Alberto Reatti

List of Publications by Year
in descending order

66 papers	1,371 citations	394421 19 h-index	454955 30 g-index
66 all docs	66 docs citations	66 times ranked	1010 citing authors

#	ARTICLE	IF	CITATIONS
1	Electrical Characterization Under Harsh Environment of DC–DC Converters Used in Diagnostic Systems. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-11.	4.7	8
2	Model-Based Power Management for Smart Farming Wireless Sensor Networks. IEEE Transactions on Circuits and Systems I: Regular Papers, 2022, 69, 2235-2245.	5.4	4
3	Machine Learning-Based Monitoring of DC-DC Converters in Photovoltaic Applications. Algorithms, 2022, 15, 74.	2.1	14
4	Protection From Indirect Lightning Effects for Power Converters in Avionic Environment: Modeling and Experimental Validation. IEEE Transactions on Industrial Electronics, 2021, 68, 7850-7862.	7.9	12
5	Design of a Wireless Charging System for Online Battery Spectroscopy. Energies, 2021, 14, 218.	3.1	33
6	Zero Voltage Switching Condition in Class-E Inverter for Capacitive Wireless Power Transfer Applications. Energies, 2021, 14, 911.	3.1	19
7	Pareto Optimization of Planar Circular Coil for EV Wireless Charging. , 2021, , .		1
8	Effect of Pulses Distribution in a Buck Converter Controlled with Pulse Skipping Modulation. , 2021, , .		4
9	Improved Spice Simulation of Dynamic Core Losses for Ferrites With Nonuniform Field and Its Experimental Validation. IEEE Transactions on Industrial Electronics, 2021, 68, 12069-12078.	7.9	20
10	Simulation of Pulse Width Modulation DC-DC Converters Through Symbolic Analysis Techniques. Advances in Science, Technology and Engineering Systems, 2021, 6, 275-282.	0.5	1
11	Time-Domain Circuit Modelling for Hybrid Supercapacitors. Energies, 2021, 14, 6837.	3.1	24
12	Influence of Non-Linearity in Losses Estimation of Magnetic Components for DC-DC Converters. Energies, 2021, 14, 6498.	3.1	12
13	Class-E Inverters for Capacitive Wireless Power Transfer in Charger Circuit Applications. , 2021, , .		2
14	Effects of Control Strategies on AC-DC Conversion Efficiency in EV Wireless Charging. , 2021, , .		2
15	A Secondary-Side Controlled Electric Vehicle Wireless Charger. Energies, 2020, 13, 6527.	3.1	32
16	Computationally Efficient Modeling of DC-DC Converters for PV Applications. Energies, 2020, 13, 5100.	3.1	29
17	Probabilistic evaluation of power converters as support in their design. IET Power Electronics, 2020, 13, 4542-4550.	2.1	21
18	Smart Active Envelope Solutions, Integration of Photovoltaic/Thermal Solar Concentrator in the Building Façade. Innovative Renewable Energy, 2020, , 459-467.	0.4	0

#	Article	IF	Citations
19	Efficient Power Management Strategies for High-Energy-Demanding Industrial Plants. Lecture Notes in Electrical Engineering, 2020, , 279-297.	0.4	0
20	Zero-Voltage Switching Operation of Transformer Class-E Inverter at Any Coupling Coefficient. IEEE Transactions on Industrial Electronics, 2019, 66, 1809-1819.	7.9	61
21	MLMVNNN for Parameter Fault Detection in PWM DCâ€"DC Converters and Its Applications for Buck and Boost DCâ€"DC Converters. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 439-449.	4.7	41
22	A Laplace transform approach to the simulation of DCâ€ĐC converters. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2019, 32, e2618.	1.9	9
23	Sliding-Mode Voltage Control of Dynamic Power Supply for CCM. , 2019, , .		10
24	Application of modal analysis methods to the design of wireless power transfer systems. Meccanica, 2019, 54, 321-331.	2.0	20
25	A symbolic program for parameter identifiability analysis in systems modeled via equivalent linear timeâ€invariant electrical circuits, with application to electromagnetic harvesters. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2019, 32, e2251.	1.9	6
26	Improvement of Power Flow Analysis based on Currents' Physical Component (CPC) Theory. , 2018, , .		5
27	Analysis and Design of Choke Inductors for Switched-Mode Power Inverters. IEEE Transactions on Industrial Electronics, 2018, 65, 2234-2244.	7.9	57
28	Modelling of inductive resonant transfer for electric vehicles. International Journal of Electric and Hybrid Vehicles, 2018, 10, 131.	0.3	8
29	A Current-Source Sinusoidal Gate Driver for High-Frequency Applications. , 2018, , .		8
30	Testability Analysis Based on Complex-Field Fault Modeling. , 2018, , .		3
31	Nonlinear Modeling and Voltage-Mode Control of DC-DC Boost Converter for CCM. , 2018, , .		16
32	Integration and architectural issues of a photovoltaic/thermal linear solar concentrator. Solar Energy, 2018, 169, 362-373.	6.1	11
33	Duty Cycle and Input-to-Output Voltage Transfer Functions of Tapped-Inductor Buck DC-DC Converter. , 2018, , .		6
34	Modelling of inductive resonant transfer for electric vehicles. International Journal of Electric and Hybrid Vehicles, 2018, 10, 131.	0.3	1
35	Magnetising inductance of multipleâ€output flyback dcâ€"dc convertor for discontinuousâ€conduction mode. IET Power Electronics, 2017, 10, 451-461.	2.1	32
36	Inductive power transfer: Through a bondgraph analogy, an innovative modal approach. , 2017, , .		21

