

Ausias GarrigÃ³s

List of Publications by Year in descending order

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65
docs citations

65
times ranked

893
citing authors

#	ARTICLE	IF	CITATIONS
1	Electric Vehicle Battery Life Extension Using Ultracapacitors and an FPGA Controlled Interleaved Buck-Boost Converter. IEEE Transactions on Power Electronics, 2013, 28, 5940-5948.	7.9	168
2	In-Site Real-Time Photovoltaic V Curves and Maximum Power Point Estimator. IEEE Transactions on Power Electronics, 2013, 28, 1234-1240.	7.9	77
3	Real time estimation of photovoltaic modules characteristics and its application to maximum power point operation. Renewable Energy, 2007, 32, 1059-1076.	8.9	65
4	Self-Powered 380 V DC SiC Solid-State Circuit Breaker and Fault Current Limiter. IEEE Transactions on Power Electronics, 2019, 34, 9600-9608.	7.9	41
5	Modeling the Sequential Switching Shunt Series Regulator. IEEE Power Electronics Letters, 2005, 3, 7-13.	0.7	37
6	Analytical resolution of the electrical four-parameters model of a photovoltaic module using small perturbation around the operating point. Renewable Energy, 2012, 43, 83-89.	8.9	36
7	High-Efficiency Regulation Method for a Zero-Current and Zero-Voltage Current-Fed Push-Pull Converter. IEEE Transactions on Power Electronics, 2011, 26, 444-452.	7.9	34
8	5kW DC/DC converter for hydrogen generation from photovoltaic sources. International Journal of Hydrogen Energy, 2010, 35, 6123-6130.	7.1	33
9	Combined maximum power point tracking and output current control for a photovoltaic-electrolyser DC/DC converter. International Journal of Hydrogen Energy, 2014, 39, 20907-20919.	7.1	29
10	Soft Switching Bidirectional Converter for Battery Discharging-Charging. , 0, , .		27
11	Interleaved multi-phase and multi-switch boost converter for fuel cell applications. International Journal of Hydrogen Energy, 2015, 40, 8419-8432.	7.1	27
12	Bidirectional High-Efficiency Nonisolated Step-Up Battery Regulator. IEEE Transactions on Aerospace and Electronic Systems, 2011, 47, 2230-2239.	4.7	24
13	Interleaved, switched-inductor, multi-phase, multi-device DC/DC boost converter for non-isolated and high conversion ratio fuel cell applications. International Journal of Hydrogen Energy, 2019, 44, 12783-12792.	7.1	24
14	High-Power Battery Discharge Regulator for Space Applications. IEEE Transactions on Industrial Electronics, 2010, 57, 3935-3943.	7.9	20
15	Non-isolated multiphase boost converter for a fuel cell with battery backup power system. International Journal of Hydrogen Energy, 2011, 36, 6259-6268.	7.1	20
16	Bidirectional, Interleaved, Multiphase, Multidevice, Soft-Switching, FPGA-Controlled, Buck-Boost Converter With PWM Real-Time Reconfiguration. IEEE Transactions on Power Electronics, 2018, 33, 9710-9721.	7.9	18
17	Influence of the Parasitic Solar Array Capacitance in the Sequential Switching Shunt Series Regulator. , 0, , .		17
18	A new Sequential Switching Shunt Regulator Digital Shunt Regulator (S3R-DSR) for Solar Array Regulators. , 2006, , .		16

#	ARTICLE	IF	CITATIONS
19	The Sequential Switching Shunt Maximum Power Regulator and its Application in the Electric Propulsion System of a Spacecraft. , 2007, , .		16
20	Optimized topology for high efficiency battery discharge regulator. IEEE Transactions on Aerospace and Electronic Systems, 2008, 44, 1511-1521.	4.7	16
21	Designing Arduino electronic shields: Experiences from secondary and university courses. , 2017, , .		16
22	Thin-film silicon detectors for particle detection. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 1284-1291.	0.8	15
23	A Power Conditioning Unit for High Power GEO Satellites based on the Sequential Switching Shunt Series Regulator. , 0, , .		15
24	An interleaved, FPGA-controlled, multi-phase and multi-switch synchronous boost converter for fuel cell applications. International Journal of Hydrogen Energy, 2015, 40, 12447-12456.	7.1	15
25	Direct coupling photovoltaic power regulator for stand-alone power systems with hydrogen generation. International Journal of Hydrogen Energy, 2010, 35, 10127-10137.	7.1	14
26	Characterization of 13 and 30 ¹ / ₄ μm thick hydrogenated amorphous silicon diodes deposited over CMOS integrated circuits for particle detection application. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 518, 357-361.	1.6	13
27	High power passive soft switched interleaved boost converters. , 0, , .		12
28	A novel low noise hydrogenated amorphous silicon pixel detector. Journal of Non-Crystalline Solids, 2004, 338-340, 729-731.	3.1	12
29	Bidirectional Coupled Inductors Step-up Converter for Battery Discharging-Charging. , 0, , .		12
30	New High Power / High Voltage Battery-Free Bus for Electrical Propulsion in Satellites. , 2007, , .		10
31	Control loop design of the Sequential Switching Shunt Series Regulator. , 0, , .		9
32	Two-Stage MPPT Power Regulator for Satellite Electrical Propulsion System. IEEE Transactions on Aerospace and Electronic Systems, 2011, 47, 1617-1630.	4.7	9
33	System model of the sequential switching shunt series regulator for spacecraft regulated high power busses. , 0, , .		8
34	Bidirectional High-Power High-Efficiency non-isolated step-up DC-DC Converter. , 0, , .		8
35	Phase Margin Degradation of a Peak Current Controlled Converter at Reduced Duty Cycle. IEEE Transactions on Power Electronics, 2010, 25, 863-874.	7.9	8
36	LVDC SiC MOSFET Analog Electronic Fuse With Self-Adjusting Tripping Time Depending on Overcurrent Condition. IEEE Transactions on Industrial Electronics, 2022, 69, 8472-8480.	7.9	8

