BogusÅ‚aw WiÄcek

List of Publications by Year
in descending order

78 papers	612 citations	623734 14 h-index	752698 20 g-index
79 all docs	79 docs citations	79 times ranked	603 citing authors

#	Article	IF	Citations
1	Measurements and simulations of transient characteristics of heat pipes. Microelectronics Reliability, 2006, 46, 109-115.	1.7	66
2	Dynamic thermal analysis of underground medium power cables using thermal impedance, time constant distribution and structure function. Applied Thermal Engineering, 2013, 60, 256-260.	6.0	29
3	New approach to thermal drift correction in microbolometer thermal cameras. Quantitative InfraRed Thermography Journal, 2015, 12, 184-195.	4.2	27
4	Influence of soil humidity on the thermal impedance, time constant and structure function of underground cables: A laboratory experiment. Applied Thermal Engineering, 2017, 113, 1444-1451.	6.0	27
5	Review on thermal image processing for passive and active thermography. , 2005, 2006, 686-9.		26
6	Thermal drift compensation method for microbolometer thermal cameras. Applied Optics, 2012, 51, 1788.	1.8	25
7	Steady state analysis of cooling electronic circuits using heat pipes. IEEE Transactions on Components and Packaging Technologies, 2001, 24, 549-553.	1.3	23
8	Behaviour of the thermal impedance of buried power cables. International Journal of Electrical Power and Energy Systems, 2013, 44, 383-387.	5.5	23
9	Harmonic analysis of dynamic thermal problems in high voltage overhead transmission lines and buried cables. International Journal of Electrical Power and Energy Systems, 2014, 58, 199-205.	5.5	19
10	Electrothermal analysis and temperature fluctuationsâ€™ prediction of overhead power lines. International Journal of Electrical Power and Energy Systems, 2017, 87, 198-210.	5.5	18
11	Comparison of Fourier and wavelet analyses for defect detection in lock-in and pulse phase thermography. Quantitative InfraRed Thermography Journal, 2007, 4, 219-232.	4.2	16
12	A method of local magnetic loss determination in punched ferromagnetic strips. Journal of Magnetism and Magnetic Materials, 2014, 355, 282-288.	2.3	16
13	Thermal modelling and screening method for skin pathologies using active thermography. Biocybernetics and Biomedical Engineering, 2018, 38, 602-610.	5.9	16
14	Application of computer-based thermography to thermal measurements of integrated circuits and power devices. Microelectronics Journal, 1997, 28, 337-347.	2.0	15
15	Thermal impedances of thin plates. International Journal of Heat and Mass Transfer, 2007, 50, 4457-4460.	4.8	15
16	Thermal signatures for breast cancer screening comparative study. , 0, , .		14
17	A THREE LAYER MODEL FOR THE THERMAL IMPEDANCE OF THE HUMAN SKIN: MODELING AND EXPERIMENTAL MEASUREMENTS. Journal of Mechanics in Medicine and Biology, 2015, 15, 1550044.	0.7	13
18	Optimal placement of electronic devices in forced convective cooling conditions. Microelectronics Reliability, 2009, 49, 1537-1545.	1.7	12

