roghayeh Gavagsaz-Ghoachani

List of Publications by Year
in descending order

70	1,021	516215 16	610482 24
papers	citations	h-index	g-index

70	70	70	725
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ultrasonic nano-emulsification â€“ A review. Ultrasonics Sonochemistry, 2019, 52, 88-105.	3.8	122
2	Control of a Hybrid Energy Source Comprising a Fuel Cell and Two Storage Devices Using Isolated Three-Port Bidirectional DCâ€“DC Converters. IEEE Transactions on Industry Applications, 2015, 51, 491-497.	3.3	87
3	Stability Analysis and Dynamic Performance Evaluation of a Power Electronics-Based DC Distribution System With Active Stabilizer. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2016, 4, 93-102.	3.7	74
4	Discrete-Time Tool for Stability Analysis of DC Power Electronics-Based Cascaded Systems. IEEE Transactions on Power Electronics, 2017, 32, 652-667.	5.4	66
5	Hybrid maximum power point tracking algorithm with improved dynamic performance. Renewable Energy, 2019, 130, 982-991.	4.3	62
6	Asymptotic Stability Analysis of the Limit Cycle of a Cascaded DCâ€“DC Converter Using Sampled Discrete-Time Modeling. IEEE Transactions on Industrial Electronics, 2016, 63, 2477-2487.	5.2	40
7	DC Power Networks With Very Low Capacitances for Transportation Systems: Dynamic Behavior Analysis. IEEE Transactions on Power Electronics, 2013, 28, 5865-5877.	5.4	35
8	Discrete-Time Modeling, Stability Analysis, and Active Stabilization of DC Distribution Systems With Multiple Constant Power Loads. IEEE Transactions on Industry Applications, 2016, 52, 4888-4898.	3.3	34
9	Observer and Lyapunov-Based Control for Switching Power Converters With LC Input Filter. IEEE Transactions on Power Electronics, 2019, 34, 7053-7066.	5.4	27
10	Flatness based control of an isolated three-port bidirectional DC-DC converter for a fuel cell hybrid source. , 2011, , .		24
11	Bifurcation Analysis and Stabilization of DC Power Systems for Electrified Transportation Systems. IEEE Transactions on Transportation Electrification, 2016, 2, 86-95.	5.3	24
12	Estimation of the bifurcation point of a modulatedâ€hysteresis currentâ€controlled DCâ€“DC boost converter: stability analysis and experimental verification. IET Power Electronics, 2015, 8, 2195-2203.	1.5	22
13	A Lyapunov Function for Switching Command of a DCâ€“DC Power Converter With an LC Input Filter. IEEE Transactions on Industry Applications, 2017, 53, 5041-5050.	3.3	22
14	Predicting the onset of bifurcation and stability study of a hybrid current controller for a boost converter. Mathematics and Computers in Simulation, 2013, 91, 262-273.	2.4	21
15	New Method to Filter HF Current Ripples Generated by Current-Fed DC/DC Converters. IEEE Transactions on Power Electronics, 2011, 26, 3832-3842.	5.4	20
16	Active stabilisation design of DCâ€“DC converters with constant power load using a sampled discreteâ€time model: stability analysis and experimental verification. IET Power Electronics, 2018, 11, 1519-1528.	1.5	20
17	Proposed system based on a three-level boost converter to mitigate voltage imbalance in photovoltaic power generation systems. IEEE Transactions on Power Electronics, 2021, , 1-1.	5.4	20
18	An e-learning tool for power control and energy management in DC microgrids. , 2013, , .		17

#	Article	IF	Citations
19	Power-electronics learning through experiment and simulation: DC-DC converters. , 2016, , .		15
20	Stability Analysis and Active Stabilization of DC Power Systems for Electrified Transportation Systems, Taking into Account the Load Dynamics. IEEE Transactions on Transportation Electrification, 2017, 3, 3-12.	5.3	15
21	Stability analysis of a tightly controlled load supplied by a DC-DC boost converter with a modified sliding mode controller. , 2014, , .		14
22	Discrete-time modelling, stability analysis, and active stabilization of dc distribution systems with constant power loads. , 2015, , .		14
23	Step-By-Step Guide to Model Photovoltaic Panels: An Up-To-Date Comparative Review Study. IEEE Journal of Photovoltaics, 2022, 12, 915-928.	1.5	14
24	Energy management and stabilization of a hybrid DC microgrid for transportation applications. , 2016, , .		13
25	A Proposed Configuration Based on Three-Level Boost Converter for Unbalancing Voltage issue in Photovoltaic Systems Operation. , 2019, , .		13
26	Stability analysis of hybrid AC/DC power systems for more electric aircraft. , 2016, , .		12
27	Generalisation of an averaged model approach to estimate the periodâ€doubling bifurcation onset in power converters. IET Power Electronics, 2016, 9, 977-988.	1.5	11
28	Study of two-phase interleaved boost converter using coupled inductors for a fuel cell. , 2013, , .		10
29	A Fixed-Frequency Optimization of PWM Current Controllerâ€"Modeling and Design of Control Parameters. IEEE Transactions on Transportation Electrification, 2018, 4, 671-683.	5.3	10
30	Generalization of a DCâ€"DC Modular Converter Topology for Fuel Cell Applications. IEEE Transactions on Industry Applications, 2022, 58, 2255-2267.	3.3	10
31	Comparison of two nonlinear control strategies for a hybrid source system using an isolated three-port bidirectional DC-DC converter. , 2011, , .		9
32	Switching command based on Lyapunov function for a boost converter with an LC input filter in dc microgrid application. , 2015, , .		8
33	Investigating the transfer of scientific content with the help of comic stories at a level of higher education. , 2021, , .		8
34	Stability analysis, discrete time modeling and active stabilization of DC-DC converter, taking into account the load dynamics. , 2015, , .		7
35	Commandability of a modular Three-Level Boost Converter in Fuel-cell Systems. , 2019, , .		7
36	Effect of wide observation of nature in renewable energy engineering education. , 2021, , .		7