#	ARTICLE	IF	CITATIONS
37	SiC MOSFET vs SiC/Si Cascode short circuit robustness benchmark. Microelectronics Reliability, 2019, 100-101, 113429.	1.7	7
38	New Power Conditioning System for Battery-free Satellite Buses with Maximum Power Point Tracking. IEEE Applied Power Electronics Conference and Exposition, 2007, , .	0.0	6
39	A generic FPGA-based PWM generator with automatic device fault recovery for fuel cell, interleaved, multi-phase and multi-switch DC/DC boost converters. International Journal of Hydrogen Energy, 2017, 42, 13876-13888.	7.1	6
40	System-on-Chip for Real-Time Satellite Photovoltaic Curves Telemetry. IEEE Transactions on Industrial Informatics, 2018, 14, 951-957.	11.3	6
41	Interleaved, Switched Inductor and High-Gain Wide Bandgap Based Boost Converter Proposal. Energies, 2021, 14, 800.	3.1	6
42	Circuit proposals for high-voltage latching current limiters. , 2019, , .		5
43	Latching Current Limiter for Space Platform Power Distribution Using a Low-Voltage p-MOSFET and a Normally-ON SiC JFET. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 5464-5473.	5.4	5
44	PV parameter identification using reduced I-V data. , 2017, , .		4
45	Guest Editorial Emerging Electric Machines and Drives for Smart Energy Conversion. IEEE Transactions on Energy Conversion, 2018, 33, 1931-1933.	5.2	4
46	On the design of a multiple-output DC/DC converter for the PHI experiment on-board of solar orbiter. , 2013, , .		3
47	SiC Based SSPC for High Voltage Space Applications. , 2018, , .		3
48	Photovoltaic-Driven SiC MOSFET Circuit Breaker with Latching and Current Limiting Capability. Energies, 2019, 12, 4585.	3.1	3
49	Single Point Failure Free Interleaved Synchronous Buck Converter for Microsatellite Electrolysis Propulsion. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 5371-5380.	5.4	3
50	Design of a power conditioning unit for a Stirling generator in space applications. , 2012, , .		2
51	Evaluation of Gallium Nitride Transistors in Electronic Power Conditioners for TWTAs. , 2015, , .		2
52	Interleaved, Multi-Switch, Multi-Phase Boost Converter For Battery Discharge Regulators. E3S Web of Conferences, 2017, 16, 14010.	0.5	2
53	An Analog Global Maximum Power Point Tracking for photovoltaic systems: Application to nanospacecrafts. , 2017, , .		2
54	Optimized Design of 1 MHz Intermediate Bus Converter Using GaN HEMT for Aerospace Applications. Energies, 2020, 13, 6583.	3.1	2

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55	Sequential Switching Shunt Regulator Parallel Power Processing Control for High Capacitance Solar Arrays. <i>Energies</i> , 2021, 14, 429.	3.1	2
56	Hydrogen back-up power system with photovoltaic direct energy transfer regulation and interleaved boost for space applications. , 2012, , .		1
57	Benefits and Drawbacks of A High Frequency GAN ZVS Converter. <i>E3S Web of Conferences</i> , 2017, 16, 14006.	0.5	1
58	SiC based solid state protection switches for space applications. , 2017, , .		1
59	SiC Based Latching Current Limiter for High Voltage Space Power Distribution Systems. , 2018, , .		1
60	Comparative Study of SiC Transistors for Active Current Limitation in S3R. <i>Elektronika Ir Elektrotehnika</i> , 2017, 23, .	0.8	1
61	Isolated two-stage passive PFC rectifier for the Radioisotope Stirling Generator. , 2013, , .		0
62	Investigation into the potential use of integrated switching regulators for low-voltage, low-power photovoltaic conversion in space applications. , 2015, , .		0
63	Analog isolated electronic dynamometer based on a magnetoresistive current sensor. <i>Review of Scientific Instruments</i> , 2017, 88, 035102.	1.3	0
64	Silicon Carbide and Magnetoresistive Technologies for Solid State Power Controllers. <i>E3S Web of Conferences</i> , 2017, 16, 12004.	0.5	0