F Javier GonzÃ¡lez

List of Publications by Year in descending order

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

#	Article	IF	Citations
1	Noninvasive Glucose Measurements Through Transcutaneous Raman Spectroscopy: A Review. Journal of Diabetes Science and Technology, 2024, 18, 460-469.	2.2	0
2	Deep convolutional neural networks for classifying breast cancer using infrared thermography. Quantitative InfraRed Thermography Journal, 2022, 19, 283-294.	4.2	27
3	In vitro effect of high glucose concentrations on erythrocyte morphology assessed by scanning electron microscopy. Micron, 2022, 154, 103179.	2.2	3
4	Raman Spectroscopy Study of Skin Biopsies from Patients with Parkinsonâ€™s Disease: Trends in Alpha-Synuclein Aggregation from the Amide I Region. Applied Spectroscopy, 2022, 76, 1317-1328.	2.2	3
5	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
6	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
7	Application of atomic force microscopy to assess erythrocytes morphology in early stages of diabetes. A pilot study. Micron, 2021, 141, 102982.	2.2	4
8	Raman Spectroscopy for Adipose Tissue Assessment in Rat Models of Obesity and Type 1 Diabetes. Applied Spectroscopy, 2021, 75, 1189-1197.	2.2	7
9	Comment on â€œEvaluating 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
10	Thermal Simulations of Cancerous Breast Tumors and Cysts on a Realistic Female Torso. Journal of Biomechanical Engineering, 2021, 143, .	1.3	5
11	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
12	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
13	Nearâ€field analysis of discrete bowtie plasmonic nanoantennas. Microwave and Optical Technology Letters, 2020, 62, 943-948.	1.4	3
14	Infrared thermography of abdominal wall in acute appendicitis: Proof of concept study. Infrared Physics and Technology, 2020, 105, 103165.	2.9	5
15	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
16	Far-infrared spectrally selective LiTaO3 and AlN pyroelectric detectors using resonant subwavelength metal surface structures. MRS Advances, 2020, 5, 2005-2012.	0.9	3
17	Spray-deposited metal-chalcogenide photodiodes for low cost infrared imagers. MRS Advances, 2020, 5, 2013-2022.	0.9	1
18	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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19	Infrared pixel based on Seebeck nanoantennas. MRS Advances, 2020, 5, 1837-1842.	0.9	1
20	Thermal impedance analysis of nano-dipole linear arrays for energy harvesting applications. Infrared Physics and Technology, 2020, 107, 103332.	2.9	2
21	Automatic analysis of breast thermograms by convolutional neural networks. , 2020, , .		2
22	Raman spectroscopy for adipose tissue differentiation: a pilot study. , 2020, , .		0
23	Effect of tissue density on the temperature pattern of the breast. , 2020, , .		1
24	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
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	Thermal contrast of active dynamic thermography versus static thermography. Biomedical Spectroscopy and Imaging, 2019, 8, 41-45.	1.2	2
27	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
28	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
29	Spray-on thermoelectric energy harvester. MRS Advances, 2019, 4, 851-855.	0.9	1
30	Performance Improvement of Refractometric Sensors Through Hybrid Plasmonicâ€“Fano Resonances. Journal of Lightwave Technology, 2019, 37, 2905-2913.	4.6	34
31	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
32	Detection of Histamine Dihydrochloride at Low Concentrations Using Raman Spectroscopy Enhanced by Gold Nanostars Colloids. Nanomaterials, 2019, 9, 211.	4.1	15
33	Optical Limiter using Epsilon-Near-Zero Grating. , 2019, , .		1
34	Comparison of Deep Learning Architectures for Pre-Screening of Breast Cancer Thermograms. , 2019, , .		20
35	Surface-enhanced Raman scattering of hydroquinone assisted by gold nanorods. Journal of Nanophotonics, 2019, 13, 1.	1.0	7
36	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

