Krzysztof GÃ³recki

List of Publications by Year
in descending order

143	1,467	304602	454834
papers	citations	22 h-index	30 g-index

144	144	144	384
all docs	docs citations	times ranked	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.	5.4	60
2	Modelling mutual thermal interactions between power LEDs in SPICE. Microelectronics Reliability, 2015, 55, 389-395.	0.9	48
3	Nonlinear Compact Thermal Model of Power Semiconductor Devices. IEEE Transactions on Components and Packaging Technologies, 2010, 33, 643-647.	1.4	46
4	Modeling the Influence of Selected Factors on Thermal Resistance of Semiconductor Devices. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2014, 4, 421-428.	1.4	40
5	Parameter estimation of the electrothermal model of the ferromagnetic core. Microelectronics Reliability, 2014, 54, 978-984.	0.9	38
6	Measurements of Parameters of the Thermal Model of the IGBT Module. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 4864-4875.	2.4	38
7	Nonlinear Compact Thermal Model of the IGBT Dedicated to SPICE. IEEE Transactions on Power Electronics, 2020, 35, 13420-13428.	5.4	36
8	The Method of a Fast Electrothermal Transient Analysis of Single-Inductance DCâ€“DC Converters. IEEE Transactions on Power Electronics, 2012, 27, 4005-4012.	5.4	35
9	New dynamic electro-thermo-optical model of power LEDs. Microelectronics Reliability, 2018, 91, 1-7.	0.9	33
10	Modeling Nonisothermal Characteristics of Switch-Mode Voltage Regulators. IEEE Transactions on Power Electronics, 2008, 23, 1848-1858.	5.4	31
11	Electrothermal model of a power LED for SPICE. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2012, 25, 39-45.	1.2	30
12	Application of Average Electrothermal Models in the SPICE-Aided Analysis of Boost Converters. IEEE Transactions on Industrial Electronics, 2019, 66, 2746-2755.	5.2	30
13	The Analysis Of Accuracy Of Selected Methods Of Measuring The Thermal Resistance Of IGBTs. Metrology and Measurement Systems, 2015, 22, 455-464.	1.4	29
14	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.	1.2	28
15	Modelling LED lamps in SPICE with thermal phenomena taken into account. Microelectronics Reliability, 2017, 79, 440-447.	0.9	28
16	Modeling Single Inductor DCâ€“DC Converters With Thermal Phenomena in the Inductor Taken Into Account. IEEE Transactions on Power Electronics, 2017, 32, 7025-7033.	5.4	27
17	New Method of Measurements Transient Thermal Impedance and Radial Power of Power LEDs. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 212-220.	2.4	27
18	Electrothermal model of choking-coils for the analysis of dcâ€“dc converters. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2012, 177, 1248-1253.	1.7	26

#	Article	IF	Citations
19	Application of ZnO Nanoparticles in Sn99Ag0.3Cu0.7-Based Composite Solder Alloys. Nanomaterials, 2021, 11, 1545.	1.9	25
20	A new electrothermal average model of the diodeâ€“transistor switch. Microelectronics Reliability, 2008, 48, 51-58.	0.9	23
21	Microstructure Influence of SACX0307-TiO2 Composite Solder Joints on Thermal Properties of Power LED Assemblies. Materials, 2020, 13, 1563.	1.3	23
22	Electrothermal analysis of the self-excited pushâ€“pull DCâ€“DC converter. Microelectronics Reliability, 2009, 49, 424-430.	0.9	22
23	A Method of Measuring the Transient Thermal Impedance of Monolithic Bipolar Switched Regulators. IEEE Transactions on Components and Packaging Technologies, 2007, 30, 627-631.	1.4	21
24	The compact thermal model of the pulse transformer. Microelectronics Journal, 2014, 45, 1795-1799.	1.1	21
25	Modelling dynamic characteristics of the IGBT with thermal phenomena taken into account. Microelectronics International, 2017, 34, 160-164.	0.4	21
26	Compact Thermal Model of the Pulse Transformer Taking into Account Nonlinearity of Heat Transfer. Energies, 2020, 13, 2766.	1.6	20
27	Spice-aided modelling of the UC3842 current mode PWM controller with selfheating taken into account. Microelectronics Reliability, 2007, 47, 1145-1152.	0.9	19
28	The electrothermal macromodel of switching voltage regulators from the L4970 family. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2008, 21, 455-473.	1.2	18
29	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.	2.5	18
30	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.	1.2	18
31	Modelling mutual thermal coupling in LED modules. Microelectronics International, 2015, 32, 152-157.	0.4	17
32	Influence of a Soldering Process on Thermal Parameters of Large Power LED Modules. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2019, 9, 2160-2167.	1.4	17
33	Measurements and Computations of Internal Temperatures of the IGBT and the Diode Situated in the Common Case. Electronics (Switzerland), 2021, 10, 210.	1.8	17
34	Methods of Fast Analysis of DCâ€“DC Convertersâ€”A Review. Electronics (Switzerland), 2021, 10, 2920.	1.8	17
35	Parametric Compact Thermal Models of Power LEDs. Energies, 2019, 12, 1724.	1.6	15
36	Compact Modelling of Electrical, Optical and Thermal Properties of Multi-Colour Power LEDs Operating on a Common PCB. Energies, 2021, 14, 1286.	1.6	15

