Expanding Capability. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2023, 11, 796-805.	3.7	9
3	Modeling and Stability Analysis of Single-Phase Microgrids Controlled in Stationary Frame. IEEE Transactions on Power Electronics, 2022, 37, 7759-7774.	5.4	11
4	Modified Droop Strategy for Wide Load Range Efficiency Improvement of Parallel Inverter Systems. IEEE Transactions on Power Electronics, 2022, 37, 8433-8446.	5.4	8
5	Efficient Modeling and Systematic Design of Enhanced Phase-Locked Loop Structures. IEEE Transactions on Power Electronics, 2022, 37, 9061-9072.	5.4	8
6	Load type impacts on the stability and robustness of DC microgrids. International Journal of Electrical Power and Energy Systems, 2022, 140, 108036.	3.3	6
7	A High Voltage Gain ZVT Quasi-Z-Source Converter With Reduced Voltage Stress. IEEE Transactions on Power Electronics, 2022, 37, 13696-13710.	5.4	3
8	A Power Decoupling Technique for High Power-Density Single-Phase Inverters. , 2022, , .		1
9	Design and Magnetic Optimization of Dual Active Bridge Converters for Energy Storage Application. , 2022, , .		3
10	A High-frequency Compact Zero-Voltage-Transition GaN-based Single-phase Inverter. , 2022, , .		1
11	A High-Voltage-Gain ZVS IPOS Bidirectional Converter. , 2022, , .		0
12	An Asymmetrical DAB Converter Modulation and Control Systems to Extend the ZVS Range and Improve Efficiency. IEEE Transactions on Power Electronics, 2022, 37, 12774-12792.	5.4	21
13	Reduced-Order Controllers Using Integrated Controller-Plant Dynamics Approach for Grid-Connected Inverters. IEEE Transactions on Industrial Electronics, 2021, 68, 7444-7453.	5.2	8
14	A Lossless Passive Snubber Circuit for Three-Port DC-DC Converter. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 1905-1914.	3.7	24
15	Parallel Inverter System Efficiency Improvement Using Alternative Adaptive Droop Control. , 2021, , .		1
16	Weighted Dynamic Aggregation Modeling of Induction Machine-Based Wind Farms. IEEE Transactions on Sustainable Energy, 2021, 12, 1604-1614.	5.9	27
17	Soft-Switched Single Inductor Single Stage Multiport Bidirectional Power Converter for Hybrid Energy Systems. IEEE Transactions on Power Electronics, 2021, 36, 11298-11315.	5.4	36
18	A New Approach to Steady-State Modeling, Analysis, and Design of Power Converters. IEEE Transactions on Power Electronics, 2021, 36, 12746-12768.	5.4	5

#	ARTICLE	IF	CITATIONS
19	A Low-Cost Cell-Level Differential Power Processing CMOS IC for Single Junction Photovoltaic Cells. IEEE Transactions on Power Electronics, 2021, 36, 13985-14001.	5.4	4
20	Alternative Control Approach to Achieve Fast Load-Transient Responses in DC-DC Converters. IEEE Transactions on Industrial Electronics, 2021, 68, 12668-12678.	5.2	6
21	A High Step-Up/Step-Down Input-Parallel Output-Series ZVS Bidirectional Converter With Coupled Inductors. IEEE Transactions on Power Electronics, 2021, , 1-1.	5.4	13
22	Microgrid Light-Load Efficiency Improvement Based on Online-Inverter Detection. , 2021, , .		0
23	Weighted Dynamic Aggregation Modeling of DC Microgrid Converters with Droop Control. , 2021, , .		3
24	A Single-phase Enhanced Grid-forming Controller with Converter Current Limiting. , 2021, , .		2
25	An Approach for Modeling and Stability Analysis of Single-phase Microgrids. , 2021, , .		0
26	A Modular Battery Voltage-Balancing System Using a Series-Connected Topology. IEEE Transactions on Power Electronics, 2020, 35, 5952-5964.	5.4	25
27	An Alternative Dual Active Bridge Modulation to Minimize RMS Current and Extend ZVS Range. , 2020, , .		7
28	Optimal Design of Nested Current and Voltage Loops in Grid-Connected Inverters. , 2020, , .		8
29	Stator Short-Circuit Fault Detection and Location Methods for Brushless DFIMs Using Nested-Loop Rotor Slot Harmonics. IEEE Transactions on Power Electronics, 2020, 35, 8559-8568.	5.4	18
30	A Wideband Frequency Divider With Programmable Odd/Even Division Factors and Quadrature/Symmetrical Outputs. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 1857-1866.	3.5	6
31	Alternative Approach to Analysis and Design of Series Resonant Converter at Steady State. IEEE Transactions on Industrial Electronics, 2019, 66, 4424-4435.	5.2	21
32	Vacuum-Packaged Piezoelectric Energy Harvester for Powering Smart Grid Monitoring Devices. IEEE Transactions on Industrial Electronics, 2019, 66, 4447-4456.	5.2	26
33	Grid-Supporting Inverters With Improved Dynamics. IEEE Transactions on Industrial Electronics, 2019, 66, 3655-3667.	5.2	72
34	Application of Battery Storage System to Improve Transient Responses in a Distribution Grid. , 2019, , .		3
35	A Single Stage Virtual Synchronous Machine. , 2019, , .		0
36	An Improved Damping Method for Virtual Synchronous Machines. IEEE Transactions on Sustainable Energy, 2019, 10, 1491-1500.	5.9	86