#	Article	IF	Citations
37	Lyapunov-based control and observer of a boost converter with LC input filter and stability analysis. , 2016, , .		6
38	Hybrid Fuel Cell/Supercapacitor using a Series Converter. , 2019, , .		6
39	Operating Mode Analysis of a Modular Converter: Experimental Validation. IEEE Transactions on Industry Applications, 2022, 58, 4889-4902.	3.3	6
40	Current-fed DC-DC converter with Flatness based control for renewable energy. , 2014, , .		5
41	Dynamic analysis of an on-board DC distribution system with active stabilizer. , 2015, , .		5
42	Stability issue of DC-DC converters with input LC filter via flatness-based control. , 2016, , .		5
43	Attractive educational strategy based on the story that hybrid vehicles integrated with the human family. , 2021, , .		5
44	Cascaded Controller for Controlling DC Bus Voltage in Mismatched Input Powers. IEEE Transactions on Power Electronics, 2022, 37, 13834-13847.	5.4	5
45	Control of a hybrid energy source comprising a fuel cell and two storage devices using isolated three-port bidirectional DC-DC converters. , 2013, , .		4
46	Improved performance of a control using switching command based on Lyapunov functions of a boost converter with an LC input filter. , 2016, , .		4
47	Transfer of a scientific concept in the field of renewable energy with a creative group work. , 2021, , .		4
48	Operation and Analysis of a Modular Converter for Photovoltaic or Fuel cell systems. , 2021, , .		3
49	Transformer for an N-port isolated bidirectional DC-DC converter. , 2013, , .		2
50	Comparative study of two control methods for a boost converter with LC input filter: Indirect sliding-mode and flatness based control. , 2015, , .		2
51	Control of a Two-Phase Interleaved Boost Converter with Input LC Filter for Fuel Cell Vehicle Applications. , 2017, , .		2
52	Hybrid Power Source FC/SC with Single-Loop Control Approach: Reference Trajectories Generation. , 2017, , .		2
53	Improvement of the Commandability zones of A Modular DC-DC Converter Based On A Three-Level Boost Converter. , 2020, , .		2
54	A DC-DC modular structure converter for photovoltaic applications. , 2021, , .		2

#	Article	IF	Citations
55	Pulse-width modulation technique for a multi-input dc-dc boost converter. , 2021, , .		2
56	Topology of Three DC-DC Modular Converters Based on Three-level Converters for Fuel Cell Systems. , 2021, , .		2
57	Evaluation of the performance of a controller based on indirect-sliding mode in a renewable system. , 2021, , .		2
58	Lyapunov functionâ€based improved switching command for a boost converter with an inductorâ€“capacitor input filter. IET Power Electronics, 2020, 13, 3940-3953.	1.5	2
59	Robust control based on flatness properties for a dc-dc switching power converter. , 2020, , .		2
60	Large-signal average modeling of 2-module Converter for renewable energy applications. , 2021, , .		2
61	Current controller design for high switching frequency converters. , 2016, , .		1
62	Maximum power point tracking in small wind turbine with permanent magnet generator using voltage sensor. , 2019, , .		1
63	Investigation of three-module converter structure in photovoltaic systems. , 2021, , .		1
64	Ripple capacitor's voltage analysis on two-input three-level boost converter. , 2022, , .		1
65	Effect of fault in output capacitor due to its parasitic resistance in modular DC-DC three-level converter. , 2022, , .		1
66	Cascade control with flatness-based charge MPPT control applied to photovoltaic boost converters. , 2021, , .		0
67	Stability and robustness investigation of a modular system using a large-signal average model. , 2021, , .		0
68	Control investigation of a modular system using two-loop control in renewable energy systems. , 2022, , .		0
69	Effect of the parasitic resistances on the voltage gain in a dc-dc modular system. , 2022, , .		0
70	Comparison behavior of the capacitor voltages balancing using linear and nonlinear controllers. , 2022, , .		0