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37	Influence of Power Losses in the Inductor Core on Characteristics of Selected DCâ€“DC Converters. Energies, 2019, 12, 1991.	1.6	14
38	Modelling the power losses in the ferromagnetic materials. Materials Science-Poland, 2017, 35, 398-404.	0.4	13
39	Selected Problems of Power MOSFETs Thermal Parameters Measurements. Energies, 2021, 14, 8353.	1.6	12
40	Properties of some convolution algorithms for the thermal analysis of semiconductor devices. Applied Mathematical Modelling, 2007, 31, 1489-1496.	2.2	11
41	Modelling the temperature influence on dc characteristics of the IGBT. Microelectronics Reliability, 2017, 79, 96-103.	0.9	11
42	Analysis of influence of losses in the core of the inductor on parameters of the buck converter. , 2018, , .		11
43	Modelling a Switching Process of IGBTs with Influence of Temperature Taken into Account. Energies, 2019, 12, 1894.	1.6	11
44	Influence of Selected Factors on Thermal Parameters of the Components of Forced Cooling Systems of Electronic Devices. Electronics (Switzerland), 2021, 10, 340.	1.8	11
45	The influence of the mounting manner of the power LEDs on its thermal and optical parameters. , 2014, , .		10
46	Modelling the influence of self-heating on characteristics of IGBTs. , 2014, , .		10
47	Non-linear average electrothermal models of buck and boost converters for SPICE. Microelectronics Reliability, 2009, 49, 431-437.	0.9	9
48	The influence of mutual thermal interactions between power LEDs on their characteristics. , 2013, , .		9
49	Measurements of thermal resistance of power LEDs. Microelectronics International, 2014, 31, 217-223.	0.4	9
50	Influence of Packaging Processes and Temperature on Characteristics of Schottky Diodes Made of SiC. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2019, 9, 633-641.	1.4	9
51	Thermal, Photometric and Radiometric Properties of Multi-Color LEDs Situated on the Common PCB. Electronics (Switzerland), 2020, 9, 1672.	1.8	9
52	Analysis of the Usefulness Range of the Averaged Electrothermal Model of a Diodeâ€“Transistor Switch to Compute the Characteristics of the Boost Converter. Energies, 2021, 14, 154.	1.6	9
53	The electrothermal macromodel of voltage mode PWM controllers for SPICE. Microelectronics Journal, 2006, 37, 728-734.	1.1	8
54	A New Measuring Method of the Thermal Resistance of Silicon p-n Diodes. IEEE Transactions on Instrumentation and Measurement, 2007, 56, 2788-2794.	2.4	8

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55	The influence of the selected factors on transient thermal impedance of semiconductor devices. , 2014, , .		8
56	Modelling characteristics of photovoltaic panels with thermal phenomena taken into account. IOP Conference Series: Materials Science and Engineering, 2016, 104, 012013.	0.3	8
57	Examinations of Selected Thermal Properties of Packages of SiC Schottky Diodes. Metrology and Measurement Systems, 2016, 23, 451-459.	1.4	8
58	Modelling characteristics of the impulse transformer in a wide frequency range. International Journal of Circuit Theory and Applications, 2020, 48, 750-761.	1.3	8
59	Improved Method for Measuring Power Losses in the Inductor Core. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-10.	2.4	8
60	Accurate Circuit-Level Modelling of IGBTs with Thermal Phenomena Taken into Account. Energies, 2021, 14, 2372.	1.6	8
61	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.	2.4	7
62	Application of the electrothermal average inductor model for analyses of boost converters. , 2015, , .		7
63	Compact thermal model of planar transformers. , 2017, , .		7
64	Electrical model of the alkaline electrolyser dedicated for SPICE. International Journal of Circuit Theory and Applications, 2018, 46, 1044-1054.	1.3	7
65	Thermal Parameters of Monocrystalline GaN Schottky Diodes. IEEE Transactions on Electron Devices, 2019, 66, 2132-2138.	1.6	7
66	Influence of a Thermal Pad on Selected Parameters of Power LEDs. Energies, 2020, 13, 3732.	1.6	7
67	Compact Thermal Modeling of Modules Containing Multiple Power LEDs. Energies, 2020, 13, 3130.	1.6	7
68	Cooling Systems of Power Semiconductor Devicesâ€"A Review. Energies, 2022, 15, 4566.	1.6	7
69	A SPICE Electrothermal Model of the Selected Class of Monolithic Switching Regulators. IEEE Transactions on Power Electronics, 2008, 23, 1023-1026.	5.4	6
70	Modelling the influence of weather conditions on properties of the photovoltaic installation. , 2017, , .		6
71	Modeling power supplies of LED lamps. International Journal of Circuit Theory and Applications, 2018, 46, 629-636.	1.3	6
72	Influence of Cooling Conditions of Power LEDs on Their Electrical, Thermal and Optical Parameters. , 2018, , .		6

