Christophe Pradere

List of Publications by Year
in descending order

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88 papers	1,366 citations	394421 19 h-index	377865 34 g-index
89 all docs	89 docs citations	89 times ranked	1236 citing authors

#	Article	IF	Citations
1	Transverse and longitudinal coefficient of thermal expansion of carbon fibers at high temperatures (300â€“2500K). Carbon, 2008, 46, 1874-1884.	10.3	165
2	Thermal properties of carbon fibers at very high temperature. Carbon, 2009, 47, 737-743.	10.3	131
3	Thermal (IR) and Other NDT Techniques for Improved Material Inspection. Journal of Nondestructive Evaluation, 2016, 35, 1.	2.4	96
4	The Joule heating problem in silver nanowire transparent electrodes. Nanotechnology, 2017, 28, 425703.	2.6	66
5	Three-dimensional terahertz computed tomography of human bones. Applied Optics, 2012, 51, 6738.	1.8	61
6	Extending the flash method to measure the thermal diffusivity of semitransparent solids. Measurement Science and Technology, 2014, 25, 035604.	2.6	57
7	Processing of temperature field in chemical microreactors with infrared thermography. Quantitative InfraRed Thermography Journal, 2006, 3, 117-135.	4.2	50
8	Thermal diffusivity measurements on a single fiber with microscale diameter at very high temperature. International Journal of Thermal Sciences, 2006, 45, 443-451.	4.9	35
9	Subsurface imaging for panel paintings inspection: A comparative study of the ultraviolet, the visible, the infrared and the terahertz spectra. Opto-electronics Review, 2015, 23, .	2.4	31
10	Thermal analysis of chemical reaction with a continuous microfluidic calorimeter. Chemical Engineering Journal, 2010, 160, 814-822.	12.7	28
11	Numerical Inversion of Laplace Transform for Time Resolved Thermal Characterization Experiment. Journal of Heat Transfer, 2011, 133, .	2.1	28
12	Thermal quadrupole method with internal heat sources. International Journal of Thermal Sciences, 2012, 53, 49-55.	4.9	28
13	Enthalpy, kinetics and mixing characterization in droplet-flow millifluidic device by infrared thermography. Chemical Engineering Journal, 2015, 273, 325-332.	12.7	28
14	From Intermittent to Nonintermittent Behavior in Two Dimensional Thermal Convection in a Soap Bubble. Physical Review Letters, 2010, 105, 264502.	7.8	25
15	Infrared thermo-spectroscopic imaging of styrene radical polymerization in microfluidics. Chemical Engineering Journal, 2017, 324, 259-265.	12.7	25
16	Photothermal converters for quantitative 2D and 3D real-time TeraHertz imaging. Quantitative InfraRed Thermography Journal, 2010, 7, 217-235.	4.2	24
17	A millifluidic calorimeter with infrared thermography for the measurement of chemical reaction enthalpy and kinetics. Quantitative InfraRed Thermography Journal, 2008, 5, 211-229.	4.2	23
18	Microscale thermography of freezing biological cells in view of cryopreservation. Quantitative InfraRed Thermography Journal, 2009, 6, 37-61.	4.2	23

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19	An analytical two-temperature model for convectionâ€“diffusion in multilayered systems: Application to the thermal characterization of microchannel reactors. Chemical Engineering Science, 2007, 62, 4054-4064.	3.8	20
20	Fast infrared imaging spectroscopy technique (FIIST). Infrared Physics and Technology, 2015, 68, 152-158.	2.9	20
21	Measurement of in-plane thermal diffusivity of solids moving at constant velocity using laser spot infrared thermography. Measurement: Journal of the International Measurement Confederation, 2019, 134, 519-526.	5.0	20
22	Thermal Analysis for Velocity, Kinetics, and Enthalpy Reaction Measurements in Microfluidic Devices. Experimental Heat Transfer, 2009, 23, 44-62.	3.2	19
23	Pulsed flying spot with the logarithmic parabolas method for the estimation of in-plane thermal diffusivity fields on heterogeneous and anisotropic materials. Journal of Applied Physics, 2017, 121, .	2.5	19
24	Water detection in honeycomb composite structures using terahertz thermography. Russian Journal of Nondestructive Testing, 2015, 51, 520-523.	0.9	17
25	Broadband Sub-terahertz Camera Based on Photothermal Conversion and IR Thermography. Journal of Infrared, Millimeter, and Terahertz Waves, 2016, 37, 448-461.	2.2	14
26	Constant Velocity Flying Spot for the estimation of in-plane thermal diffusivity on anisotropic materials. International Journal of Thermal Sciences, 2019, 145, 106000.	4.9	14
27	Three-Dimensional Reconstruction of Thermal Volumetric Sources from Surface Temperature Fields Measured by Infrared Thermography. Applied Sciences (Switzerland), 2019, 9, 5464.	2.5	14
28	Simultaneous microscopic measurements of thermal and spectroscopic fields of a phase change material. Infrared Physics and Technology, 2016, 76, 65-71.	2.9	13
29	Fast sizing of the width of infinite vertical cracks using constant velocity Flying-Spot thermography. NDT and E International, 2019, 103, 166-172.	3.7	13
30	The periodic pulse photothermal radiometry technique within the front face configuration. Measurement: Journal of the International Measurement Confederation, 2020, 158, 107691.	5.0	12
31	New temperature field processing from IR camera for velocity, thermal diffusivity and calorimetric non-intrusive measurements in microfluidics systems. Quantitative InfraRed Thermography Journal, 2012, 9, 79-98.	4.2	11
32	Pulsed Flying Spot Elliptic method for the estimation of the thermal diffusivity field of orthotropic materials. International Journal of Thermal Sciences, 2018, 125, 142-148.	4.9	11
33	Terahertz Measurement of the Water Content Distribution in Wood Materials. Journal of Infrared, Millimeter, and Terahertz Waves, 2018, 39, 195-209.	2.2	11
34	High speed heterodyne infrared thermography applied to thermal diffusivity identification. Review of Scientific Instruments, 2011, 82, 054901.	1.3	9
35	Thermal characterization of materials using Karhunenâ€“LoÃ¨ve decomposition techniques â€“ Part I. Orthotropic materials. Inverse Problems in Science and Engineering, 2012, 20, 1115-1143.	1.2	9
36	Specific-heat measurement of single metallic, carbon, and ceramic fibers at very high temperature. Review of Scientific Instruments, 2005, 76, 064901.	1.3	8

