Janusz ZarÄbski

List of Publications by Year
in descending order

59 papers	623 citations	623734 14 h-index	642732 23 g-index
61 all docs	61 docs citations	61 times ranked	222 citing authors

#	Article	IF	Citations
1	The Electrothermal Large-Signal Model of Power MOS Transistors for SPICE. IEEE Transactions on Power Electronics, 2010, 25, 1265-1274.	7.9	60
2	Nonlinear Compact Thermal Model of Power Semiconductor Devices. IEEE Transactions on Components and Packaging Technologies, 2010, 33, 643-647.	1.3	46
3	Modeling the Influence of Selected Factors on Thermal Resistance of Semiconductor Devices. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2014, 4, 421-428.	2.5	40
4	Parameter estimation of the electrothermal model of the ferromagnetic core. Microelectronics Reliability, 2014, 54, 978-984.	1.7	38
5	Measurements of Parameters of the Thermal Model of the IGBT Module. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 4864-4875.	4.7	38
6	The Method of a Fast Electrothermal Transient Analysis of Single-Inductance DCâ€"DC Converters. IEEE Transactions on Power Electronics, 2012, 27, 4005-4012.	7.9	35
7	Modeling Nonisothermal Characteristics of Switch-Mode Voltage Regulators. IEEE Transactions on Power Electronics, 2008, 23, 1848-1858.	7.9	31
8	Parameters estimation of the d.c. electrothermal model of the bipolar transistor. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2002, 15, 181-194.	1.9	28
9	Modeling Single Inductor DCâ€"DC Converters With Thermal Phenomena in the Inductor Taken Into Account. IEEE Transactions on Power Electronics, 2017, 32, 7025-7033.	7.9	27
10	Electrothermal analysis of the self-excited pushâ€"pull DCâ€"DC converter. Microelectronics Reliability, 2009, 49, 424-430.	1.7	22
11	A Method of Measuring the Transient Thermal Impedance of Monolithic Bipolar Switched Regulators. IEEE Transactions on Components and Packaging Technologies, 2007, 30, 627-631.	1.3	21
12	Spice-aided modelling of the UC3842 current mode PWM controller with selfheating taken into account. Microelectronics Reliability, 2007, 47, 1145-1152.	1.7	19
13	A method of the thermal resistance measurements of semiconductor devices with pâ€"n junction. Measurement: Journal of the International Measurement Confederation, 2008, 41, 259-265.	5.0	18
14	SPICEâ€aided modelling of dc characteristics of power bipolar transistors with selfâ€heating taken into account. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2009, 22, 422-433.	1.9	18
15	Properties of some convolution algorithms for the thermal analysis of semiconductor devices. Applied Mathematical Modelling, 2007, 31, 1489-1496.	4.2	11
16	Modelling the temperature influence on dc characteristics of the IGBT. Microelectronics Reliability, 2017, 79, 96-103.	1.7	11
17	The electrothermal macromodel of voltage mode PWM controllers for SPICE. Microelectronics Journal, 2006, 37, 728-734.	2.0	8
18	A New Measuring Method of the Thermal Resistance of Silicon p-n Diodes. IEEE Transactions on Instrumentation and Measurement, 2007, 56, 2788-2794.	4.7	8