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73	Simple method of measuring photometric and radiometry parameters of power LEDs. , 2018, , .		6
74	Modeling and Measurements of Properties of Coupled Inductors. Energies, 2021, 14, 4088.	1.6	6
75	Modelling the pulse transformer in SPICE. IOP Conference Series: Materials Science and Engineering, 2016, 104, 012011.	0.3	5
76	The influence of a mounting manner of power MOS transistors on characteristics of the Totem-Pole circuit with RLC load. Microelectronics International, 2016, 33, 176-180.	0.4	5
77	Modelling LED lamps with thermal phenomena taken into account. , 2016, , .		5
78	Investigations of mutual thermal coupling between SiC Schottky diodes situated in the common case. Circuit World, 2017, 43, 38-42.	0.7	5
79	Non-linear thermal model of planar transformers. , 2017, , .		5
80	Influence of the Size and Shape of Magnetic Core on Thermal Parameters of the Inductor. Energies, 2020, 13, 3842.	1.6	5
81	Electrothermal Averaged Model of a Diode-Transistor Switch Including IGBT and a Rapid Switching Diode. Energies, 2020, 13, 3033.	1.6	5
82	Modelling Properties of an Alkaline Electrolyser. Energies, 2020, 13, 3073.	1.6	5
83	Influence of the Semiconductor Devices Cooling Conditions on Characteristics of Selected DCâ€“DC Converters. Energies, 2021, 14, 1672.	1.6	5
84	Influence of Thermal Phenomena on the Characteristics of Selected Electronics Networks. Energies, 2021, 14, 4750.	1.6	5
85	Optimal Temperature Regulation of Integrated Circuits with Peltier Heat Pumps. Energies, 2022, 15, 1125.	1.6	5
86	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.	1.2	4
87	Electrothermal compact model of CoolSET voltage regulators for SPICE. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2007, 20, 181-195.	1.2	4
88	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.	1.2	4
89	Modelling power LEDs with thermal phenomena taken into account. , 2015, , .		4
90	Non-linear compact thermal model of IGBTs. , 2017, , .		4

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91	A new form of the non-linear compact thermal model of the IGBT. , 2018, , .		4
92	Mathematical Model of Weather Conditions Influence on Properties of Photovoltaic Installation and Method of its Identification. , 2019, , .		4
93	Modelling dc characteristics of the IGBT module with thermal phenomena taken into account. , 2019, , .		4
94	Investigations of an Influence of the Assembling Method of the Die to the Case on Thermal Parameters of IGBTs. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2021, 11, 1988-1996.	1.4	4
95	Investigations of Electrical and Optical Parameters of Some LED Luminairesâ€"A Study Case. Energies, 2021, 14, 1612.	1.6	4
96	SPICE-Aided Modeling of Daily and Seasonal Changes in Properties of the Actual Photovoltaic Installation. Energies, 2021, 14, 6247.	1.6	4
97	Modelling thermal properties of large LED modules. Materials Science-Poland, 2019, 37, 628-638.	0.4	4
98	Electrothermal Model of Coupled Inductors with Nanocrystalline Cores. Energies, 2022, 15, 224.	1.6	4
99	Influence of a Cooling System on Power MOSFETsâ€™ Thermal Parameters. Energies, 2022, 15, 2923.	1.6	4
100	Influence of Quality of Mounting Process of RF Transistors on Their Thermal Parameters and Lifetime. Applied Sciences (Switzerland), 2022, 12, 6113.	1.3	4
101	Electrothermal compact macromodel of monolithic switching voltage regulator MC34063A. Microelectronics Reliability, 2008, 48, 1703-1710.	0.9	3
102	Modeling SiC MPS diodes. , 2008, , .		3
103	The nonlinear compact thermal model of power MOS transistors. , 2008, , .		3
104	The compact thermal model of the pulse transformer. , 2013, , .		3
105	Modelling simple photovoltaic systems with thermal phenomena taken into account. , 2016, , .		3
106	The Electrothermal Ben-Yaakov Model of the Diode-Transistor Switch for an Electrothermal Analysis of BUCK Converters. , 2006, , .		2
107	Examining the usefulness of the method of averaged models in calculating characteristics of a buck converter at the steady state. , 2008, , .		2
108	Electrothermal model of optocoupler for SPICE. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2009, 22, 321-333.	1.2	2

