

Ernesto Marin

List of Publications by Year in descending order

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121
papers

1,180
citations

361413

20
h-index

552781

26
g-index

121
all docs

121
docs citations

121
times ranked

956
citing authors

#	ARTICLE	IF	CITATIONS
1	Photoacoustic determination of non-radiative carrier lifetimes. <i>Journal of Applied Physics</i> , 1998, 83, 2604-2609.	2.5	39
2	The role of thermal properties in periodic time-varying phenomena. <i>European Journal of Physics</i> , 2007, 28, 429-445.	0.6	38
3	The application of the photoacoustic technique to the measurement of the thermal effusivity of liquids. <i>Journal Physics D: Applied Physics</i> , 1999, 32, 593-597.	2.8	31
4	Thermal diffusivity of few-layers graphene measured by an all-optical method. <i>Journal Physics D: Applied Physics</i> , 2015, 48, 465501.	2.8	31
5	Photoacoustic determination of the recombination velocity at the AlGaAs/GaAs heterostructure interface. <i>Journal of Applied Physics</i> , 1999, 86, 6222-6229.	2.5	29
6	On the thermal characterization of two-layer systems by means of the photoacoustic effect. <i>Journal Physics D: Applied Physics</i> , 1996, 29, 981-986.	2.8	28
7	On the use of the photoacoustic technique for corrosion monitoring of metals: Cu and Zn oxides formed in tropical environments. <i>Corrosion Science</i> , 1997, 39, 1641-1655.	6.6	28
8	Photoacoustic measurements of the thermal properties of Al _y Ga _{1-y} As alloys in the region 0<y<0.5. <i>Applied Physics A: Materials Science and Processing</i> , 1997, 65, 69-72.	2.3	27
9	Thermal Physics Concepts: The Role of the Thermal Effusivity. <i>Physics Teacher</i> , 2006, 44, 432-434.	0.3	27
10	Discrimination of organic coffee via Fourier transform infrared photoacoustic spectroscopy. <i>Journal of the Science of Food and Agriculture</i> , 2012, 92, 2316-2319.	3.5	27
11	Thermal diffusivity measurements in solids by photothermal infrared radiometry: Influence of convection radiation heat losses. <i>International Journal of Thermal Sciences</i> , 2015, 98, 202-207.	4.9	27
12	Photoacoustic thermal characterization of spark-processed porous silicon. <i>Journal of Applied Physics</i> , 1996, 79, 8951-8954.	2.5	26
13	Trace detection and photothermal spectral characterization by a tuneable thermal lens spectrometer with white-light excitation. <i>Talanta</i> , 2018, 183, 158-163.	5.5	26
14	Optical and thermal properties of liquids measured by means of an open photoacoustic cell. <i>Measurement Science and Technology</i> , 2000, 11, 412-417.	2.6	25
15	Measurement of the thermal properties of liquids using a thermal wave interferometer. <i>Measurement Science and Technology</i> , 2000, 11, 1522-1526.	2.6	25
16	A hot-wire method based thermal conductivity measurement apparatus for teaching purposes. <i>European Journal of Physics</i> , 2012, 33, 897-906.	0.6	25
17	Measurement of the Auger lifetime in GaInAsSb/GaSb heterostructures using the photoacoustic technique. <i>Applied Physics Letters</i> , 2001, 79, 964-966.	3.3	23
18	High sensitivity thermal lens microscopy: Cr-VI trace detection in water. <i>Talanta</i> , 2017, 170, 260-265.	5.5	22

