F Javier GonzÃ;lez

List of Publications by Year in descending order

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236925 276875 154 2,278 25 41 citations h-index g-index papers 156 156 156 2474 docs citations citing authors all docs times ranked

#	Article	IF	CITATIONS
1	Comparison of dipole, bowtie, spiral and log-periodic IR antennas. Infrared Physics and Technology, 2005, 46, 418-428.	2.9	160
2	Occupational therapy for delirium management in elderly patients without mechanical ventilation in an intensive care unit: A pilot randomized clinical trial. Journal of Critical Care, 2017, 37, 85-90.	2.2	97
3	A Double-Blind, Randomized Clinical Trial of Niacinamide 4% versus Hydroquinone 4% in the Treatment of Melasma. Dermatology Research and Practice, 2011, 2011, 1-5.	0.8	87
4	In vitro evaluation of osteoblastic cells on bacterial cellulose modified with multi-walled carbon nanotubes as scaffold for bone regeneration. Materials Science and Engineering C, 2017, 75, 445-453.	7.3	84
5	Use of Raman spectroscopy to screen diabetes mellitus with machine learning tools. Biomedical Optics Express, 2018, 9, 4998.	2.9	82
6	Measurement of the resonant lengths of infrared dipole antennas. Infrared Physics and Technology, 2000, 41, 271-281.	2.9	81
7	Antenna-coupled infrared detectors for imaging applications. IEEE Journal of Selected Topics in Quantum Electronics, 2005, 11 , 117 - 120 .	2.9	80
8	The effect of metal dispersion on the resonance of antennas at infrared frequencies. Infrared Physics and Technology, 2009, 52, 48-51.	2.9	62
9	Conversion efficiency of broad-band rectennas for solar energy harvesting applications. Optics Express, 2013, 21, A412.	3.4	60
10	High-Sensitivity Bolometers from Self-Oriented Single-Walled Carbon Nanotube Composites. ACS Applied Materials & Composites, 2011, 3, 3200-3204.	8.0	46
11	Antenna-coupled metal-oxide-metal diodes for dual-band detection at 92.5â€GHz and 28â€THz. Electronics Letters, 2004, 40, 116.	1.0	45
12	Two Dimensional Array of Antenna-Coupled Microbolometers. Journal of Infrared, Millimeter and Terahertz Waves, 2002, 23, 785-797.	0.6	43
13	Detection mechanisms in microstrip dipole antenna-coupled infrared detectors. Infrared Physics and Technology, 2003, 44, 155-163.	2.9	41
14	Infrared antennas coupled to lithographic Fresnel zone plate lenses. Applied Optics, 2004, 43, 6067.	2.1	41
15	Response Increase of IR Antenna-Coupled Thermocouple Using Impedance Matching. IEEE Journal of Quantum Electronics, 2012, 48, 659-664.	1.9	41
16	Raman Spectroscopy an Option for the Early Detection of Citrus Huanglongbing. Applied Spectroscopy, 2016, 70, 829-839.	2.2	41
17	Local Use of Insulin in Wounds of Diabetic Patients. Plastic and Reconstructive Surgery, 2013, 132, 1015e-1019e.	1.4	40
18	Non-invasive estimation of the metabolic heat production of breast tumors using digital infrared imaging. Quantitative InfraRed Thermography Journal, 2011, 8, 139-148.	4.2	38