#	ARTICLE	IF	CITATIONS
19	The influence of the selected factors on transient thermal impedance of semiconductor devices. , 2014, , .		8
20	Examinations of Selected Thermal Properties of Packages of SiC Schottky Diodes. Metrology and Measurement Systems, 2016, 23, 451-459.	1.4	8
21	Accurate Circuit-Level Modelling of IGBTs with Thermal Phenomena Taken into Account. Energies, 2021, 14, 2372.	3.1	8
22	A New Method for the Measurement of the Thermal Resistance of the Monolithic Switched Regulator LT1073. IEEE Transactions on Instrumentation and Measurement, 2007, 56, 2101-2104.	4.7	7
23	Application of the electrothermal average inductor model for analyses of boost converters. , 2015, , .		7
24	Electrical model of the alkaline electrolyser dedicated for SPICE. International Journal of Circuit Theory and Applications, 2018, 46, 1044-1054.	2.0	7
25	SiC Schottky power diode modelling in SPICE. , 2005, , .		6
26	SPICE modelling of power Schottky diodes. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2008, 21, 551-561.	1.9	6
27	A SPICE Electrothermal Model of the Selected Class of Monolithic Switching Regulators. IEEE Transactions on Power Electronics, 2008, 23, 1023-1026.	7.9	6
28	SPICE-aided modeling of high-voltage silicon carbide JFETs. IOP Conference Series: Materials Science and Engineering, 2016, 104, 012014.	0.6	6
29	Modelling the influence of weather conditions on properties of the photovoltaic installation. , 2017, , .		6
30	Electrothermal Model of SiC Power BJT. Energies, 2020, 13, 2617.	3.1	6
31	Investigations of mutual thermal coupling between SiC Schottky diodes situated in the common case. Circuit World, 2017, 43, 38-42.	0.9	5
32	Influence of Thermal Phenomena on the Characteristics of Selected Electronics Networks. Energies, 2021, 14, 4750.	3.1	5
33	The electrothermal macromodel of the MA7800 monolithic positive-voltage regulators family. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2006, 19, 331-343.	1.9	4
34	Investigations of the usefulness of average models for calculations characteristics of buck and boost converters at the steady state. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2010, 23, 20-31.	1.9	4
35	Mathematical Model of Weather Conditions Influence on Properties of Photovoltaic Installation and Method of its Identification. , 2019, , .		4
36	Modelling of Dynamic Properties of Silicon Carbide Junction Field-Effect Transistors (JFETs). Energies, 2020, 13, 187.	3.1	4

#	Article	IF	Citations
37	Electrothermal compact macromodel of monolithic switching voltage regulator MC34063A. Microelectronics Reliability, 2008, 48, 1703-1710.	1.7	3
38	Modeling SiC MPS diodes. , 2008, , .		3
39	The nonlinear compact thermal model of power MOS transistors. , 2008, , .		3
40	DC characteristics and parameters of silicon carbide high-voltage power BJTs. IOP Conference Series: Materials Science and Engineering, 2016, 104, 012015.	0.6	3
41	The Electrothermal Ben-Yaakov Model of the Diode-Transistor Switch for an Electrothermal Analysis of BUCK Converters. , 2006, , .		2
42	Modelling Power Schottky Diodes. , 2006, , .		2
43	Modifications of the DC Raytheonâ€"Statz model for SiC MESFETs. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2008, 21, 583-590.	1.9	2
44	Examining the usefulness of the method of averaged models in calculating characteristics of a buck converter at the steady state. , 2008, , .		2
45	Modelling CoolMOSC3 transistor characteristics in SPICE. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2010, 23, 127-139.	1.9	2
46	The compact d.c. electrothermal model of power MOSFETs for SPICE. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2010, 23, 140-150.	1.9	2
47	Thermal model of the IGBT module. Journal of Physics: Conference Series, 2018, 1033, 012001.	0.4	2
48	Functional and catastrophic thermal failures in bipolar electronic circuits. , 2005, , .		1
49	Modelling TrenchMOSFETs in SPICE. , 2008, , .		1
50	The method of a fast electrothermal transient analysis of a buck converter. , 2008, , .		1
51	Modeling of MESFET in SPICE including self-heating. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2014, 27, 691-699.	1.9	1
52	Measurements and calculations of capacitances of BJT and SJT made of silicon carbide. ITM Web of Conferences, 2018, 19, 01026.	0.5	1
53	DC characteristics of the SiC MESFETs. , 2006, , .		0
54	Modelling the UCC3800 controller in SPICE with the electrothermal phenomena taken into account. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2012, 25, 317-324.	1.9	0

#	Article	IF	Citations
55	High-temperature properties of Schottky diodes made of silicon carbide. , 2016, , .		0
56	Mathematical Model of Dynamics of Generated Electric Power by Photovoltaic Installation Taking into Account a Seasonality Factor. , 2020, , .		0
57	The Influence of the Material of the Transformer Core on Characteristics of the Selected DCâ€"DC Converters. Springer Proceedings in Physics, 2014, , 185-190.	0.2	0
58	The Influence of the Construction of the Cooling System of Semiconductor Devices on the Watt-Hour Efficiency of DCâ€"DC Converters. Springer Proceedings in Physics, 2014, , 155-160.	0.2	0
59	Modeling of Photovoltaic Installation Performance Taking into Account Seasonal Phenomena of Different Climate Zones. Advances in Intelligent Systems and Computing, 2021, , 433-446.	0.6	0