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19	Implementation of a field programmable gate array-based lock-in amplifier. Measurement: Journal of the International Measurement Confederation, 2015, 69, 31-41.	5.0	21
20	Electropyroelectric technique for measurement of the thermal effusivity of liquids. Journal Physics D: Applied Physics, 2010, 43, 225501.	2.8	20
21	Encapsulation efficiency of CdSe/ZnS quantum dots by liposomes determined by thermal lens microscopy. Biomedical Optics Express, 2015, 6, 3898.	2.9	20
22	Application of the thermal wave resonator to the measurement of the thermal diffusivity of gas mixtures. Review of Scientific Instruments, 2001, 72, 1580.	1.3	19
23	A multi-thermal-lens approach to evaluation of multi-pass probe beam configuration in thermal lens spectrometry. Analytica Chimica Acta, 2020, 1100, 182-190.	5.4	19
24	Measurement of the thermal properties of liquid mixtures using a thermal wave interferometer. Applied Physics B: Lasers and Optics, 2001, 73, 151-155.	2.2	18
25	On the Photoacoustic Characterization of Semiconductors: Influence of Carrier Recombination on the Thermodiffusion, Thermoelastic and Electronic Strain Signal Generation Mechanisms. Physica Status Solidi A, 2000, 179, 387-402.	1.7	17
26	On the wave treatment of the conduction of heat in photothermal experiments with solids. European Journal of Physics, 2002, 23, 523-532.	0.6	17
27	Study of the physical properties of Bi doped CdTe thin films deposited by close space vapour transport. Thin Solid Films, 2008, 516, 3818-3823.	1.8	16
28	Similarity theory and dimensionless numbers in heat transfer. European Journal of Physics, 2009, 30, 439-445.	0.6	16
29	On the thermal characterization of solids by photoacoustic calorimetry: thermal diffusivity and linear thermal expansion coefficient. Thermochimica Acta, 2015, 614, 52-58.	2.7	16
30	On the Use of the Photoacoustic Technique for Monitoring the Doping Concentration Dependence of the Surface Recombination Velocity. Physica Status Solidi A, 1998, 169, 275-280.	1.7	15
31	Anisotropic magnetocaloric effect in gadolinium thin films: Magnetization measurements and acoustic detection. Journal of Applied Physics, 2013, 114, 163905.	2.5	15
32	Physical properties of Bi doped CdTe thin films grown by the CSVT method. Solar Energy Materials and Solar Cells, 2006, 90, 2228-2234.	6.2	14
33	A study of the optical absorption in CdTe by photoacoustic spectroscopy. Journal of Materials Science, 2007, 42, 7176-7179.	3.7	14
34	On thermal waves. European Journal of Physics, 2013, 34, L83-L85.	0.6	14
35	White Light Photothermal Lens Spectrophotometer for the Determination of Absorption in Scattering Samples. Applied Spectroscopy, 2014, 68, 680-685.	2.2	14
36	Densification and microstructure of spark plasma sintered $7YSZ\text{-}x\text{Gd}_2\text{O}_3$ ceramic nano-composites. Journal of Asian Ceramic Societies, 2017, 5, 266-275.	2.3	14

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37	Photo-induced charge transfer in Prussian blue analogues as detected by photoacoustic spectroscopy. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2007, 68, 191-197.	3.9	13
38	Characterization of the thermal properties of gases using a thermal wave interferometer. <i>Measurement Science and Technology</i> , 2001, 12, 1949-1955.	2.6	12
39	A temperature relaxation method for the measurement of the specific heat of solids at room temperature in student laboratories. <i>American Journal of Physics</i> , 2003, 71, 1032-1036.	0.7	12
40	Specific Heat Measurements by a Thermal Relaxation Method: Influence of Convection and Conduction. <i>International Journal of Thermophysics</i> , 2006, 27, 1859-1872.	2.1	10
41	A method for thermal diffusivity measurement in fluids. <i>Review of Scientific Instruments</i> , 2013, 84, 104903.	1.3	10
42	A liquids refractive index spectrometer. <i>Sensors and Actuators B: Chemical</i> , 2016, 229, 249-256.	7.8	10
43	Absorption Spectra of Ethanol and Water Using a Photothermal Lens Spectrophotometer. <i>Applied Spectroscopy</i> , 2018, 72, 1069-1073.	2.2	10
44	Monitoring of hydrocarbon vapor diffusion in air using a thermal wave interferometer. <i>Journal of Applied Physics</i> , 2002, 91, 5581-5586.	2.5	9
45	Differential sensor in front photopyroelectric technique: II. Experimental. <i>Journal Physics D: Applied Physics</i> , 2009, 42, 125504.	2.8	9
46	Absolute measurements of thermal effusivity using the electropyroelectric technique. <i>Thermochimica Acta</i> , 2013, 554, 59-62.	2.7	9
47	Thermoelectric transport properties of CuFeInTe ₃ . <i>Journal of Alloys and Compounds</i> , 2015, 651, 490-496.	5.5	9
48	Thermal lens microscope sensitivity enhancement using a passive Fabry-Pérot-type optical cavity. <i>Laser Physics Letters</i> , 2016, 13, 055702.	1.4	9
49	Measurement of mass diffusivity in air using thermal wave interference detection. <i>Review of Scientific Instruments</i> , 2003, 74, 433-436.	1.3	8
50	Thermal Wave Resonator Cavity Applied to the Study of the Thermal Diffusivity of Coffee Infusions. <i>International Journal of Thermophysics</i> , 2009, 30, 1591-1597.	2.1	8
51	On the heat transfer through a solid slab heated uniformly and continuously on one of its surfaces. <i>European Journal of Physics</i> , 2011, 32, 783-791.	0.6	8
52	An explanation for anomalous thermal conductivity behaviour in nanofluids as measured using the hot-wire technique. <i>Journal Physics D: Applied Physics</i> , 2014, 47, 085501.	2.8	8
53	Dielectric and thermal properties of xPbTiO ₃ -(1-x)SrTiO ₃ Polycrystals. <i>Journal of Materials Science</i> , 2004, 39, 1233-1239.	3.7	7
54	Hyperbolic heat diffusion in photothermal experiments with solids. <i>European Physical Journal Special Topics</i> , 2005, 125, 365-368.	0.2	7