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37	Combination of terahertz radiation method and thermal probe method for non-destructive thermal diagnosis of thick building walls. Energy and Buildings, 2018, 158, 1328-1336.	6.7	8
38	Advanced thermal impedance network for the heat diffusion with sources. International Journal of Thermal Sciences, 2018, 130, 518-524.	4.9	8
39	Signal noise ratio improvement technique for bulk thermal diffusivity measurement. International Journal of Thermal Sciences, 2018, 129, 385-395.	4.9	8
40	Non-contact temperature field measurement of solids by infrared multispectral thermotransmittance. Journal of Applied Physics, 2017, 121, .	2.5	7
41	Thin Coatings of Cerium Oxide Nanoparticles with Anti-Reflective Properties. Applied Sciences (Switzerland), 2019, 9, 3886.	2.5	7
42	Coupling Pulsed Flying Spot technique with robot automation for industrial thermal characterization of complex shape composite materials. NDT and E International, 2019, 102, 175-179.	3.7	7
43	Heat Capacity and Anisotropic Thermal Conductivity in Cr₂AlC Single Crystals at High Temperature. Journal of Physical Chemistry C, 2020, 124, 24017-24028.	3.1	7
44	Study of Phase Change and Supercooling in Micro-Channels by Infrared Thermography. Experimental Heat Transfer, 2016, 29, 266-283.	3.2	6
45	Lock-in thermography on moving samples: amazing mismatch between amplitude and phase. Quantitative InfraRed Thermography Journal, 2020, 17, 279-286.	4.2	6
46	Thermal Camera-Based Fourier Transform Infrared Thermospectroscopic Imager. Applied Spectroscopy, 2021, 75, 462-474.	2.2	6
47	Infrared thermospectroscopic imaging of heat and mass transfers in laminar microfluidic reactive flows. Chemical Engineering Journal Advances, 2021, 8, 100166.	5.2	6
48	A Continuous Millimeter-Wave Imaging Scanner for Art Conservation Science. Advances in Optical Technologies, 2011, 2011, 1-9.	0.8	5
49	Absolute self-calibrated room-temperature terahertz powermeter. Applied Optics, 2013, 52, 2320.	1.8	5
50	Thermoreflectance temperature measurement with millimeter wave. Review of Scientific Instruments, 2014, 85, 064904.	1.3	5
51	Estimating the humidity of wood by terahertz infrared thermography. Russian Journal of Nondestructive Testing, 2016, 52, 753-757.	0.9	5
52	Calibration Procedure for Attenuation Coefficient Measurements in Highly Opaque Media Using Infrared Focal Plane Array (IRFPA) Spectroscopy. Applied Spectroscopy, 2018, 72, 177-187.	2.2	5
53	Thermal resistance field estimations from IR thermography using multiscale Bayesian inference. Quantitative InfraRed Thermography Journal, 2021, 18, 332-343.	4.2	5
54	3D infrared thermospectroscopic imaging. Scientific Reports, 2020, 10, 22310.	3.3	5

