

# Stephane Grauby

## List of Publications by Year in descending order

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59  
papers

1,049  
citations

471509  
17  
h-index

434195  
31  
g-index

60  
all docs

60  
docs citations

60  
times ranked

1023  
citing authors

#	ARTICLE	IF	CITATIONS
1	High resolution photothermal imaging of high frequency phenomena using a visible charge coupled device camera associated with a multichannel lock-in scheme. Review of Scientific Instruments, 1999, 70, 3603-3608.	1.3	128
2	Scanning thermal microscopy of individual silicon nanowires. Journal of Applied Physics, 2011, 109, .	2.5	78
3	Thermal exchange radius measurement: Application to nanowire thermal imaging. Review of Scientific Instruments, 2010, 81, 073701.	1.3	63
4	Decrease in thermal conductivity in polymeric P3HT nanowires by size-reduction induced by crystal orientation: new approaches towards thermal transport engineering of organic materials. Nanoscale, 2014, 6, 7858-7865.	5.6	63
5	Calibration procedure for temperature measurements by thermoreflectance under high magnification conditions. Applied Physics Letters, 2004, 84, 822-824.	3.3	62
6	Coherent phonons in Si <sup>*</sup> /SiGe superlattices. Physical Review B, 2007, 75, .	3.2	58
7	Fabrication of Bi <sub>2</sub> Te <sub>3</sub> nanowire arrays and thermal conductivity measurement by 3D-scanning thermal microscopy. Journal of Applied Physics, 2013, 113, .	2.5	56
8	Heterodyne picosecond thermoreflectance applied to nanoscale thermal metrology. Journal of Applied Physics, 2011, 110, .	2.5	48
9	Four different approaches for the measurement of IC surface temperature: application to thermal testing. Microelectronics Journal, 2002, 33, 689-696.	2.0	41
10	Nanoscale Block Copolymer Ordering Induced by Visible Interferometric Micropatterning: A Route towards Large Scale Block Copolymer 2D Crystals. Advanced Materials, 2013, 25, 213-217.	21.0	40
11	Si and SiGe Nanowires: Fabrication Process and Thermal Conductivity Measurement by 3D-Scanning Thermal Microscopy. Journal of Physical Chemistry C, 2013, 117, 9025-9034.	3.1	33
12	Strategies for built-in characterization testing and performance monitoring of analog RF circuits with temperature measurements. Measurement Science and Technology, 2010, 21, 075104.	2.6	26
13	Thermoreflectance calibration procedure on a laser diode: application to catastrophic optical facet damage analysis. IEEE Electron Device Letters, 2005, 26, 461-463.	3.9	24
14	Imaging setup for temperature, topography, and surface displacement measurements of microelectronic devices. Review of Scientific Instruments, 2003, 74, 645-647.	1.3	23
15	Characterization of the thermal behavior of PN thermoelectric couples by scanning thermal microscope. Microelectronics Journal, 2004, 35, 797-803.	2.0	21
16	Thermal parameters identification of micrometric layers of microelectronic devices by thermoreflectance microscopy. Microelectronics Journal, 2004, 35, 811-816.	2.0	20
17	Cross-plan Si <sup>*</sup> /SiGe superlattice acoustic and thermal properties measurement by picosecond ultrasonics. Journal of Applied Physics, 2007, 101, 013705.	2.5	20
18	Study of thermomechanical properties of Si <sup>*</sup> /SiGe superlattices using femtosecond transient thermoreflectance technique. Applied Physics Letters, 2005, 87, 103506.	3.3	16

#	ARTICLE	IF	CITATIONS
19	A heterodyne method for the thermal observation of the electrical behavior of high-frequency integrated circuits. Measurement Science and Technology, 2008, 19, 115704.	2.6	16
20	Temperature variation mapping of a microelectromechanical system by thermoreflectance imaging. IEEE Electron Device Letters, 2005, 26, 78-80.	3.9	15
21	Laser scanning thermoreflectance imaging system using galvanometric mirrors for temperature measurements of microelectronic devices. Review of Scientific Instruments, 2007, 78, 074902.	1.3	15
22	Dynamical behavior and cut-off frequency of Si/SiGe microcoolers. Superlattices and Microstructures, 2007, 41, 7-16.	3.1	15
23	Comparison of thermoreflectance and scanning thermal microscopy for microelectronic device temperature variation imaging: Calibration and resolution issues. Microelectronics Reliability, 2008, 48, 204-211.	1.7	15
24	Surface displacement imaging by interferometry with a light emitting diode. Applied Optics, 2002, 41, 4996.	2.1	14
25	Laser diode COFD analysis by thermoreflectance microscopy. Microelectronics Reliability, 2001, 41, 1597-1601.	1.7	13
26	High resolution AC temperature field imaging. Electronics Letters, 1997, 33, 1688.	1.0	13
27	Dynamical behavior of the scanning thermal microscope (SthM) thermal resistive probe studied using Si/SiGe microcoolers. Superlattices and Microstructures, 2005, 38, 69-75.	3.1	10
28	Time gating imaging through thick silicon substrate: a new step towards backside characterisation. Microelectronics Reliability, 2006, 46, 1520-1524.	1.7	10
29	Joule expansion imaging techniques on microelectronic devices. Microelectronics Journal, 2009, 40, 1367-1372.	2.0	10
30	Precise Facet Temperature Distribution of High- Power Laser Diodes: Unpumped Window Effect. IEEE Photonics Technology Letters, 2015, 27, 1002-1005.	2.5	10
31	Laser Seebeck Effect Imaging (SEI) and Peltier Effect Imaging (PEI): complementary investigation methods.. Microelectronics Reliability, 2003, 43, 1609-1613.	1.7	8
32	Applications of temperature phase measurements to IC testing. Microelectronics Reliability, 2004, 44, 95-103.	1.7	7
33	Ultimate-resolution thermal spectroscopy in time domain thermoreflectance (TDTR). Journal of Applied Physics, 2020, 128, 065106.	2.5	7
34	Si and Ge allotrope heterostructured nanowires: experimental evaluation of the thermal conductivity reduction. Nanotechnology, 2019, 30, 375704.	2.6	5
35	Harmonic Regime Analysis and Inverse Method Applied to The Simultaneous Determination of Thermoelectric Properties. , 2006, , .		4
36	Determination of ZT of PN thermoelectric couples by AC electrical measurement. , 0, , .		3