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37	Design and implementation of a low-cost portable Raman spectrometer. Revista Mexicana De FÃsica, 2019, 65, 274-277.	0.4	1
38	Use of Raman spectroscopy to screen diabetes mellitus with machine learning tools: reply to comment. Biomedical Optics Express, 2019, 10, 4492.	2.9	2
39	Long-Wave Infrared Variable Emissivity Combat Identification Panel. , 2019, , .		1
40	Low-cost embedded system for optical imaging of intrinsic signals. Revista Mexicana De FÃsica, 2019, 65, 651-657.	0.4	0
41	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
42	Use of Raman spectroscopy to screen diabetes mellitus with machine learning tools. Biomedical Optics Express, 2018, 9, 4998.	2.9	82
43	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
44	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
45	Dynamic Infrared Thermography of Nanoheaters Embedded in Skin-Equivalent Phantoms. Journal of Nanomaterials, 2018, 2018, 1-8.	2.7	2
46	Shock-wave pressure decay in aluminum: model development. , 2018, , .		1
47	Spectral Response of Metallic Optical Antennas Driven by Temperature. Plasmonics, 2017, 12, 553-561.	3.4	2
48	Silver/zinc oxide self-assembled nanostructured bolometer. Infrared Physics and Technology, 2017, 81, 266-270.	2.9	4
49	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
50	Advantages of vivipary in Echinocactus platyacanthus , an endemic and protected Mexican cactus species. Journal of Arid Environments, 2017, 141, 56-59.	2.4	8
51	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
52	Raman spectroscopy mapping of Si (001) surface strain induced by Ni patterned micro arrays. Journal of Applied Physics, 2017, 122, 125703.	2.5	0
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	Theoretical and clinical aspects of the useÂofÂthermography in non-invasive medicalÂdiagnosis. Biomedical Spectroscopy and Imaging, 2017, 5, 347-358.	1.2	5

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55	Bioanalysis by Immobilization of Antibodies on Hafnium(IV) Oxide with 3-Aminopropyltriethoxysilane. Analytical Letters, 2017, 50, 2937-2943.	1.8	7
56	High sensitivity bolometers from thymine functionalized multi-walled carbon nanotubes. Sensors and Actuators B: Chemical, 2017, 238, 880-887.	7.8	11
57	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
58	Non-invasive in vivo Raman spectroscopy of the skin for diabetes screening. , 2017, , .		0
59	Assessment of mezcal aging combining Raman spectroscopy and multivariate analysis techniques. Biomedical Spectroscopy and Imaging, 2017, 6, 75-81.	1.2	4
60	Surface enhanced Raman spectroscopy in the prescense of hydroquinone assisted by gold nanorods. , 2017, , .		0
61	Fabrication and thermal analysis of micro thermocouples for energy harvesting. , 2017, , .		0
62	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
63	Evolutionary Algorithm Geometry Optimization of Optical Antennas. International Journal of Antennas and Propagation, 2016, 2016, 1-7.	1.2	6
64	Pain Measurement through Temperature Changes in Children Undergoing Dental Extractions. Pain Research and Management, 2016, 2016, 1-5.	1.8	18
65	Structural analysis of the epitaxial interface Ag/ZnO in hierarchical nanoantennas. Applied Physics Letters, 2016, 109, 153104.	3.3	12
66	Optical Tuning of Nanospheres Through Phase Transition: An Optical Nanocircuit Analysis. IEEE Photonics Technology Letters, 2016, 28, 2878-2881.	2.5	2
67	Responsivity and resonant properties of dipole, bowtie, and spiral Seebeck nanoantennas. Journal of Photonics for Energy, 2016, 6, 024501.	1.3	11
68	Raman Spectroscopy an Option for the Early Detection of Citrus Huanglongbing. Applied Spectroscopy, 2016, 70, 829-839.	2.2	41
69	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
70	Enhancement of antenna-coupled microbolometers response by impedance matching. Journal of Applied Research and Technology, 2015, 13, 523-525.	0.9	3
71	Design and Fabrication of Interdigital Nanocapacitors Coated with HfO2. Sensors, 2015, 15, 1998-2005.	3.8	16
72	Detectivity comparison of bolometric optical antennas. , 2015, , .		2

