John G Hayes

List of Publications by Year
in descending order

37 papers	939 citations	759233 12 h-index	996975 15 g-index
37 all docs	37 docs citations	37 times ranked	957 citing authors

#	Article	IF	Citations
1	Power-Factor-Corrected Single-Stage Inductive Charger for Electric Vehicle Batteries. IEEE Transactions on Industrial Electronics, 2007, 54, 1217-1226.	7.9	177
2	Simplified electric vehicle power train models and range estimation. , 2011, , .		88
3	Revised Magnetics Performance Factors and Experimental Comparison of High-Flux Materials for High-Current DCâ€“DC Inductors. IEEE Transactions on Power Electronics, 2011, 26, 2112-2126.	7.9	87
4	An Adaptive Digital-Control Scheme for Improved Active Power Filtering Under Distorted Grid Conditions. IEEE Transactions on Industrial Electronics, 2018, 65, 988-999.	7.9	64
5	CCTT-Core Split-Winding Integrated Magnetic for High-Power DCâ€“DC Converters. IEEE Transactions on Power Electronics, 2013, 28, 4970-4984.	7.9	61
6	CCM and DCM Operation of the Interleaved Two-Phase Boost Converter With Discrete and Coupled Inductors. IEEE Transactions on Power Electronics, 2015, 30, 6551-6567.	7.9	60
7	Cycle Testing of Supercapacitors for Long-Life Robust Applications. IEEE Transactions on Power Electronics, 2015, 30, 2505-2516.	7.9	59
8	Simplified electric vehicle powertrain model for range and energy consumption based on EPA coast-down parameters and test validation by Argonne National Lab data on the Nissan Leaf. , 2014, , .		48
9	Magnetic material selection for EMI filters. , 2017, , .		42
10	Supercapacitor Testing for Power Smoothing in a Variable Speed Offshore Wave Energy Converter. IEEE Journal of Oceanic Engineering, 2012, 37, 301-308.	3.8	34
11	Comparison of 8-kW CCTT IM and Discrete Inductor Interleaved Boost Converter for Renewable Energy Applications. IEEE Transactions on Industry Applications, 2015, 51, 2455-2469.	4.9	23
12	Small-Signal Model of the Two-Phase Interleaved Coupled-Inductor Boost Converter. IEEE Transactions on Power Electronics, 2018, 33, 8052-8064.	7.9	22
13	Comparison of Test Methods for Characterization of High-Leakage Two-Winding Transformers. IEEE Transactions on Industry Applications, 2009, 45, 1729-1741.	4.9	20
14	Fuel cell vehicle energy management strategy based on the cost of ownership. IET Electrical Systems in Transportation, 2019, 9, 226-236.	2.4	17
15	Measurement Methods for High-Frequency Characterizations of Permeability, Permittivity, and Core Loss of Mn-Zn Ferrite Cores. IEEE Transactions on Power Electronics, 2022, 37, 15152-15162.	7.9	17
16	A rapid prototyping tool for load and source emulation in a microgrid test laboratory. , 2014, , .		16
17	Digital control of an interleaved BCM boost PFC converter with fast transient response at low input voltage. , 2017, , .		11
18	A Study of Flux Distribution and Impedance in Solid and Laminar Ferrite Cores. , 2019, , .		10

#	Article	IF	Citations
19	Digital Closed-Loop Control Strategy to Maintain the Phase Shift of a Multi-Channel BCM Boost Converter for PFC Applications. IEEE Transactions on Power Electronics, 2019, 34, 7001-7012.	7.9	10
20	A Practical Method to Define High Frequency Electrical Properties of MnZn Ferrites. , 2020, , .		9
21	Adaptive resonant current-control for active power filtering within a microgrid. , 2014, , .		8
22	Analysis of electric vehicle powertrain simulators for fuel consumption calculations. , 2016, , .		8
23	Discontinuous conduction mode operation of the two-phase integrated-magnetic boost converter. , 2014, , .		7
24	CCM and DCM operation of the integrated-magnetic interleaved two-phase boost converter. , 2014, , .		7
25	Comparison of CCTT-core split-winding integrated magnetic and discrete inductors for high-power DC-DC converters. , 2013, , .		6
26	Load and source electronic emulation using resonant current control for testing in a microgrid laboratory. , 2014, , .		5
27	Small-signal model and control of the interleaved two-phase coupled-inductor boost converter. , 2016, , .		5
28	A digital closed-loop control strategy for maintaining the 180Â° phase shift of an interleaved BCM boost converter for PFC applications. , 2017, , .		4
29	Kinetic Energy Storage for High Reliability Power Supply Back-up. IEEE Applied Power Electronics Conference and Exposition, 2007, , .	0.0	3
30	Comparison of Test Methods for Characterisation of a Doubly-Fed Induction Machine. , 2008, , .		2
31	Comparison of Test Methods for Characterization of Doubly Fed Induction Machines. IEEE Transactions on Industry Applications, 2010, 46, 1936-1949.	4.9	2
32	CCTT-core split-winding integrated magnetic interleaved boost converter for renewable energy applications. , 2013, , .		2
33	Optimized control of high-performance servo-motor drives in the field-weakening region. , 2016, , .		2
34	Improved zero-crossing distortion of a boundary-conduction-mode boost converter with digital average-current-mode control. , 2018, , .		2
35	Comparison of CCTT split-winding and EE integrated magnetics for high-power dc-dc converters. , 2011, , .		1
36	Simplified electric vehicle models for use in undergraduate teaching and research. , 2014, , .		0

#	Article	IF	Citations
37	Using Feedforward Digital Control to Improve the Power Quality of a Three-Channel BCM Boost Converter for PFC Applications. , 2019, , .		0