#	ARTICLE	IF	CITATIONS
37	Heterodyne lock-in thermal coupling measurements in integrated circuits: Applications to test and characterization. Review of Scientific Instruments, 2009, 80, 026101.	1.3	3
38	Nanoscale Thermal Transport Studied With Heterodyne Picosecond Thermoreflectance. , 2009, , .		3
39	Electro-thermal characterization of a differential temperature sensor in a 65nm CMOS IC: Applications to gain monitoring in RF amplifiers. Microelectronics Journal, 2014, 45, 484-490.	2.0	3
40	Measurement of thermally induced vibrations of microelectronic devices by use of a heterodyne electronic speckle pattern interferometry imaging technique. Applied Optics, 2003, 42, 1763.	2.1	2
41	Thermal study of PN thermoelectric couple by laser induced Seebeck EMF measurement. Superlattices and Microstructures, 2004, 35, 375-387.	3.1	2
42	ElectroStatic Discharge Fault Localization by Laser Probing. Microelectronics Reliability, 2005, 45, 1482-1486.	1.7	2
43	Characterization of thermoelectric devices by laser induced Seebeck electromotive force (LIS-EMF) measurement. Journal Physics D: Applied Physics, 2005, 38, 1489-1497.	2.8	2
44	Using Temperature as Observable of the Frequency Response of RF CMOS Amplifiers. , 2008, , .		2
45	Effect of nanostructuration on the thermal conductivity of thermoelectric materials. , 2013, , .		2
46	Investigations on electro-optical and thermal performances degradation of high power density GaAs-based laser diode in vacuum environment. Microelectronics Reliability, 2015, 55, 1746-1749.	1.7	2
47	Thermal Behavior of High Power GaAs-Based Laser Diodes in Vacuum Environment. IEEE Photonics Technology Letters, 2016, 28, 665-668.	2.5	2
48	Imaging Thermoelectric Properties at the Nanoscale. Nanomaterials, 2021, 11, 1199.	4.1	2
49	2 MHz modulated photothermal imaging using a CCD camera coupled to a multichannel lock-in detection. , 1999, , .		1
50	Study of the thermal behaviour of PN thermoelectric couples by laser probe interferometric measurement. , 0, , .		1
51	Application of Picosecond Ultrasonics to Non-Destructive Analysis in VLSI circuits. Microelectronics Reliability, 2003, 43, 1803-1807.	1.7	1
52	Thermal and thermomechanical study of micro-refrigerators on a chip based on semiconductor heterostructures. , 0, , .		1
53	Simulation of Si/SiGe micro-cooler by thermal quadrupoles method. , 2005, , .		1
54	Joule expansion imaging techniques on microelectronic devices. , 2007, , .		1

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55	Laser scanning thermomechanical imaging of microelectronic devices. , 2008, , .		1
56	Fast Laser Scanning Imaging System for Surface Displacement Measurements. IEEE Electron Device Letters, 2009, 30, 222-224.	3.9	1
57	Strain Energy Imaging of a Power MOS Transistor Using Speckle Interferometry. IEEE Transactions on Reliability, 2004, 53, 293-296.	4.6	0
58	Investigating Coherent Zone-Folded Acoustic Phonons in Si/SiGe Superlattices by Transient Thermoreflectance Technique. Materials Research Society Symposia Proceedings, 2009, 1221, 8031.	0.1	0
59	Nonlinearity characterization of temperature sensing systems for integrated circuit testing by intermodulation products monitoring. Review of Scientific Instruments, 2011, 82, 094902.	1.3	0