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73	Resonant elements contactless coupled to bolometric micro-stripes. Proceedings of SPIE, 2015, , .	0.8	1
74	Bolometric Properties of Semiconducting and Metallic Single-Walled Carbon Nanotube Composite Films. ACS Photonics, 2015, 2, 334-340.	6.6	23
75	Single-walled carbon nanotubes (SWCNTs) induce vasodilation in isolated rat aortic rings. Toxicology in Vitro, 2015, 29, 657-662.	2.4	8
76	Quality control of mezcal combining multivariate analysis techniques and Raman spectroscopy. , 2015, , .		2
77	Electric radiation mapping of silver/zinc oxide nanoantennas by using electron holography. Journal of Applied Physics, 2015, 117, 034306.	2.5	9
78	Resonance properties of Ag-ZnO nanostructures at terahertz frequencies. Optics Express, 2015, 23, 25111.	3.4	3
79	Analysis of the spectral response of fractal antennas related with its geometry and current paths. Proceedings of SPIE, 2015, , .	0.8	0
80	Analysis of metallic nanoantennas for solar energy conversion. , 2015, , .		0
81	Resistance-Based Biosensor of Multi-Walled Carbon Nanotubes. Journal of Immunoassay and Immunochemistry, 2015, 36, 142-148.	1.1	4
82	Noninvasive Detection of Filaggrin Molecules by Raman Spectroscopy. , 2014, , 93-101.		1
83	Infrared imaging in the analysis of planar antennas. Microwave and Optical Technology Letters, 2014, 56, 1610-1612.	1.4	0
84	Steerable optical antennas by selective heating. Optics Letters, 2014, 39, 1957.	3.3	5
85	Seebeck nanoantennas for solar energy harvesting. Applied Physics Letters, 2014, 105, 093108.	3.3	31
86	Computational analysis of a spiral thermoelectric nanoantenna for solar energy harvesting applications. , 2014, , .		3
87	Polarimetric pixel using Seebeck nanoantennas. Optics Express, 2014, 22, 13835.	3.4	14
88	Ex-vivo multi-modal microscopy of healthy skin. , 2014, , .		0
89	Seebeck nanoantennas for the detection and characterization of infrared radiation. Optics Express, 2014, 22, A1538.	3.4	25
90	Livedoid vasculopathy (LV) associated with sticky platelets syndrome type 3 (SPS type 3) and enhanced activity of plasminogen activator inhibitor (PAIâ€1) anomalies. International Journal of Dermatology, 2014, 53, 1495-1497.	1.0	10

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91	Use of infrared thermography in children with shock: A case series. SAGE Open Medical Case Reports, 2014, 2, 2050313X1456177.	0.3	6
92	Non-invasive Diagnosis of Filaggrin-related Atopic Dermatitis. , 2014, , .		0
93	Use of digital infrared imaging in the assessment of childhood psoriasis. Skin Research and Technology, 2013, 19, e549-51.	1.6	7
94	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
95	High-speed high-sensitivity carbon nanotube-based composite bolometers. Proceedings of SPIE, 2013, , .	0.8	1
96	Optimization of distributed bolometers coupled to optical antennas in the infrared. , 2013, , .		0
97	Robustness of antenna-coupled distributed bolometers. Optics Letters, 2013, 38, 3784.	3.3	12
98	Near-field mapping of dipole nano-antenna-coupled bolometers. Journal of Applied Physics, 2013, 114, 033109.	2.5	10
99	Conversion efficiency of broad-band rectennas for solar energy harvesting applications. Optics Express, 2013, 21, A412.	3.4	60
100	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
101	Multiphysics simulation for the optimization of optical nanoantennas working as distributed bolometers in the infrared. Journal of Nanophotonics, 2013, 7, 073093.	1.0	11
102	Local Use of Insulin in Wounds of Diabetic Patients. Plastic and Reconstructive Surgery, 2013, 132, 1015e-1019e.	1.4	40
103	Use of Raman spectroscopy in the analysis of nickel allergy. Journal of Biomedical Optics, 2012, 18, 061206.	2.6	15
104	Noise and Artifact Characterization of in Vivo Raman Spectroscopy Skin Measurements. Applied Spectroscopy, 2012, 66, 650-655.	2.2	18
105	Material dependence of the distributed bolometric effect in resonant metallic nanostructures. Proceedings of SPIE, 2012, , .	0.8	5
106	Noninvasive determination of burn depth in children by digital infrared thermal imaging. Journal of Biomedical Optics, 2012, 18, 061204.	2.6	37
107	Determination of the molecular stability of bevacizumab (Avastin) by Raman spectroscopy. Biomedical Spectroscopy and Imaging, 2012, 1, 261-263.	1.2	0
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	Response Increase of IR Antenna-Coupled Thermocouple Using Impedance Matching. IEEE Journal of Quantum Electronics, 2012, 48, 659-664.	1.9	41
110	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
111	Diffuse neonatal hemangiomatosis: a case report. International Journal of Dermatology, 2012, 51, 1228-1230.	1.0	0
112	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
113	High-Sensitivity Bolometers from Self-Oriented Single-Walled Carbon Nanotube Composites. ACS Applied Materials & Interfaces, 2011, 3, 3200-3204.	8.0	46
114	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
115	Noninvasive detection of filaggrin gene mutations using Raman spectroscopy. Biomedical Optics Express, 2011, 2, 3363.	2.9	12
116	Nanoantennas for polarisation division multiplexing. Electronics Letters, 2011, 47, 120.	1.0	7
117	Use of Raman spectroscopy for the early detection of filaggrinâ€related atopic dermatitis. Skin Research and Technology, 2011, 17, 45-50.	1.6	33
118	Distribution of skin temperature in Mexican children. Skin Research and Technology, 2011, 17, 326-331.	1.6	35
119	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
120	Effect of hydrogen concentration on the bolometric performance of sputtered a-SixGe1âˆ’x:H films. Thin Solid Films, 2011, 519, 6522-6524.	1.8	1
121	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
122	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
123	Diffuse reflectance spectrophotometry for skin phototype determination. Skin Research and Technology, 2010, 16, 397-400.	1.6	15
124	Analytical solution of the Pennes equation for burn-depth determination from infrared thermographs. Mathematical Medicine and Biology, 2010, 27, 21-38.	1.2	21
125	Early Detection of Filaggrin-Related Atopic Dermatitis by Raman Spectroscopy and Principal Component Analysis. , 2010, , .		0
126	Polygonal Fresnel zone plates. Journal of Optics, 2009, 11, 085707.	1.5	14

