

# Szymon Bączkowski

## List of Publications by Year in descending order

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40  
papers

1,244  
citations

1040056

9  
h-index

1058476

14  
g-index

40  
all docs

40  
docs citations

40  
times ranked

967  
citing authors

#	ARTICLE	IF	CITATIONS
1	Physics-Based Modeling of Parasitic Capacitance in Medium-Voltage Filter Inductors. IEEE Transactions on Power Electronics, 2021, 36, 829-843.	7.9	37
2	Impact of Power Module Parasitic Capacitances on Medium-Voltage SiC MOSFETs Switching Transients. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 298-310.	5.4	48
3	Behavioral Modeling of Ground Current in Filter Inductors of Medium-Voltage SiC-MOSFET-Based Converters. , 2020, , .		4
4	Demonstration of a 10 kV SiC MOSFET based Medium Voltage Power Stack. , 2020, , .		15
5	Analysis of cascaded silicon carbide MOSFETs using a single gate driver for medium voltage applications. IET Power Electronics, 2020, 13, 413-419.	2.1	9
6	High-frequency resonant operation of an integrated medium-voltage SiC MOSFET power module. IET Power Electronics, 2020, 13, 475-482.	2.1	7
7	Three-level PN cell for multilevel converters. IET Power Electronics, 2020, 13, 324-331.	2.1	1
8	Development of a Model-Based Approach to Capture Battery Parameter Degradation in Satellites. ECS Transactions, 2020, 99, 341-349.	0.5	0
9	A Fast-Switching Integrated Full-Bridge Power Module Based on GaN eHEMT Devices. IEEE Transactions on Power Electronics, 2019, 34, 2494-2504.	7.9	61
10	Proof-of-Concept for a Kelvin-Emitter On-Chip Temperature Sensor for Power Semiconductors. , 2019, , .		2
11	Frequency domain scanning acoustic microscopy for power electronics: Physics-based feature identification and selectivity. Microelectronics Reliability, 2018, 88-90, 726-732.	1.7	6
12	Effects of Auxiliary-Source Connections in Multichip Power Module. IEEE Transactions on Power Electronics, 2017, 32, 7816-7823.	7.9	34
13	Short-Circuit Degradation of 10-kV 10-A SiC MOSFET. IEEE Transactions on Power Electronics, 2017, 32, 9342-9354.	7.9	59
14	Transferring the Incremental Capacity Analysis to Lithium-Sulfur Batteries. ECS Transactions, 2017, 77, 1919-1927.	0.5	2
15	Reduction of parasitic capacitance in 10 kV SiC MOSFET power modules using 3D FEM. , 2017, , .		26
16	Gate driver with high common mode rejection and self turn-on mitigation for a 10 kV SiC MOSFET enabled MV converter. , 2017, , .		36
17	Switching current imbalance mitigation in power modules with parallel connected SiC MOSFETs. , 2017, , .		16
18	Common mode current mitigation for medium voltage half bridge SiC modules. , 2017, , .		22

#	ARTICLE	IF	CITATIONS
19	A novel DBC layout for current imbalance mitigation in SiC MOSFET multichip power modules. , 2016, , .		4
20	Effects of auxiliary source connections in multichip power module. , 2016, , .		4
21	Test bench for thermal cycling of 10 kV silicon carbide power modules. , 2016, , .		2
22	A Novel DBC Layout for Current Imbalance Mitigation in SiC MOSFET Multichip Power Modules. IEEE Transactions on Power Electronics, 2016, 31, 8042-8045.	7.9	81
23	Short-circuit characterization of 10 kV 10A 4H-SiC MOSFET. , 2016, , .		20
24	Influences of Device and Circuit Mismatches on Paralleling Silicon Carbide MOSFETs. IEEE Transactions on Power Electronics, 2016, 31, 621-634.	7.9	204
25	Current measurement method for characterization of fast switching power semiconductors with Silicon Steel Current Transformer. , 2015, , .		22
26	Triple pulse tester " Efficient power loss characterization of power modules. , 2015, , .		3
27	10kV SiC MOSFET split output power module. , 2015, , .		6
28	Complete Loss and Thermal Model of Power Semiconductors Including Device Rating Information. IEEE Transactions on Power Electronics, 2015, 30, 2556-2569.	7.9	154
29	Circuit mismatch influence on performance of paralleling silicon carbide MOSFETs. , 2014, , .		35
30	SiC MOSFETs based split output half bridge inverter: Current commutation mechanism and efficiency analysis. , 2014, , .		13
31	An online V<sub>ce</sub> measurement and temperature estimation method for high power IGBT module in normal PWM operation. , 2014, , .		8
32	Improving Power Converter Reliability: Online Monitoring of High-Power IGBT Modules. IEEE Industrial Electronics Magazine, 2014, 8, 40-50.	2.6	97
33	5kW phase-shifted full-bridge converter with current doubler using normally-off SiC JFETs designed for 98% efficiency. , 2013, , .		4
34	A review on real time physical measurement techniques and their attempt to predict wear-out status of IGBT. , 2013, , .		61
35	Test setup for long term reliability investigation of Silicon Carbide MOSFETs. , 2013, , .		15
36	Online V <sub>ce</sub> measurement method for wear-out monitoring of high power IGBT modules. , 2013, , .		79

#	ARTICLE	IF	CITATIONS
37	Current-voltage model of LED light sources. , 2012, , .		2
38	High output LED-based profile lighting fixture. , 2011, , .		6
39	Advanced dimming strategy for solid state luminaires. , 2010, , .		1
40	Led spectral and power characteristics under hybrid PWM/AM dimming strategy. , 2010, , .		38