

Alex Van den Bossche

List of Publications by Year in descending order

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66
papers

714
citations

840585

11
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642610

23
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all docs

66
docs citations

66
times ranked

619
citing authors

#	ARTICLE	IF	CITATIONS
1	Developed cascaded multilevel inverter topology to minimise the number of circuit devices and voltage stresses of switches. IET Power Electronics, 2014, 7, 459-466.	1.5	105
2	A Smart Voltage and Current Monitoring System for Three Phase Inverters Using an Android Smartphone Application. Sensors, 2017, 17, 872.	2.1	72
3	Segmentation of Magnets to Reduce Losses in Permanent-Magnet Synchronous Machines. IEEE Transactions on Magnetics, 2008, 44, 4409-4412.	1.2	69
4	Comparison of Nonoriented and Grain-Oriented Material in an Axial Flux Permanent-Magnet Machine. IEEE Transactions on Magnetics, 2010, 46, 279-285.	1.2	51
5	An Active Cell Equalization Technique for Lithium Ion Batteries Based on Inductor Balancing. , 2018, , .		50
6	An Efficient Equalizing Method for Lithium-Ion Batteries Based on Coupled Inductor Balancing. Electronics (Switzerland), 2019, 8, 136.	1.8	32
7	A Āuk Converter Cell Balancing Technique by Using Coupled Inductors for Lithium-Based Batteries. Energies, 2019, 12, 2881.	1.6	30
8	Flyback Converter Balancing Technique for Lithium Based Batteries. , 2019, , .		21
9	A Computationally Efficient Method to Determine Iron and Magnet Losses in VSI-PWM Fed Axial Flux Permanent Magnet Synchronous Machines. IEEE Transactions on Magnetics, 2014, 50, 1-10.	1.2	20
10	A Procedure for the Extraction of Intrinsic AC Conductivity and Dielectric Constant of N87 Mnâ€Zn Ferrite Samples Based on Impedance Measurements and Equivalent Electrical Circuit Modeling. IEEE Transactions on Power Electronics, 2018, 33, 10723-10735.	5.4	20
11	A Cell Equalization Method Based on Resonant Switched Capacitor Balancing for Lithium Ion Batteries. , 2018, , .		18
12	Evaluation of a Simple Lamination Stacking Method for the Teeth of an Axial Flux Permanent-Magnet Synchronous Machine With Concentrated Stator Windings. IEEE Transactions on Magnetics, 2012, 48, 999-1002.	1.2	17
13	A Battery Equalization Technique Based on Āuk Converter Balancing for Lithium Ion Batteries. , 2019, , .		15
14	An open-source non-contact thermometer using low-cost electronic components. HardwareX, 2021, 9, e00183.	1.1	15
15	Multi-Winding Equalization Technique for Lithium Ion Batteries for Electrical Vehicles. , 2018, , .		12
16	Forward Converter Current Fed Equalizer for Lithium Based Batteries in Ultralight Electrical Vehicles. Electronics (Switzerland), 2019, 8, 408.	1.8	12
17	Feasibility Study of Wind Farm Grid-Connected Project in Algeria under Grid Fault Conditions Using D-Facts Devices. Applied Sciences (Switzerland), 2018, 8, 2250.	1.3	11
18	Electric Vehicles Charging Concepts for Lithium Based Batteries. , 2018, , .		10

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19	Analytical and calculation DC-link capacitor of a three-phase grid-tied photovoltaic inverter. , 2018, , .		10
20	A Single Transformer for Active Cell Equalization Method of Lithium-Ion Batteries with Two Times Fewer Secondaries than Cells. Electronics (Switzerland), 2019, 8, 951.	1.8	9
21	Circulating Current Reduction in MMC-HVDC System Using Average Model. Applied Sciences (Switzerland), 2019, 9, 1383.	1.3	8
22	A Novel Driving Method for Switched Reluctance Motor With Standard Full Bridge Inverter. IEEE Transactions on Energy Conversion, 2020, 35, 994-1003.	3.7	7
23	Drivetrain design for an ultra light electric vehicle with high efficiency. , 2013, , .		6
24	Design considerations and loss analysis of DC chokes. , 2016, , .		6
25	Voltage Unbalance and Overvoltage Mitigation by Using the Three-phase Damping Control Strategy in Battery Storage Applications. , 2018, , .		6
26	A Smart High-Voltage Cell Detecting and Equalizing Circuit for LiFePO4 Batteries in Electric Vehicles. Applied Sciences (Switzerland), 2019, 9, 5391.	1.3	5
27	Successive resistive braking circuit for permanent magnet wind turbine generators. , 2010, , .		4
28	Inductive components in Power Electronics. , 2011, , .		4
29	Reducing the permanent magnet content in fractional-slot concentrated-windings permanent magnet synchronous machines. , 2012, , .		4
30	A novel design and electromagnetic analysis for a linear switched reluctance motor. Electrical Engineering, 2019, 101, 609-618.	1.2	4
31	Capacitor voltage ripple reduction in MMC-HVDC system using flat bottom current method. Electrical Engineering, 2021, 103, 1483-1492.	1.2	4
32	Modelling of electrical properties of mn-zn ferrites taking into account the frequency of the occurrence of the dimensional resonance. Journal of Electrical Engineering, 2018, 69, 219-225.	0.4	4
33	Low stand by power, self oscillating power supply. , 2007, , .		3
34	Soft-Switch DC-DC Converter with a High Conversion Ratio for an Electrical Bicycle. , 2007, , .		3
35	Improving the torque output in radial- and axial-flux permanent-magnet synchronous machines with concentrated windings by using a combined wye-delta connection. , 2011, , .		3
36	Influence of Soft Magnetic Material in a Permanent Magnet Synchronous Machine With a Commercial Induction Machine Stator. IEEE Transactions on Magnetics, 2012, 48, 1645-1648.	1.2	3