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19	Noninvasive determination of burn depth in children by digital infrared thermal imaging. Journal of Biomedical Optics, 2012, 18, 061204.	2.6	37
20	Distribution of skin temperature in Mexican children. Skin Research and Technology, 2011, 17, 326-331.	1.6	35
21	Performance Improvement of Refractometric Sensors Through Hybrid Plasmonic–Fano Resonances. Journal of Lightwave Technology, 2019, 37, 2905-2913.	4.6	34
22	Use of Raman spectroscopy for the early detection of filaggrinâ€related atopic dermatitis. Skin Research and Technology, 2011, 17, 45-50.	1.6	33
23	Seebeck nanoantennas for solar energy harvesting. Applied Physics Letters, 2014, 105, 093108.	3.3	31
24	Development and validation of an algorithm to predict the treatment modality of burn wounds using thermographic scans: Prospective cohort study. PLoS ONE, 2018, 13, e0206477.	2.5	30
25	Antimicrobial activity of endodontic sealers and medications containing chitosan and silver nanoparticles against Enterococcus faecalis. Journal of Applied Biomaterials and Functional Materials, 2019, 17, 228080001985177.	1.6	28
26	Deep convolutional neural networks for classifying breast cancer using infrared thermography. Quantitative InfraRed Thermography Journal, 2022, 19, 283-294.	4.2	27
27	Antenna-coupled microbolometer arrays with aerogel thermal isolation. Infrared Physics and Technology, 2004, 45, 47-51.	2.9	26
28	Fresnel zone antenna for dual-band detection at millimeter and infrared wavelengths. Optics Letters, 2009, 34, 809.	3.3	26
29	Seebeck nanoantennas for the detection and characterization of infrared radiation. Optics Express, 2014, 22, A1538.	3.4	25
30	Thermal impedance model of electrostatic discharge effects on microbolometers. Microwave and Optical Technology Letters, 2000, 26, 291-293.	1.4	24
31	Size, shape and hue modulate attraction and landing responses of the braconid parasitoid Fopius arisanus to fruit odour-baited visual targets. BioControl, 2012, 57, 405-414.	2.0	23
32	Bolometric Properties of Semiconducting and Metallic Single-Walled Carbon Nanotube Composite Films. ACS Photonics, 2015, 2, 334-340.	6.6	23
33	Analytical solution of the Pennes equation for burn-depth determination from infrared thermographs. Mathematical Medicine and Biology, 2010, 27, 21-38.	1.2	21
34	Comparison of Deep Learning Architectures for Pre-Screening of Breast Cancer Thermograms. , 2019, , .		20
35	Molecular structure and concentration of melanin in the stratum corneum of patients with melasma. Photodermatology Photoimmunology and Photomedicine, 2009, 25, 159-160.	1.5	19
36	Antenna-coupled VOx thin-film microbolometer array. Microwave and Optical Technology Letters, 2003, 38, 235-237.	1.4	18

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37	Noise and Artifact Characterization of in Vivo Raman Spectroscopy Skin Measurements. Applied Spectroscopy, 2012, 66, 650-655.	2.2	18
38	Pain Measurement through Temperature Changes in Children Undergoing Dental Extractions. Pain Research and Management, 2016, 2016, 1-5.	1.8	18
39	Morphological changes in erythrocytes of people with type 2 diabetes mellitus evaluated with atomic force microscopy: A brief review. Micron, 2018, 105, 11-17.	2.2	17
40	Raman Spectroscopy for In Vivo Medical Diagnosis. , 0, , .		17
41	Design and Fabrication of Interdigital Nanocapacitors Coated with HfO2. Sensors, 2015, 15, 1998-2005.	3.8	16
42	Diffuse reflectance spectrophotometry for skin phototype determination. Skin Research and Technology, 2010, 16, 397-400.	1.6	15
43	Use of Raman spectroscopy in the analysis of nickel allergy. Journal of Biomedical Optics, 2012, 18, 061206.	2.6	15
44	Noninvasive estimation of chronological and photoinduced skin damage using Raman spectroscopy and principal component analysis. Skin Research and Technology, 2012, 18, 442-446.	1.6	15
45	Detection of hydroquinone by Raman spectroscopy in patients with melasma before and after treatment. Skin Research and Technology, 2019, 25, 20-24.	1.6	15
46	Detection of Histamine Dihydrochloride at Low Concentrations Using Raman Spectroscopy Enhanced by Gold Nanostars Colloids. Nanomaterials, 2019, 9, 211.	4.1	15
47	Polygonal Fresnel zone plates. Journal of Optics, 2009, 11, 085707.	1.5	14
48	Polarimetric pixel using Seebeck nanoantennas. Optics Express, 2014, 22, 13835.	3.4	14
49	Raman spectroscopy analysis of the skin of patients with melasma before standard treatment with topical corticosteroids, retinoic acid, and hydroquinone mixture. Skin Research and Technology, 2016, 22, 170-173.	1.6	14
50	Noninvasive detection of filaggrin gene mutations using Raman spectroscopy. Biomedical Optics Express, 2011, 2, 3363.	2.9	12
51	Robustness of antenna-coupled distributed bolometers. Optics Letters, 2013, 38, 3784.	3.3	12
52	Structural analysis of the epitaxial interface Ag/ZnO in hierarchical nanoantennas. Applied Physics Letters, 2016, 109, 153104.	3.3	12
53	Evaluation of liver fibrosis using Raman spectroscopy and infrared thermography: A pilot study. Photodiagnosis and Photodynamic Therapy, 2017, 19, 278-283.	2.6	12
54	A Home-Made Trap Baited With Sex Pheromone for Monitoring Spodoptera frugiperda Males (Lepidoptera: Noctuidae) in Corn crops in Mexico. Journal of Economic Entomology, 2018, 111, 1674-1681.	1.8	12