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55	Physical Properties of Macroporous Tungsten Oxide Thin Films and Their Impact on the Photocurrent Density. <i>International Journal of Photoenergy</i> , 2013, 2013, 1-8.	2.5	7
56	Study of the heat transfer in solids using infrared photothermal radiometry and simulation by COMSOL Multiphysics. <i>Applied Radiation and Isotopes</i> , 2014, 83, 260-263.	1.5	7
57	Application of thermal lens microscopy (TLM) for measurement of Cr(VI) traces in wastewater. <i>Journal of Environmental Management</i> , 2019, 232, 305-309.	7.8	7
58	Monitoring the advanced oxidation of paracetamol using ZnO films via capillary electrophoresis. <i>Journal of Water Process Engineering</i> , 2021, 41, 102051.	5.6	7
59	Rodlike Particles of Polydopamine-CdTe Quantum Dots: An Actuator As a Photothermal Agent and Reactive Oxygen Species-Generating Nanoplatform for Cancer Therapy. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 42357-42369.	8.0	7
60	On the use of the photoacoustic technique for monitoring the surface recombination velocity at SiN:H/Si interfaces. <i>Semiconductor Science and Technology</i> , 1999, 14, 543-548.	2.0	6
61	On the Use of the Optothermal Window Technique for the Determination of Low Concentrations of Chromium (VI) and Phosphorus in Water. <i>International Journal of Environmental Analytical Chemistry</i> , 2000, 76, 331-344.	3.3	6
62	Differential sensor in front photopyroelectric technique: I. Theory. <i>Journal Physics D: Applied Physics</i> , 2008, 41, 085106.	2.8	6
63	On the modulation frequency dependence of the photoacoustic signal for a metal coated glass-liquid system. <i>Open Physics</i> , 2010, 8, .	1.7	6
64	Influence of the thiourea/CdCl ₂ concentration ratio used for the chemical bath deposition of CdS thin films, upon the CdS/CdTe interface recombination velocity in CdTe/CdS/glass structures.. <i>Journal of Applied Physics</i> , 2010, 107, 123701.	2.5	6
65	On heat transfer through a solid slab heated uniformly and periodically: determination of thermal properties. <i>European Journal of Physics</i> , 2012, 33, 135-148.	0.6	6
66	Stabilization of Joule Heating in the Electropyroelectric Method. <i>International Journal of Thermophysics</i> , 2012, 33, 1924-1933.	2.1	6
67	Electropyroelectric technique: A methodology free of fitting procedures for thermal effusivity determination in liquids. <i>Review of Scientific Instruments</i> , 2015, 86, 064902.	1.3	6
68	Thermal effusivity measurement of conventional and organic coffee oils via photopyroelectric technique. <i>Food Research International</i> , 2017, 102, 419-424.	6.2	6
69	Thermal transport properties of heptane-isooctane mixtures. <i>Thermochimica Acta</i> , 2018, 666, 190-196.	2.7	6
70	Measurement of the thermal conductivity of fluids using laser spot lock-in thermography. <i>Measurement: Journal of the International Measurement Confederation</i> , 2020, 158, 107740.	5.0	6
71	Photoacoustic Determination of Iron in Corn Meal. <i>Analytical Sciences</i> , 2003, 19, 599-602.	1.6	5
72	Thermal Characterization of ZnO-DMSO (Dimethyl Sulfoxide) Colloidal Dispersions Using the Inverse Photopyroelectric Technique. <i>Analytical Sciences</i> , 2009, 25, 705-709.	1.6	5