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37	Magnetic stray field based position detection in BLDC outer rotor permanent magnet synchronous machines. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2014, 27, 544-554.	1.2	3
38	A Control Method with Ring Structure for Switched Reluctance Motor. , 2018, , .		3
39	Controlling a Switched Reluctance Motor with a Conventional Three-Phase Bridge Instead of Asymmetric H-Bridges. Energies, 2018, 11, 3242.	1.6	3
40	New Pulse Width Modulation Technique to Reduce Losses for Three-Phase Photovoltaic Inverters. Active and Passive Electronic Components, 2018, 2018, 1-10.	0.3	3
41	Investigation of a delay compensated deadbeat current controller for inverters by Z-transform. Electrical Engineering, 2018, 100, 2341-2349.	1.2	3
42	Circulating-Current-Excited Switched Reluctance Generator System With Diode Rectifier. IEEE Transactions on Industrial Electronics, 2022, 69, 7859-7868.	5.2	3
43	Losses in VSI-PWM fed axial flux machines. , 2014, , .		2
44	Comparison and design of power electronics transformers in 25 kHzâ€“400 kHz range. , 2016, , .		2
45	Frequency synchronization of a single-phase grid-connected DC/AC inverter using a double integration method. Automatika, 2017, 58, 141-146.	1.2	2
46	Comparison and design of DC chokes based on different magnetic materials. , 2017, , .		2
47	A Tuning Method for the Derivative Filter in PID Controller with Delay Time. , 2018, , .		2
48	A thyristor- and thermistor-based inrush current limiter for DC-link start-up. International Journal of Electronics, 2018, 105, 1615-1627.	0.9	2
49	Design and Implementation A Smart Monitoring and Controlling System of Three-Phase Photovoltaic Inverter Based on LoRa. IOP Conference Series: Materials Science and Engineering, 2019, 518, 042022.	0.3	2
50	Dynamic voltage stability for embedded electrical networks in marine vessels using FACTS devices. International Journal of Dynamics and Control, 2021, 9, 1783-1799.	1.5	2
51	Core loss model for nanocrystalline cores for full and half bridge waveforms. , 2007, , .		1
52	Eddy current based, contactless position transducer for a gas handle. , 2010, , .		1
53	Driving electric vehicles: As green as the grid. , 2015, , .		1
54	Comparison of multiple stage braking circuits for wind driven generators. , 2016, , .		1

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55	Comparative study of winding arrangements for power electronic transformers. , 2016, , .		1
56	Direct Usage of Photovoltaic Solar Panels to Supply a Freezer Motor with Variable DC Input Voltage. Electronics (Switzerland), 2020, 9, 167.	1.8	1
57	Design and Implementation Low Cost of Photovoltaic Monitoring System Network Based on LoRaWAN. IOP Conference Series: Materials Science and Engineering, 2020, 745, 012046.	0.3	1
58	Low wind speed wind turbine in DIY version. , 2013, , .		0
59	Overvoltage protection for range extended electric vehicles. , 2015, , .		0
60	Self-oscillating gate driver used for gallium nitride transistors in high frequency applications. , 2016, , .		0
61	A simplified controller and detailed dynamics of constant off-time peak current control. Journal of Electrical Engineering, 2017, 68, 390-395.	0.4	0
62	Less-Conventional Low-Consumption Galvanic Separated MOSFET-IGBT Gate Drive Supply. Active and Passive Electronic Components, 2017, 2017, 1-8.	0.3	0
63	A Tuning Method for PI Controller for an Integrating System with Time Delay. , 2018, , .		0
64	A modified Smart Controlling and Monitoring Scheme of Three Phase Photovoltaic Inverter rely on LoRa Technology. IOP Conference Series: Materials Science and Engineering, 2019, 518, 052005.	0.3	0
65	High frequency power loss measurement platform. International Journal of Electronics Letters, 2020, 8, 28-37.	0.7	0
66	Set-up and measurements on a Mn-Zn ferrite ring core under sinusoidal excitation and dc bias conditions. , 2021, , .		0