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127	Comment on: â€œReflectance Spectrophotometer: the Dermatologist's Sphygmomanometer for Skin Aging?â€. Journal of Investigative Dermatology, 2009, 129, 1582-1583.	0.7	5
128	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
129	The effect of metal dispersion on the resonance of antennas at infrared frequencies. Infrared Physics and Technology, 2009, 52, 48-51.	2.9	62
130	Fresnel zone antenna for dual-band detection at millimeter and infrared wavelengths. Optics Letters, 2009, 34, 809.	3.3	26
131	Prediction of Glucose Concentration by Impedance Phase Measurements. AIP Conference Proceedings, 2008, , .	0.4	5
132	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
133	Thermal analysis of side-view mirrors. , 2007, , .		0
134	Thermal-impedance simulations of antenna-coupled microbolometers. , 2006, 6206, 471.		0
135	Vision system to analyze interferometric patterns: application to fiber optic sensors. , 2006, , .		0
136	Thermal-impedance simulations of antenna-coupled microbolometers. Infrared Physics and Technology, 2006, 48, 223-226.	2.9	9
137	Antenna-coupled infrared focal plane array. Microwave and Optical Technology Letters, 2006, 48, 165-166.	1.4	6
138	Comparison of dipole, bowtie, spiral and log-periodic IR antennas. Infrared Physics and Technology, 2005, 46, 418-428.	2.9	160
139	Antenna-coupled infrared detectors for imaging applications. IEEE Journal of Selected Topics in Quantum Electronics, 2005, 11, 117-120.	2.9	80
140	Antenna-coupled microbolometers on a silicon-nitride membrane. Microwave and Optical Technology Letters, 2005, 47, 546-548.	1.4	8
141	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
142	Antenna-coupled microbolometer arrays with aerogel thermal isolation. Infrared Physics and Technology, 2004, 45, 47-51.	2.9	26
143	Infrared antennas coupled to lithographic Fresnel zone plate lenses. Applied Optics, 2004, 43, 6067.	2.1	41
144	Antenna-coupled infrared detectors. , 2004, 5406, 863.		1

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145	Antenna-coupled MOM diodes for dual-band detection in MMW and LWIR. , 2004, , .		8
146	Antenna-coupled VOx thin-film microbolometer array. Microwave and Optical Technology Letters, 2003, 38, 235-237.	1.4	18
147	Detection mechanisms in microstrip dipole antenna-coupled infrared detectors. Infrared Physics and Technology, 2003, 44, 155-163.	2.9	41
148	Fabrication of infrared antennas using electron-beam lithography. , 2003, 4984, 100.		2
149	Two Dimensional Array of Antenna-Coupled Microbolometers. Journal of Infrared, Millimeter and Terahertz Waves, 2002, 23, 785-797.	0.6	43
150	The art of back-of-the-envelope paraxial raytracing. IEEE Transactions on Education, 2001, 44, 365-372.	2.4	11
151	Thermal impedance model of electrostatic discharge effects on microbolometers. Microwave and Optical Technology Letters, 2000, 26, 291-293.	1.4	24
152	Measurement of the resonant lengths of infrared dipole antennas. Infrared Physics and Technology, 2000, 41, 271-281.	2.9	81
153	Raman Spectroscopy for In Vivo Medical Diagnosis. , 0, , .		17
154	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