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73	Thermal-Diffusivity Measurement in Low Thermal-Conductivity Solids by a Transient Heating Method. <i>International Journal of Thermophysics</i> , 2012, 33, 1966-1975.	2.1	5
74	A method for heat capacity measurement by photoacoustics. <i>Measurement: Journal of the International Measurement Confederation</i> , 2013, 46, 1208-1211.	5.0	5
75	Self-normalized front photopyroelectric technique for thermal effusivity measurements in liquids. <i>Thermochimica Acta</i> , 2015, 599, 8-12.	2.7	5
76	Phase resolved method using the Hill-Climbing Metaheuristic Algorithm applied for the spectral separation from photoacoustic spectra of chilli pepper skin and yellow corn pericarp. <i>Measurement: Journal of the International Measurement Confederation</i> , 2019, 138, 143-148.	5.0	5
77	Comparison between low optical absorption models for pump-probe transient thermal lens spectroscopy: a theoretical and experimental study. <i>Laser Physics</i> , 2020, 30, 125701.	1.2	5
78	Study of Nonradiative Recombination Mechanisms in Semiconductors by Photoacoustic Measurements. <i>Physica Status Solidi (B): Basic Research</i> , 2000, 220, 305-309.	1.5	4
79	Improvement of an optical fiber sensor for the detection of low concentrations of solutes using the photothermal effect. <i>Thermochimica Acta</i> , 2014, 593, 12-15.	2.7	4
80	Thermal diffusivity measurement by lock-in photothermal shadowgraph method. <i>Journal of Applied Physics</i> , 2016, 119, 164902.	2.5	4
81	Study of the Pigments in Colombian Powdered Coffee Using Photoacoustic Spectroscopy. <i>International Journal of Thermophysics</i> , 2017, 38, 1.	2.1	4
82	Thermal diffusivity of heptane-isooctane mixtures. <i>Thermochimica Acta</i> , 2020, 689, 178616.	2.7	4
83	On the heating modulation frequency dependence of the photopyroelectric signal in experiments for liquid thermal characterization. <i>Infrared Physics and Technology</i> , 2011, 54, 449-453.	2.9	3
84	Photoacoustic analysis of the ultrasonic irradiation effect in the photosynthetic activity in aquatic liriium plants. <i>Applied Radiation and Isotopes</i> , 2014, 83, 268-271.	1.5	3
85	Thermoacoustic and thermoreflectance imaging of biased integrated circuits: Voltage and temperature maps. <i>Applied Physics Letters</i> , 2016, 109, .	3.3	3
86	Effect of <i>Azospirillum brasilense</i> and <i>Burkholderia unamae</i> Bacteria on Maize Photosynthetic Activity Evaluated Using the Photoacoustic Technique. <i>International Journal of Thermophysics</i> , 2016, 37, 1.	2.1	3
87	Evaluation of thin films intermixing by photoacoustic spectroscopy. <i>Thin Solid Films</i> , 2021, 735, 138871.	1.8	3
88	Monitoring of gas diffusion in air using the TWI technique: Thermal diffusivity measurements made easy. <i>Review of Scientific Instruments</i> , 2003, 74, 842-844.	1.3	2
89	Heat capacity measurement in solids by means of the photoacoustic technique. <i>European Physical Journal Special Topics</i> , 2005, 125, 201-203.	0.2	2
90	Specific heat of the Ba _{0.7} Sr _{0.3} Ti _{1-x} ZryO ₃ (y=0, 0.03, 0.05, 0.1) ferroelectric ceramics obtained by the temperature relaxation method. <i>Journal of Materials Science</i> , 2006, 41, 6130-6133.	3.7	2