#	ARTICLE	IF	CITATIONS
37	Robust Control Design for High-Power Density PV Converters in Weak Grids. IEEE Transactions on Control Systems Technology, 2019, 27, 2361-2373.	3.2	14
38	Fault Ride-Through Capability of Voltage-Controlled Inverters. IEEE Transactions on Industrial Electronics, 2018, 65, 7933-7943.	5.2	111
39	Control and Analysis of a Modular Bridge for Battery Cell Voltage Balancing. IEEE Transactions on Power Electronics, 2018, 33, 9722-9733.	5.4	21
40	Designing Decentralized Load-Frequency Controllers: An Optimization Approach for Synchronous Generators in Islanded Grids. IEEE Industry Applications Magazine, 2018, 24, 67-74.	0.3	6
41	Application of generalized peak current controllers for active power filters and rectifiers with power factor correction. , 2018, , .		1
42	Optimal and Systematic Design of Current Controller for Grid-Connected Inverters. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2018, 6, 812-824.	3.7	58
43	The Operation of a Power Transmission Line With Injected Third Harmonic Voltage. IEEE Transactions on Power Delivery, 2017, 32, 226-233.	2.9	11
44	Control and Experiment of AC/AC Sparse Modular Multilevel Converter. IEEE Transactions on Power Delivery, 2017, 32, 1527-1534.	2.9	1
45	Fixed Switching Frequency Generalized Peak Current Control (GPCC) of DC-AC Converters. IEEE Transactions on Power Electronics, 2017, 32, 6605-6616.	5.4	12
46	Robust H <sub>∞</sub> DC link control design for high-power density converters with high-order filter in PV systems. , 2017, , .		2
47	Robust load frequency control in islanded microgrid systems using $\hat{1}/4$ -synthesis and D-K iteration. , 2016, , .		11
48	Fault ride-through capability for grid-supporting inverters. , 2016, , .		4
49	Robust decentralized voltage and frequency control of generators in islanded microgrids using $\hat{1}/4$ -synthesis. , 2016, , .		6
50	Hybrid bidirectional AC/AC multilevel converter. , 2016, , .		0
51	Control design in $\hat{1}/4$ -synthesis framework for grid-connected inverters with higher order filters. , 2016, , .		5
52	An optimization approach to design decentralized load frequency controllers for generators in islanded microgrids. , 2016, , .		1
53	Universal Controller for Three-Phase Inverters in a Microgrid. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2016, 4, 1342-1353.	3.7	54
54	Robust inverter control design in islanded microgrids using $\hat{1}/4$ -synthesis. , 2016, , .		4

