

# Christophe Pradere

## List of Publications by Year in descending order

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Version: 2024-02-01

88  
papers

1,366  
citations

394390

19  
h-index

377849

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 convection–diffusion in multilayered systems: Application to the thermal characterization of microchannel reactors. <i>Chemical Engineering Science</i> , 2007, 62, 4054-4064.	3.8	20
20	Fast infrared imaging spectroscopy technique (FIIST). <i>Infrared Physics and Technology</i> , 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. <i>Measurement: Journal of the International Measurement Confederation</i> , 2019, 134, 519-526.	5.0	20
22	Thermal Analysis for Velocity, Kinetics, and Enthalpy Reaction Measurements in Microfluidic Devices. <i>Experimental Heat Transfer</i> , 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. <i>Journal of Applied Physics</i> , 2017, 121, .	2.5	19
24	Water detection in honeycomb composite structures using terahertz thermography. <i>Russian Journal of Nondestructive Testing</i> , 2015, 51, 520-523.	0.9	17
25	Broadband Sub-terahertz Camera Based on Photothermal Conversion and IR Thermography. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2016, 37, 448-461.	2.2	14
26	Constant Velocity Flying Spot for the estimation of in-plane thermal diffusivity on anisotropic materials. <i>International Journal of Thermal Sciences</i> , 2019, 145, 106000.	4.9	14
27	Three-Dimensional Reconstruction of Thermal Volumetric Sources from Surface Temperature Fields Measured by Infrared Thermography. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 5464.	2.5	14
28	Simultaneous microscopic measurements of thermal and spectroscopic fields of a phase change material. <i>Infrared Physics and Technology</i> , 2016, 76, 65-71.	2.9	13
29	Fast sizing of the width of infinite vertical cracks using constant velocity Flying-Spot thermography. <i>NDT and E International</i> , 2019, 103, 166-172.	3.7	13
30	The periodic pulse photothermal radiometry technique within the front face configuration. <i>Measurement: Journal of the International Measurement Confederation</i> , 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. <i>Quantitative InfraRed Thermography Journal</i> , 2012, 9, 79-98.	4.2	11
32	Pulsed Flying Spot Elliptic method for the estimation of the thermal diffusivity field of orthotropic materials. <i>International Journal of Thermal Sciences</i> , 2018, 125, 142-148.	4.9	11
33	Terahertz Measurement of the Water Content Distribution in Wood Materials. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2018, 39, 195-209.	2.2	11
34	High speed heterodyne infrared thermography applied to thermal diffusivity identification. <i>Review of Scientific Instruments</i> , 2011, 82, 054901.	1.3	9
35	Thermal characterization of materials using Karhunen–Loève decomposition techniques – Part I. Orthotropic materials. <i>Inverse Problems in Science and Engineering</i> , 2012, 20, 1115-1143.	1.2	9
36	Specific-heat measurement of single metallic, carbon, and ceramic fibers at very high temperature. <i>Review of Scientific Instruments</i> , 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. <i>Energy and Buildings</i> , 2018, 158, 1328-1336.	6.7	8
38	Advanced thermal impedance network for the heat diffusion with sources. <i>International Journal of Thermal Sciences</i> , 2018, 130, 518-524.	4.9	8
39	Signal noise ratio improvement technique for bulk thermal diffusivity measurement. <i>International Journal of Thermal Sciences</i> , 2018, 129, 385-395.	4.9	8
40	Non-contact temperature field measurement of solids by infrared multispectral thermotransmittance. <i>Journal of Applied Physics</i> , 2017, 121, .	2.5	7
41	Thin Coatings of Cerium Oxide Nanoparticles with Anti-Reflective Properties. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 3886.	2.5	7
42	Coupling Pulsed Flying Spot technique with robot automation for industrial thermal characterization of complex shape composite materials. <i>NDT and E International</i> , 2019, 102, 175-179.	3.7	7
43	Heat Capacity and Anisotropic Thermal Conductivity in Cr <sub>2</sub> AlC Single Crystals at High Temperature. <i>Journal of Physical Chemistry C</i> , 2020, 124, 24017-24028.	3.1	7
44	Study of Phase Change and Supercooling in Micro-Channels by Infrared Thermography. <i>Experimental Heat Transfer</i> , 2016, 29, 266-283.	3.2	6
45	Lock-in thermography on moving samples: amazing mismatch between amplitude and phase. <i>Quantitative InfraRed Thermography Journal</i> , 2020, 17, 279-286.	4.2	6
46	Thermal Camera-Based Fourier Transform Infrared Thermospectroscopic Imager. <i>Applied Spectroscopy</i> , 2021, 75, 462-474.	2.2	6
47	Infrared thermospectroscopic imaging of heat and mass transfers in laminar microfluidic reactive flows. <i>Chemical Engineering Journal Advances</i> , 2021, 8, 100166.	5.2	6
48	A Continuous Millimeter-Wave Imaging Scanner for Art Conservation Science. <i>Advances in Optical Technologies</i> , 2011, 2011, 1-9.	0.8	5
49	Absolute self-calibrated room-temperature terahertz powermeter. <i>Applied Optics</i> , 2013, 52, 2320.	1.8	5
50	Thermoreflectance temperature measurement with millimeter wave. <i>Review of Scientific Instruments</i> , 2014, 85, 064904.	1.3	5
51	Estimating the humidity of wood by terahertz infrared thermography. <i>Russian Journal of Nondestructive Testing</i> , 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. <i>Applied Spectroscopy</i> , 2018, 72, 177-187.	2.2	5
53	Thermal resistance field estimations from IR thermography using multiscale Bayesian inference. <i>Quantitative InfraRed Thermography Journal</i> , 2021, 18, 332-343.	4.2	5
54	3D infrared thermospectroscopic imaging. <i>Scientific Reports</i> , 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 Surface 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 Karhunen's decomposition techniques 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 liquid-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. <i>Energies</i> , 2018, 11, 2042.	3.1	2
74	Integration study among flying spot laser thermography and terahertz technique for the inspection of panel paintings. <i>Journal of Thermal Analysis and Calorimetry</i> , 2022, 147, 8279-8287.	3.6	2
75	Thermal characterization of viscoelastic materials using sonothermography. <i>AIP Conference Proceedings</i> , 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. <i>Journal of Physics: Conference Series</i> , 2015, 655, 012002.	0.4	1
77	Thermal Chladni plate experiments to reveal and estimate spatially dependent vibrothermal source. <i>Quantitative InfraRed Thermography Journal</i> , 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. <i>AIP Advances</i> , 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 CO <sub>2</sub> capture by solid adsorbents: some approaches by IR image processing. <i>Mechanics and Industry</i> , 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. <i>Measurement: Journal of the International Measurement Confederation</i> , 2021, 182, 109723.	5.0	0
86	Mesure de cartographies de teneur en eau par imagerie t�rahertz. <i>Instrumentation Mesure Metrologie</i> , 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