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55	Estimation of Thermal Resistance Field in Layered Materials by Analytical Asymptotic Method. Applied Sciences (Switzerland), 2020, 10, 2351.	2.5	5
56	Bayesian Inference for 3D Volumetric Heat Sources Reconstruction from Surfacic IR Imaging. Applied Sciences (Switzerland), 2020, 10, 1607.	2.5	5
57	Analyzing efficiency of optical and THz infrared thermography in nondestructive testing of GFRPs by using the Tanimoto criterion. NDT and E International, 2021, 117, 102383.	3.7	5
58	Active thermo-reflectometry for absolute temperature measurement by infrared thermography on specular materials. Scientific Reports, 2022, 12, 7814.	3.3	5
59	Estimation of the transverse coefficient of thermal expansion on carbon fibers at very high temperature. Inverse Problems in Science and Engineering, 2007, 15, 77-89.	1.2	4
60	Heterodyne method with an infrared camera for the thermal diffusivity estimation with periodic local heating in a large range of frequencies (25 Hz to upper than 1 kHz). Quantitative InfraRed Thermography Journal, 2010, 7, 115-128.	4.2	4
61	Quantitative kinetics and enthalpy measurements of biphasic underflow chemical reactions using infrared thermography. Experimental Thermal and Fluid Science, 2015, 67, 14-17.	2.7	4
62	Thermal analysis of droplet flow: Numerical, analytical and experimental investigations. Applied Thermal Engineering, 2015, 90, 403-412.	6.0	4
63	Microscale spectroscopic thermal imaging of n-alkanes. Quantitative InfraRed Thermography Journal, 2017, 14, 154-163.	4.2	4
64	Thermospectroscopic infrared imaging of a confined drying process. Chemical Engineering Journal, 2021, 403, 126167.	12.7	4
65	Thermal characterization of materials using Karhunenâ€“LoÃ¨ve decomposition techniques â€“ Part II. Heterogeneous materials. Inverse Problems in Science and Engineering, 2012, 20, 1145-1174.	1.2	3
66	Sonothermography in composite materials: Finite Element modeling and experimental validation. NDT and E International, 2012, 51, 120-126.	3.7	3
67	Quantitative thermal analysis of heat transfer in liquidâ€“liquid biphasic millifluidic droplet flows. Quantitative InfraRed Thermography Journal, 2014, 11, 134-160.	4.2	3
68	Thermal characterisation of homogeneous materials using a weak formulation technique. Quantitative InfraRed Thermography Journal, 2014, 11, 190-206.	4.2	3
69	A flash characterisation method for thin cylindrical multilayered composites based on the combined front and rear faces thermograms. Quantitative InfraRed Thermography Journal, 2016, 13, 182-194.	4.2	3
70	Contactless Transient THz Temperature Imaging by Thermo-transmittance Technique on Semi-transparent Materials. Journal of Infrared, Millimeter, and Terahertz Waves, 2018, 39, 1112-1126.	2.2	3
71	Ultra-broadband contactless imaging power meter. Applied Optics, 2021, 60, 7995.	1.8	3
72	3D transient temperature measurement in homogeneous solid material with THz waves. , 2016, , .		2

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73	Time-Resolved Temperature Map Prediction of Concentration Photovoltaics Systems by Means of Coupled Ray Tracing Flux Analysis and Thermal Quadrupoles Modelling. Energies, 2018, 11, 2042.	3.1	2
74	Integration study among flying spot laser thermography and terahertz technique for the inspection of panel paintings. Journal of Thermal Analysis and Calorimetry, 2022, 147, 8279-8287.	3.6	2
75	Thermal characterization of viscoelastic materials using sonothermography. AIP Conference Proceedings, 2014, , .	0.4	1
76	Infrared image processing devoted to thermal non-contact characterization-Applications to Non-Destructive Evaluation, Microfluidics and 2D source term distribution for multispectral tomography. Journal of Physics: Conference Series, 2015, 655, 012002.	0.4	1
77	Thermal Chladni plate experiments to reveal and estimate spatially dependent vibrothermal source. Quantitative InfraRed Thermography Journal, 2019, 16, 163-171.	4.2	1
78	Use of SVD decomposition to increase signal and noise ratio on THz imaging measurements. , 2014, , .		1
79	Several considerations about a pulsed flying spot method implemented with IR thermography. , 2015, , .		1
80	Flash method and Bayesian inference for measurement of thermophysical fields. AIP Advances, 2021, 11, 105009.	1.3	1
81	Heat Transfer and Correlation Mapping for the Estimation of Thermophysical Properties in Microfluidic Devices. , 2010, , .		0
82	New 2D TeraHertz sensor based on arrayed thermal converter coupled to infrared temperature flux measurement. , 2010, , .		0
83	Thermal effects of CO₂capture by solid adsorbents: some approaches by IR image processing. Mechanics and Industry, 2013, 14, 447-451.	1.3	0
84	Measurement of Water Content in a Wood Sample by Terahertz Imaging. , 2017, , .		0
85	Contactless thermal profilometry of carbon-resin materials by IR thermography. Measurement: Journal of the International Measurement Confederation, 2021, 182, 109723.	5.0	0
86	Mesure de cartographies de teneur en eau par imagerie tÃ©rahertz. Instrumentation Mesure Metrologie, 2016, 15, 161-175.	0.3	0
87	Infrared thermospectroscopic imaging and tomography of confined process. , 2019, , .		0
88	Flying-spot thermography: measuring the in-plane (an)isotropic thermal diffusivity of large and complex parts. , 2019, , .		0