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55	The art of back-of-the-envelope paraxial raytracing. IEEE Transactions on Education, 2001, 44, 365-372.	2.4	11
56	Multiphysics simulation for the optimization of optical nanoantennas working as distributed bolometers in the infrared. Journal of Nanophotonics, 2013, 7, 073093.	1.0	11
57	Responsivity and resonant properties of dipole, bowtie, and spiral Seebeck nanoantennas. Journal of Photonics for Energy, 2016, 6, 024501.	1.3	11
58	Occupational therapy for delirium management in elderly patients without mechanical ventilation in an intensive care unit. A pilot randomized clinical trial. Journal of Critical Care, 2017, 40, 265.	2.2	11
59	High sensitivity bolometers from thymine functionalized multi-walled carbon nanotubes. Sensors and Actuators B: Chemical, 2017, 238, 880-887.	7.8	11
60	Characterization of wildâ€type and mutant p53 protein by Raman spectroscopy and multivariate methods. Journal of Raman Spectroscopy, 2019, 50, 1388-1394.	2.5	11
61	Near-field mapping of dipole nano-antenna-coupled bolometers. Journal of Applied Physics, 2013, 114, 033109.	2.5	10
62	Livedoid vasculopathy (LV) associated with sticky platelets syndrome type 3 (SPS type 3) and enhanced activity of plasminogen activator inhibitor (PAlâ€1) anomalies. International Journal of Dermatology, 2014, 53, 1495-1497.	1.0	10
63	Thermal-impedance simulations of antenna-coupled microbolometers. Infrared Physics and Technology, 2006, 48, 223-226.	2.9	9
64	Spectral response and far-field pattern of a dipole nano-antenna on metamaterial substrates having near-zero and negative indices of refraction. Optics Communications, 2011, 284, 1429-1434.	2.1	9
65	Electric radiation mapping of silver/zinc oxide nanoantennas by using electron holography. Journal of Applied Physics, 2015, 117, 034306.	2.5	9
66	Antenna-coupled MOM diodes for dual-band detection in MMW and LWIR., 2004,,.		8
67	Antenna-coupled microbolometers on a silicon-nitride membrane. Microwave and Optical Technology Letters, 2005, 47, 546-548.	1.4	8
68	Optical Nanoantennas Coupled to Photonic Crystal Cavities and Waveguides for Near-Field Sensing. IEEE Journal of Selected Topics in Quantum Electronics, 2010, 16, 446-449.	2.9	8
69	Single-walled carbon nanotubes (SWCNTs) induce vasodilation in isolated rat aortic rings. Toxicology in Vitro, 2015, 29, 657-662.	2.4	8
70	Advantages of vivipary in Echinocactus platyacanthus, an endemic and protected Mexican cactus species. Journal of Arid Environments, 2017, 141, 56-59.	2.4	8
71	Nanoantennas for polarisation division multiplexing. Electronics Letters, 2011, 47, 120.	1.0	7
72	Use of digital infrared imaging in the assessment of childhood psoriasis. Skin Research and Technology, 2013, 19, e549-51.	1.6	7