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19	Estimation of FeO content in the steel slag using infrared imaging and artificial neural network. Measurement: Journal of the International Measurement Confederation, 2018, 117, 380-389.	5.0	11
20	Investigations of Single and Multilayer Structures Using Lock-In Thermographyâ€"Possible Applications. International Journal of Occupational Safety and Ergonomics, 2005, 11, 211-215.	1.9	10
21	Raynaudâ€™s Phenomenon and Endothelial Dysfunction in End-Stage Renal Disease Patients Treated with Hemodialysis. Kidney and Blood Pressure Research, 2005, 28, 27-31.	2.0	10
22	Active Thermography in Qualitative Evaluation of Protective Materials. International Journal of Occupational Safety and Ergonomics, 2009, 15, 363-371.	1.9	10
23	Thermal analysis of integrated spiral inductors. Infrared Physics and Technology, 2013, 56, 80-84.	2.9	10
24	Thermal impedance measurement of integrated inductors on bulk silicon substrate. Microelectronics Reliability, 2017, 73, 54-59.	1.7	10
25	Processing of EMG Signals with High Impact of Power Line and Cardiac Interferences. Applied Sciences (Switzerland), 2021, 11, 4625.	2.5	10
26	Ascertainment of fringing-effect losses in ferrite inductors with an air gap by thermal compact modelling and thermographic measurements. Applied Thermal Engineering, 2017, 124, 1447-1456.	6.0	9
27	Evaluation of the Heat Transfer Coefficient in Microcircuits From the Frequency Analysis of the Thermal Transient Response. IEEE Transactions on Components and Packaging Technologies, 2010, 33, 260-266.	1.3	8
28	Defect detection in wire welded joints using thermography investigations. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2012, 177, 1239-1242.	3.5	8
29	Radiative parameters of steel slag for FeO content estimation using multispectral thermography system. Quantitative InfraRed Thermography Journal, 2014, 11, 222-232.	4.2	8
30	Application of genetic algorithms for electronic devices placement in structures with heat conduction through the substrate. Microelectronics Reliability, 2011, 51, 453-459.	1.7	7
31	Evaluation of Perfusion and Thermal Parameters of Skin Tissue Using Cold Provocation and Thermographic Measurements. Metrology and Measurement Systems, 2016, 23, 373-381.	1.4	7
32	Active thermography application for solder thickness measurement in surface mounted device technology. Microelectronics Journal, 1998, 29, 223-228.	2.0	6
33	The physical properties of the surface of apparel made from flax and polyester fibres. International Journal of Clothing Science and Technology, 2003, 15, 284-294.	1.1	6
34	Thermography in psoriasis vulgaris evaluation. , 2005, 2006, 627-30.		6
35	Multilayer thermal object identification in frequency domain using IR thermography and vector fitting. International Journal of Circuit Theory and Applications, 2020, 48, 1523-1533.	2.0	6
36	Evaluation of a buried power cable's thermal behavior using phase diagrams and calculation of the phase difference between temperature and power. Applied Thermal Engineering, 2014, 70, 770-775.	6.0	5

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37	Modelling and IR measurement of the electronic substrate thermal conductivity. Microelectronics Reliability, 2015, 55, 138-142.	1.7	5
38	Estimation of the Inter-Yarn Channel Inlet Diameter in Textile Materials Using Structured Light 3D Micro-Scanning. Fibres and Textiles in Eastern Europe, 2016, 24, 88-93.	0.5	5
39	Technical challenges for the construction of a medical image database. , 2005, , .		4
40	Cooling and shielding systems for infrared detectors - requirements and limits. , 2005, 2006, 619-22.		4
41	Gas identification and estimation of its concentration in a tube using thermographic camera with diffraction grating. Quantitative InfraRed Thermography Journal, 2018, 15, 106-120.	4.2	4
42	Analysis of the Effect of Channel Parameters between Filaments and Single Fabric Parameters on Air Permeability, Water Vapour Resistance and Thermal Resistance. Fibres and Textiles in Eastern Europe, 2017, 25, 79-86.	0.5	4
43	Exact solution for optimal placement of electronic components on linear array using analytical thermal wake function. Electronics Letters, 2008, 44, 1216.	1.0	3
44	Numerical Analysis of Thermal Stresses in Carbon Films Obtained by the Rf Pecvd Method on the Surface of a Cannulated Screw / Analiza Numeryczna Naprezen Cieplnych W Warstwie Weglowej Otrzymanej W Procesie Rf Pecvd Na Powierzchni Wkreta Kostnego. Archives of Metallurgy and Materials, 2013, 58, 77-81.	0.6	3
45	System and software for thermal images screening in medicine â€“ application to psoriasis. Quantitative InfraRed Thermography Journal, 2015, 12, 127-136.	4.2	3
46	Temperature drift compensation in metrological microbolometer camera using multi sensor approach. , 0, , .		3
47	Theory and measurement of single and multilayer structures using lock-in and pulse thermography. , 2003, 5073, 505.		2
48	Fringing-Effect Losses in Inductors by Thermal Modeling and Thermographic Measurements. IEEE Transactions on Power Electronics, 2021, 36, 9772-9786.	7.9	2
49	Thermographic measurement and thermal modelling of air gap inductors in H-F power forward converters. , 0, , .		2
50	Determination of the heat transfer coefficient distribution. , 0, , .		2
51	Multilayer structure investigations using lock-in and pulse thermography possible applications in medicine. , 0, , .		1
52	Infrared systems for fast thermal process investigation. , 2003, 5073, 495.		1
53	Convective Cooling Evaluation of Electronic Devices using Lock-in Thermography. , 2007, , .		1
54	Electrothermal analysis of overhead power lines. , 2012, , .		1