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91	Superficial and In-depth Images of a Biological Sample Using Photopyroelectric Microscopy. AIP Conference Proceedings, 2007, , .	0.4	2
92	Microstructure and Thermal Diffusivity of Ceramic Powders. International Journal of Thermophysics, 2007, 28, 1646-1652.	2.1	2
93	Time Varying Heat Conduction in Solids. , 2011, , .		2
94	Optimized configuration of the pyroelectric sensor metal electrodes in the photopyroelectric technique. Applied Physics B: Lasers and Optics, 2013, 110, 65-71.	2.2	2
95	Heat transfer monitoring by means of the hot wire technique and finite element analysis software. Applied Radiation and Isotopes, 2014, 83, 264-267.	1.5	2
96	Theoretical description of the photopyroelectric technique in the slanted detector configuration for thermal diffusivity measurements in fluids. Thermochimica Acta, 2014, 582, 101-105.	2.7	2
97	Measurement of the thermal expansion coefficient of Guadua angustifolia-Kunth using the photoacoustic technique. Journal of Physics: Conference Series, 2016, 687, 012103.	0.4	2
98	Thermal diffusivity measurement in thin metallic filaments using the mirage method with multiple probe beams and a digital camera. Review of Scientific Instruments, 2018, 89, 024904.	1.3	2
99	Thermal impedance. European Journal of Physics, 2021, 42, 065101.	0.6	2
100	On the temperature relaxation method for the measurement of the specific heat capacity of thin solid samples. European Physical Journal Special Topics, 2005, 125, 305-308.	0.2	2
101	Study of Mineral-Based oils with Jatropha curcas L. as Bio-Additive Through Thermal and Kinematic Viscosity Properties. International Journal of Thermophysics, 2022, 43, 1.	2.1	2
102	Thermal properties of $\text{Sr}_{0.3}\text{Ba}_{0.7}\text{Ti}_{1-y}\text{Zr}_y\text{O}_3$ ferroelectric ceramics: Dependence on sample's porosity. European Physical Journal Special Topics, 2005, 125, 309-311.	0.2	2
103	Photopyroelectric Calorimeter for Phase Transitions Monitoring: Application to Chocolate. Materials Research Society Symposia Proceedings, 2009, 1242, 1.	0.1	1
104	Acoustic Detection of the Magnetocaloric Effect in Gadolinium Thin Films: Influence of the Substrate. International Journal of Thermophysics, 2015, 36, 1099-1105.	2.1	1
105	Self-normalized inverse photopyroelectric technique with viscous front window for thermal effusivity measurements in liquids. Thermochimica Acta, 2017, 655, 124-128.	2.7	1
106	Application of Photoacoustic Spectroscopy and Phase-Resolved Technique to the Study of Photoprotective Pigments in Golden Delicious Apple (Malus domestica). International Journal of Thermophysics, 2020, 41, 1.	2.1	1
107	Ultrasound irradiation effect on photosynthesis and transpiration of aquatic liriun plants. International Journal of Radiation Biology, 2021, 97, 1617-1623.	1.8	1
108	On the criterion for neglecting convective effects in photoacoustic experiments. European Physical Journal Special Topics, 2005, 125, 165-167.	0.2	1

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109	H2SO4corrosion of API5L-X52 pipeline steel: Thermal diffusivity and microstructure. European Physical Journal Special Topics, 2005, 125, 217-219.	0.2	1
110	Axisymmetric modelling of transient thermal response in solids for application to infrared photothermal radiometry technique. Revista Mexicana De Física, 2018, 65, 54-64.	0.4	1
111	Thermal Diffusivity Measurement in Solids by means of the Photoacoustic Technique. Materials Research Society Symposia Proceedings, 2009, 1242, 1.	0.1	0
112	An alternative differential method of femtosecond pump-probe examination of materials. Optics Express, 2011, 19, 11290.	3.4	0
113	A practical model for the determination of transport parameters in semiconductors. Journal of Materials Science, 2011, 46, 7799-7805.	3.7	0
114	Photoacoustic Technique in the Study of Photosynthesis in Aquatic Lirium (Eichhornia Crassipes). Materials Research Society Symposia Proceedings, 2012, 1480, 39.	0.1	0
115	Identification of Plant Growth-Promoting Bacteria Using Titanium Dioxide Photocatalysis-Assisted Photoacoustic Technique. International Journal of Thermophysics, 2013, 34, 1504-1512.	2.1	0
116	Note: Photopyroelectric measurement of thermal effusivity of transparent liquids by a method free of fitting procedures. Review of Scientific Instruments, 2016, 87, 026105.	1.3	0
117	Photothermal pump-probe lock-in shadowgraph technique using a thermographic camera for thermal diffusivity measurement in thin metallic filaments. , 0, , .		0
118	Thermal Diffusivity Measurement in Thin Metallic Filaments by the Laser Beam Deflection Technique with a Digital Camera and Lock-in Imaging Processing.. , 2018, , .		0
119	Application of the Hill Climbing Algorithm to the Geometrical Reconstruction of Vertical Buried Heat Sources Using Vibrothermography. , 0, , .		0
120	In-situ monitoring by thermal lens microscopy of a photocatalytic reduction process of hexavalent chromium. Revista Mexicana De Física, 2018, 64, 507-511.	0.4	0
121	Characterization of Cuban and Brazilian natural zeolites by photoacoustic spectroscopy and electron paramagnetic resonance. Anais Da Academia Brasileira De Ciencias, 2022, 94, e20200512.	0.8	0