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37	Wireless power recharge for underwater robotics. , 2017, , .		15
38	Application of induction power recharge to garbage collection service. , 2017, , .		21
39	Analysis and design of full-bridge Class-DE inverter at fixed duty cycle. , 2016, , .		17
40	Average current-mode control of buck dc-dc converter with reduced control voltage ripple. , 2016, , .		15
41	Small-signal modeling of PWM dual-SEPIC dc-dc converter by circuit averaging technique. , 2016, , .		25
42	Design of class-E ZVS inverter with loosely-coupled transformer at fixed coupling coefficient. , 2016, , .		19
43	Design of choke inductor in Class-E ZVS power amplifier. , 2016, , .		10
44	Matlab PV solar concentrator performance prediction based on triple junction solar cell model. Measurement: Journal of the International Measurement Confederation, 2016, 88, 310-317.	5.0	18
45	SapWin 4.0â€"a new simulation program for electrical engineering education using symbolic analysis. Computer Applications in Engineering Education, 2016, 24, 44-57.	3.4	34
46	Practical Issues and Characterization of a Photovoltaic/Thermal Linear Focus <inline-formula> <tex-math notation="LaTeX">$20imes $ </tex-math> </inline-formula> Solar Concentrator. IEEE Transactions on Instrumentation and Measurement, 2016, 65, 2464-2475.	4.7	24
47	Linear solar PV/T concentrator monitoring system and derivation of performance index. , 2015, , .		4
48	Numerical and Experimental Analysis of a CPV/T Receiver Suitable for Low Solar Concentration Factors. Energy Procedia, 2015, 82, 724-729.	1.8	25
49	Performances Issue's Analysis of an Innovative Low Concentrated Solar Panel for Energy Production in Buildings. Energy Procedia, 2015, 81, 22-29.	1.8	3
50	Small-signal modeling of the PWM boost DC-DC converter at boundary-conduction mode by circuit averaging technique. , 2015, , .		22
51	Multilevel DC-AC converters for renewable power generation plants: Comparison, simulation, and experimental tests. , 2015, , .		4
52	Derivation of network functions for PWM DC-DC Buck converter in DCM including effects of parasitic components on diode duty-cycle. , 2015, , .		16
53	Comparison of DCM operated PWM DC-DC converter modelling methods including the effects of parasitic components on duty ratio constraint. , 2015, , .		24
54	Effects of parasitic components on diode duty cycle and small-signal model of PWM DC-DC buck converter in DCM. , 2015, , .		23

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55	SapWin 4.0 ' An enhanced tool for analysis and design of analog circuits. , 2014, , .		2
56	A circuit model for straight-to-bent microstrip line coupling. , 2008, , .		0
57	AN EQUIVALENT CIRCUIT FOR EMI PREDICTION IN PRINTED CIRCUIT BOARDS FEATURING A STRAIGHT-TO-BENT MICROSTRIP LINE COUPLING. Progress in Electromagnetics Research B, 2008, 5, 107-118.	1.0	18
58	Computer aided small-signal analysis for PWM DC-DC converters operated in discontinuous conduction mode. , 2005, , .		10
59	PWM switch model of a buck-boost converter operated under discontinuous conduction mode. , 2005, , .		17
60	Small-signal model of PWM converters for discontinuous conduction mode and its application for boost converter. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2003, 50, 65-73.	0.1	81
61	Comparison of various methods for calculating the AC resistance of inductors. IEEE Transactions on Magnetics, 2002, 38, 1512-1518.	2.1	135
62	Low-cost high power-density electronic ballast for automotive HID lamp. IEEE Transactions on Power Electronics, 2000, 15, 361-368.	7.9	78
63	Analysis and design of a current-driven two-inductor ZCS low di/sub D//dt full-wave rectifier. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 1996, 43, 745-759.	0.1	8
64	Class E full-wave low dv/dt rectifier. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 1993, 40, 73-85.	0.1	32
65	Modeling Litz-wire winding losses in high-frequency power inductors. , 0, , .		96
66	Neural network based model of a PV array for the optimum performance of PV system. , 0, , .		22