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73	Bioanalysis by Immobilization of Antibodies on Hafnium(IV) Oxide with 3-Aminopropyltriethoxysilane. Analytical Letters, 2017, 50, 2937-2943.	1.8	7
74	Altered erythrocyte morphology in Mexican adults with prediabetes and type 2 diabetes mellitus evaluated by scanning electron microscope. Microscopy (Oxford, England), 2019, 68, 261-270.	1.5	7
75	Raman Spectroscopy for Adipose Tissue Assessment in Rat Models of Obesity and Type 1 Diabetes. Applied Spectroscopy, 2021, 75, 1189-1197.	2.2	7
76	Surface-enhanced Raman scattering of hydroquinone assisted by gold nanorods. Journal of Nanophotonics, 2019, 13, 1.	1.0	7
77	Feasibility of Raman spectroscopy as a potential in vivo tool to screen for preâ€diabetes and diabetes. Journal of Biophotonics, 2022, 15, .	2.3	7
78	Antenna-coupled infrared focal plane array. Microwave and Optical Technology Letters, 2006, 48, 165-166.	1.4	6
79	Use of infrared thermography in children with shock: A case series. SAGE Open Medical Case Reports, 2014, 2, 2050313X1456177.	0.3	6
80	Evolutionary Algorithm Geometry Optimization of Optical Antennas. International Journal of Antennas and Propagation, 2016, 2016, 1-7.	1,2	6
81	Infrared Imager Requirements for Breast Cancer Detection. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 3312-4.	0.5	5
82	Prediction of Glucose Concentration by Impedance Phase Measurements. AIP Conference Proceedings, 2008, , .	0.4	5
83	Comment on: "Reflectance Spectrophotometer: the Dermatologist's Sphygmomanometer for Skin Aging?― Journal of Investigative Dermatology, 2009, 129, 1582-1583.	0.7	5
84	Material dependence of the distributed bolometric effect in resonant metallic nanostructures. Proceedings of SPIE, 2012, , .	0.8	5
85	Steerable optical antennas by selective heating. Optics Letters, 2014, 39, 1957.	3.3	5
86	Theoretical and clinical aspects of the useÂofÂthermography in non-invasive medicalÂdiagnosis. Biomedical Spectroscopy and Imaging, 2017, 5, 347-358.	1,2	5
87	Use of Raman spectroscopy in the assessment of skin after CO ₂ ablative fractional laser surgery on acne scars. Skin Research and Technology, 2019, 25, 805-809.	1.6	5
88	Infrared thermography of abdominal wall in acute appendicitis: Proof of concept study. Infrared Physics and Technology, 2020, 105, 103165.	2.9	5
89	Hypercholesterolemia associated with erythrocytes morphology assessed by scanning electron microscopy in metabolically unhealthy individuals with normal-weight and obesity. Obesity Medicine, 2020, 20, 100292.	0.9	5
90	Raman spectroscopy applications for the diagnosis and follow-up of type 2 diabetes mellitus. A brief review. Biomedical Spectroscopy and Imaging, 2020, 9, 119-140.	1.2	5