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55	INFLUENCE OF INFRARED RADIATION ON THE HUMAN SKIN TEMPERATURE â€" EXPERIMENTAL DATA AND MODELING. Journal of Mechanics in Medicine and Biology, 2013, 13, 1350025.	0.7	1
56	Macroscale heat transfer in human tissues. , 2016, , .		1
57	Application of IR thermography and thermal inverse modelling to evaluate power losses in ferromagnetic strips. Quantitative InfraRed Thermography Journal, 2018, 15, 54-67.	4.2	1
58	Dynamic thermal heat pipes analysis: Thermal impedance in start-up condition. Microelectronics Journal, 2019, 93, 104639.	2.0	1
59	Second-Harmonic Contactless Method for Measurement of RMS Current Using a Standard Infrared Camera. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-8.	4.7	1
60	Identification of the Thermal Constants of the DPL Heat Transfer Model of a Single Layer Porous Material. , 2021, 25, 41-46.	0.1	1
61	Development of Low-Resolution, Low-Power and Low-Cost Infrared System. , 2021, 25, 47-52.	0.1	1
62	Thermal parameter extraction for screening procedure of skin pathologies based on the cold provocation. , 0, , .		1
63	Optimal Position of Buried Power Cables. Elektronika Ir Elektrotechnika, 2014, 20, .	0.8	1
64	Gas identification and estimation of its concentration in a tube using hyperspectral thermography approach. , 0, , .		1
65	The Application of NIR Spectrometer for Average Temperature Measurement in Optical Fibers Based on Spontaneous Raman Scattering for DTS Applications. , 2020, , .		1
66	Vector Analysis of Electrical Networks for Temperature Measurement of MOS Power Transistors. , 2021, 25, 83-87.	0.1	1
67	Thermal management in high-power electronics cooled down using capillary pump. , 2003, , .		0
68	Optimal Placement of Eletronic Devices in Forced Convective Cooling Conditions. , 2007, , .		0
69	Piezoelectric Transformer Efficiency Tests in a Digitally Controlled Converter Circuit. , 2007, , .		0
70	Application of genetic algorithms for electronic devices placement. Quantitative InfraRed Thermography Journal, 2008, 5, 195-209.	4.2	0
71	Cyclosporine A â€" treated nephrotic children show impaired vasodilatation but no autonomic neuropathy. Archives of Medical Science, 2010, 4, 573-577.	0.9	0
72	Oscillatory behaviour of transient thermal problems in microelectronics. , 2017, , .		0

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73	Separation of Natural Convection and Radiation by Changing Rotational Acceleration. , 2004, , .		0
74	The use of fractional calculus for the optimal placement of electronic components on a linear array. Facta Universitatis - Series Electronics and Energetics, 2015, 28, 77-84.	0.9	0
75	Thermographic detection of abraded pipeline walls in the industrial installations. , 0, , .		0
76	Last 25 years of IR thermography in Poland. , 0, , .		0
77	Application of IR thermography for thermal inverse modelling to evaluate the local power loss in punched ferromagnetic strips. , 0, , .		0
78	Thermal Characterization of Electronic Components Using Single-detector IR Measurement and 3D Heat Transfer Modelling. , 2020, , .		0