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55	Accurate parametric steady state analysis and design tool for DC-DC power converters. , 2016, , .		3
56	Fixed-frequency generalized peak current control (GPCC) for inverters. , 2016, , .		1
57	Fast and Robust Single-Phase $dq$ Current Controller for Smart Inverter Applications. IEEE Transactions on Power Electronics, 2016, 31, 3968-3976.	5.4	102
58	Sparse AC/AC Modular Multilevel Converter. IEEE Transactions on Power Delivery, 2016, 31, 1195-1202.	2.9	4
59	Coil design approach for indirect-fed resonant wireless power transfer system. , 2015, , .		0
60	A bidirectional AC/AC multilevel converter. , 2015, , .		8
61	A simple DQ current controller for single-phase grid-connected inverters. , 2015, , .		8
62	A universal controller for grid-connected and autonomous operation of three-phase DC/AC converters. , 2015, , .		5
63	A voltage reference design for three-phase differential inverters. , 2014, , .		3
64	A high power density grid connected soft switched inverter. , 2014, , .		3
65	Universal control method for single phase grid-connected and islanded converters. , 2014, , .		0
66	DC-Bus Design and Control for a Single-Phase Grid-Connected Renewable Converter With a Small Energy Storage Component. IEEE Transactions on Power Electronics, 2013, 28, 3245-3254.	5.4	160
67	A Systematic Approach to DC-Bus Control Design in Single-Phase Grid-Connected Renewable Converters. IEEE Transactions on Power Electronics, 2013, 28, 3158-3166.	5.4	102
68	A New Phase-Locked Loop System for Three-Phase Applications. IEEE Transactions on Power Electronics, 2013, 28, 1208-1218.	5.4	73
69	A Power Control Method With Simple Structure and Fast Dynamic Response for Single-Phase Grid-Connected DG Systems. IEEE Transactions on Power Electronics, 2013, 28, 221-233.	5.4	80
70	Phase-staggered multiple ZVS inverters for grid-connected PV systems. , 2013, , .		3
71	A resonant controller with robust features for digital implementations at low sampling frequency. , 2012, , .		6
72	A Resonant Controller With High Structural Robustness for Fixed-Point Digital Implementations. IEEE Transactions on Power Electronics, 2012, 27, 3352-3362.	5.4	69

#	ARTICLE	IF	CITATIONS
73	Problems of Startup and Phase Jumps in PLL Systems. IEEE Transactions on Power Electronics, 2012, 27, 1830-1838.	5.4	197
74	Addressing DC Component in PLL and Notch Filter Algorithms. IEEE Transactions on Power Electronics, 2012, 27, 78-86.	5.4	335
75	Derivation and Design of In-Loop Filters in Phase-Locked Loop Systems. IEEE Transactions on Instrumentation and Measurement, 2012, 61, 930-940.	2.4	94
76	A frequency adaptive resonant controller for fixed point digital implementation at high sampling frequency. , 2011, , .		3
77	Linear quadratic output tracking and disturbance rejection. International Journal of Control, 2011, 84, 1442-1449.	1.2	53
78	Comparison of two methods for addressing DC component in phase-locked loop (PLL) systems. , 2011, , .		26
79	Apparent Power, Power Factor, and Current Factor in Single-phase Circuits with Non-negligible Line Impedances. Electric Power Components and Systems, 2011, 39, 423-445.	1.0	1
80	A Control Design Approach for Three-Phase Grid-Connected Renewable Energy Resources. IEEE Transactions on Sustainable Energy, 2011, 2, 423-432.	5.9	76
81	Efficient linear controller design for power electronic converters. , 2010, , .		4
82	Control of three-phase converters for grid-connected renewable energy systems using feedback linearization technique. , 2010, , .		6
83	A nonlinear approach to control instantaneous power for single-phase grid-connected photovoltaic systems. , 2009, , .		6
84	Full Utilization of the Inverter in Split-Phase Drives by Means of a Dual Three-Phase Space Vector Classification Algorithm. IEEE Transactions on Industrial Electronics, 2009, 56, 120-129.	5.2	92
85	A robust power decoupler and maximum power point tracker topology for a grid-connected photovoltaic system. Power Electronics Specialist Conference (PESC), IEEE, 2008, , .	0.0	21
86	A Novel Topology and Control Strategy for Maximum Power Point Trackers and Multi-String Grid-Connected PV Inverters. , 2008, , .		20
87	A Simple Voltage Balancing Scheme for m-Level Diode-Clamped Multilevel Converters Based on a Generalized Current Flow Model. IEEE Transactions on Power Electronics, 2008, 23, 2248-2259.	5.4	81
88	Is the Unity Power Factor Realizable at the Load Terminals?. , 2008, , .		2
89	Analysis and Implementation of a Power Switch for Telecommunication Applications. , 2008, , .		0
90	Concept of Best Energy Transfer Scenario and a True Expression for Power Factor. , 2008, , .		1

#	ARTICLE	IF	CITATIONS
91	A Sparse Multilevel Matrix Converter Based on Diode-Clamped Topology. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2007, , .	0.0	3
92	The Application of the Cascaded Multilevel Converters in Grid Connected Photovoltaic Systems. , 2007, , .		48