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109	Modelling CoolMOSC3 transistor characteristics in SPICE. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2010, 23, 127-139.	1.2	2
110	The influence of losses in the core of an inductor on characteristics of the boost converter. IOP Conference Series: Materials Science and Engineering, 2016, 104, 012016.	0.3	2
111	Modelling thermal phenomena in semiconductor devices and magnetic elements of boost converter using averaged models. , 2016, , .		2
112	Influence of thermometric characteristics on accuracy of junction temperature measurements of laboratory made SiC Schottky diodes. , 2018, , .		2
113	Thermal Characterisation of Colour Power LEDs. , 2019, , .		2
114	Modelling properties of solar cells irradiated from different lighting sources. , 2019, , .		2
115	Modeling Solar Cells Operating at Waste Light. Energies, 2021, 14, 2871.	1.6	2
116	Comparison of Properties for Selected Experimental Set-Ups Dedicated to Measuring Thermal Parameters of Power LEDs. Energies, 2021, 14, 3240.	1.6	2
117	SPICE-Aided Compact Electrothermal Model of Impulse Transformers. Applied Sciences (Switzerland), 2021, 11, 8894.	1.3	2
118	Electrothermal Model of Ferromagnetic Cores. Przeglad Elektrotechniczny, 2015, 1, 163-167.	0.1	2
119	<title>Thermal performance of LSCO and LSFO films for IR detectors</title>. , 2004, , .		1
120	Functional and catastrophic thermal failures in bipolar electronic circuits. , 2005, , .		1
121	Evaluation of Macromodels of Monolithic Current Mode PWM Controllers. , 2006, , .		1
122	Modelling TrenchMOSFETs in SPICE. , 2008, , .		1
123	The method of a fast electrothermal transient analysis of a buck converter. , 2008, , .		1
124	Electrothermal model of monolithic TOPSwitch regulators. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2013, 26, 579-588.	1.2	1
125	Modelling power LEDs in the COB case with thermal phenomena taken into account. , 2017, , .		1
126	New Model of Solar Cells for SPICE. , 2018, , .		1

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127	Influence of parameters of current feeding power LEDs on their electric, optical and thermal properties. , 2020, , .		1
128	The Embedded System to Control the Illuminance of an Office Workplace with LED Light Sources. Energies, 2022, 15, 2406.	1.6	1
129	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.	1.2	0
130	Modelling reverse characteristics of power LEDs with thermal phenomena taken into account. IOP Conference Series: Materials Science and Engineering, 2016, 104, 012012.	0.3	0
131	Modelling the half-bridge dc-dc converter with selfheating taken into account. , 2016, , .		0
132	High-temperature properties of Schottky diodes made of silicon carbide. , 2016, , .		0
133	Measurements of transient thermal impedance of ferrite cores. , 2017, , .		0
134	Modelling a Half-bridge de-de Converter Including the IGBT Module with Thermal Phenomena Taken into Account. , 2019, , .		0
135	Investigations of Influence of Properties of PCB on Thermal and Optical Parameters of the LED Module. , 2019, , .		0
136	Mathematical Model of Dynamics of Generated Electric Power by Photovoltaic Installation Taking into Account a Seasonality Factor. , 2020, , .		0
137	Modelling influence of selected factors on properties of inductors operating in the buck converter. , 2020, , .		0
138	The Influence of the Material of the Transformer Core on Characteristics of the Selected DCâ€“DC Converters. Springer Proceedings in Physics, 2014, , 185-190.	0.1	0
139	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.	0.1	0
140	UÅ›redniony elektrotermiczny model przetwornicy boost uwzglÄ™dniajÄ…cy nieliniowoÅ›Ä‡ dÅ‚awika. Przeglad Elektrotechniczny, 2015, 1, 130-136.	0.1	0
141	WpÅ‚yw temperatury na charakterystyki fotoogniwa polimerowego na bazie P3HT:PCBM. Przeglad Elektrotechniczny, 2015, 1, 35-37.	0.1	0
142	WpÅ‚yw rdzenia dÅ‚awika na charakterystyki przetwornicy buck. Przeglad Elektrotechniczny, 2016, 1, 139-141.	0.1	0
143	Influence of thermal phenomena on characteristics of components of the IGBT module. , 2017, , .		0