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91	Thermal Simulations of Cancerous Breast Tumors and Cysts on a Realistic Female Torso. Journal of Biomechanical Engineering, 2021, 143, .	1.3	5
92	Clinical characteristics and inâ€hospital mortality of patients with COVIDâ€19 in Chile: A prospective cohort study. International Journal of Clinical Practice, 2021, 75, e14919.	1.7	5
93	Confusion Assessment Method for the intensive care unit (CAM-ICU) for the diagnosis of delirium in adults in critical care settings. The Cochrane Library, 0, , .	2.8	5
94	Resistance-Based Biosensor of Multi-Walled Carbon Nanotubes. Journal of Immunoassay and Immunochemistry, 2015, 36, 142-148.	1.1	4
95	Silver/zinc oxide self-assembled nanostructured bolometer. Infrared Physics and Technology, 2017, 81, 266-270.	2.9	4
96	Assessment of mezcal aging combining Raman spectroscopy and multivariate analysis techniques. Biomedical Spectroscopy and Imaging, 2017, 6, 75-81.	1.2	4
97	Application of atomic force microscopy to assess erythrocytes morphology in early stages of diabetes. A pilot study. Micron, 2021, 141, 102982.	2.2	4
98	Computational analysis of a spiral thermoelectric nanoantenna for solar energy harvesting applications. , 2014, , .		3
99	Enhancement of antenna-coupled microbolometers response by impedance matching. Journal of Applied Research and Technology, 2015, 13, 523-525.	0.9	3
100	Resonance properties of Ag-ZnO nanostructures at terahertz frequencies. Optics Express, 2015, 23, 25111.	3.4	3
101	Effect of Graphene Oxide on Bacteria and Peripheral Blood Mononuclear Cells. Journal of Applied Biomaterials and Functional Materials, 2016, 14, 423-430.	1.6	3
102	Nearâ€field analysis of discrete bowtie plasmonic nanoantennas. Microwave and Optical Technology Letters, 2020, 62, 943-948.	1.4	3
103	Far-infrared spectrally selective LiTaO3 and AlN pyroelectric detectors using resonant subwavelength metal surface structures. MRS Advances, 2020, 5, 2005-2012.	0.9	3
104	Computational and Experimental Analysis of Gold Nanorods in Terms of Their Morphology: Spectral Absorption and Local Field Enhancement. Nanomaterials, 2021, 11, 1696.	4.1	3
105	In vitro effect of high glucose concentrations on erythrocyte morphology assessed by scanning electron microscopy. Micron, 2022, 154, 103179.	2.2	3
106	Raman Spectroscopy Study of Skin Biopsies from Patients with Parkinson's Disease: Trends in Alpha-Synuclein Aggregation from the Amide I Region. Applied Spectroscopy, 2022, 76, 1317-1328.	2.2	3
107	Fabrication of infrared antennas using electron-beam lithography., 2003, 4984, 100.		2
108	Single walled carbon nanotube bolometer coupled to a Sierpinski fractal antenna for the detection of megahertz radiation. Microwave and Optical Technology Letters, 2012, 54, 1251-1253.	1.4	2

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109	Detectivity comparison of bolometric optical antennas. , 2015, , .		2
110	Quality control of mezcal combining multivariate analysis techniques and Raman spectroscopy. , 2015, , .		2
111	Optical Tuning of Nanospheres Through Phase Transition: An Optical Nanocircuit Analysis. IEEE Photonics Technology Letters, 2016, 28, 2878-2881.	2.5	2
112	Spectral Response of Metallic Optical Antennas Driven by Temperature. Plasmonics, 2017, 12, 553-561.	3.4	2
113	Dynamic Infrared Thermography of Nanoheaters Embedded in Skin-Equivalent Phantoms. Journal of Nanomaterials, 2018, 2018, 1-8.	2.7	2
114	Thermal contrast of active dynamic thermography versus static thermography. Biomedical Spectroscopy and Imaging, 2019, 8, 41-45.	1.2	2
115	Thermal impedance analysis of nano-dipole linear arrays for energy harvesting applications. Infrared Physics and Technology, 2020, 107, 103332.	2.9	2
116	Automatic analysis of breast thermograms by convolutional neural networks. , 2020, , .		2
117	Use of Raman spectroscopy to screen diabetes mellitus with machine learning tools: reply to comment. Biomedical Optics Express, 2019, 10, 4492.	2.9	2
118	Antenna-coupled infrared detectors. , 2004, 5406, 863.		1
119	Effect of hydrogen concentration on the bolometric performance of sputtered a-SixGe1â^x:H films. Thin Solid Films, 2011, 519, 6522-6524.	1.8	1
120	High-speed high-sensitivity carbon nanotube-based composite bolometers. Proceedings of SPIE, 2013, , .	0.8	1
121	Noninvasive Detection of Filaggrin Molecules by Raman Spectroscopy. , 2014, , 93-101.		1
122	Resonant elements contactless coupled to bolometric micro-stripes. Proceedings of SPIE, 2015, , .	0.8	1
123	Spray-on thermoelectric energy harvester. MRS Advances, 2019, 4, 851-855.	0.9	1
124	Optical Limiter using Epsilon-Near-Zero Grating. , 2019, , .		1
125	Spray-deposited metal-chalcogenide photodiodes for low cost infrared imagers. MRS Advances, 2020, 5, 2013-2022.	0.9	1
126	Infrared pixel based on Seebeck nanoantennas. MRS Advances, 2020, 5, 1837-1842.	0.9	1

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127	Shock-wave pressure decay in aluminum: model development. , 2018, , .		1
128	Design and implementation of a low-cost portable Raman spectrometer. Revista Mexicana De FÃsica, 2019, 65, 274-277.	0.4	1
129	Long-Wave Infrared Variable Emissivity Combat Identification Panel. , 2019, , .		1
130	Effect of tissue density on the temperature pattern of the breast. , 2020, , .		1
131	Tuning Bolometric Parameters of Sierpinski Fractal Antenna-Coupled Uncracked/Cracked SWCNT Films by Thermoelectric Characterization at UHF Frequencies. Electronics (Switzerland), 2022, 11, 1665.	3.1	1
132	Thermal-impedance simulations of antenna-coupled microbolometers., 2006, 6206, 471.		0
133	Vision system to analyze interferometric patterns: application to fiber optic sensors. , 2006, , .		0
134	Thermal analysis of side-view mirrors. , 2007, , .		0
135	Early Detection of Filaggrin-Related Atopic Dermatitis by Raman Spectroscopy and Principal Component Analysis. , 2010, , .		0
136	Determination of the molecular stability of bevacizumab (Avastin) by Raman spectroscopy. Biomedical Spectroscopy and Imaging, 2012, 1, 261-263.	1.2	0
137	Diffuse neonatal hemangiomatosis: a case report. International Journal of Dermatology, 2012, 51, 1228-1230.	1.0	0
138	Silver nanoparticles Induce Anti-Proliferative Effects on Airway Smooth Muscle Cells. Role of Nitric Oxide and Muscarinic Receptor Signaling Pathway. Free Radical Biology and Medicine, 2013, 65, S104.	2.9	0
139	Optimization of distributed bolometers coupled to optical antennas in the infrared. , 2013, , .		0
140	Solar exposure of head and cleavage of the Mexican population and its effect on the clinical assessment of skin phototype. Biomedical Spectroscopy and Imaging, 2013, 2, 219-223.	1.2	0
141	Infrared imaging in the analysis of planar antennas. Microwave and Optical Technology Letters, 2014, 56, 1610-1612.	1.4	0
142	Ex-vivo multi-modal microscopy of healthy skin. , 2014, , .		0
143	Analysis of the spectral response of fractal antennas related with its geometry and current paths. Proceedings of SPIE, 2015, , .	0.8	0
144	Analysis of metallic nanoantennas for solar energy conversion. , 2015, , .		0

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145	Raman spectroscopy mapping of Si (001) surface strain induced by Ni patterned micro arrays. Journal of Applied Physics, 2017, 122, 125703.	2.5	0
146	Non-invasive in vivo Raman spectroscopy of the skin for diabetes screening., 2017,,.		O
147	Comment on "Evaluating the efficiency of infrared breast thermography for early breast cancer risk prediction in asymptomatic populationâ€, Infrared Physics and Technology, 2021, 113, 103615.	2.9	0
148	Non-invasive Diagnosis of Filaggrin-related Atopic Dermatitis. , 2014, , .		0
149	Surface enhanced Raman spectroscopy in the prescense of hydroquinone assisted by gold nanorods. , 2017, , .		0
150	Fabrication and thermal analysis of micro thermocouples for energy harvesting. , 2017, , .		0
151	Nano-antennas Excitation with Visible Light and Their Observed Response with a Confocal Microscope in the THz Range. Springer Proceedings in Physics, 2019, , 45-49.	0.2	0
152	Low-cost embedded system for optical imaging of intrinsic signals. Revista Mexicana De FÃsica, 2019, 65, 651-657.	0.4	0
153	Raman spectroscopy for adipose tissue differentiation: a pilot study. , 2020, , .		0
154	Noninvasive Glucose Measurements Through Transcutaneous Raman Spectroscopy: A Review. Journal of Diabetes Science and Technology, 2024, 18, 460-469.	2.2	0