

Almudena Rivadeneyra

List of Publications by Year in descending order

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101
papers

2,095
citations

218677

26
h-index

265206

42
g-index

101
all docs

101
docs citations

101
times ranked

2660
citing authors

#	ARTICLE	IF	CITATIONS
1	Flexible and robust laser-induced graphene heaters photothermally scribed on bare polyimide substrates. Carbon, 2019, 144, 116-126.	10.3	144
2	Design and characterization of a low thermal drift capacitive humidity sensor by inkjet-printing. Sensors and Actuators B: Chemical, 2014, 195, 123-131.	7.8	118
3	Properties and Printability of Inkjet and Screen-Printed Silver Patterns for RFID Antennas. Journal of Electronic Materials, 2014, 43, 604-617.	2.2	117
4	Inkjet printing and photonic sintering of silver and copper oxide nanoparticles for ultra-low-cost conductive patterns. Journal of Materials Chemistry C, 2016, 4, 3546-3554.	5.5	102
5	Screen Printed Flexible Radiofrequency Identification Tag for Oxygen Monitoring. Analytical Chemistry, 2013, 85, 11098-11105.	6.5	76
6	A novel electrode structure compared with interdigitated electrodes as capacitive sensor. Sensors and Actuators B: Chemical, 2014, 204, 552-560.	7.8	68
7	Printed electrodes structures as capacitive humidity sensors: A comparison. Sensors and Actuators A: Physical, 2016, 244, 56-65.	4.1	68
8	Passive UHF RFID Tag with Multiple Sensing Capabilities. Sensors, 2015, 15, 26769-26782.	3.8	57
9	Microbial community dynamics in a submerged fixed bed bioreactor during biological treatment of saline urban wastewater. Ecological Engineering, 2014, 71, 126-132.	3.6	55
10	In-Depth Study of Laser Diode Ablation of Kapton Polyimide for Flexible Conductive Substrates. Nanomaterials, 2018, 8, 517.	4.1	53
11	Bioprecipitation of Calcium Carbonate Crystals by Bacteria Isolated from Saline Environments Grown in Culture Media Amended with Seawater and Real Brine. BioMed Research International, 2015, 2015, 1-12.	1.9	46
12	Design, fabrication and characterization of capacitive humidity sensors based on emerging flexible technologies. Sensors and Actuators B: Chemical, 2019, 287, 459-467.	7.8	46
13	HF RFID Tag as Humidity Sensor: Two Different Approaches. IEEE Sensors Journal, 2015, 15, 5726-5733.	4.7	45
14	Design and Development of Sensing RFID Tags on Flexible Foil Compatible With EPC Gen 2. IEEE Sensors Journal, 2014, 14, 4361-4371.	4.7	44
15	Cellulose nanofibers as substrate for flexible and biodegradable moisture sensors. Composites Science and Technology, 2021, 208, 108738.	7.8	44
16	Fully Printed Flexible Single-Chip RFID Tag with Light Detection Capabilities. Sensors, 2017, 17, 534.	3.8	42
17	A printed capacitive-resistive double sensor for toluene and moisture sensing. Sensors and Actuators B: Chemical, 2015, 210, 542-549.	7.8	35
18	Design guidelines of laser reduced graphene oxide conformal thermistor for IoT applications. Sensors and Actuators A: Physical, 2018, 274, 148-154.	4.1	35

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19	Inexpensive and flexible nanographene-based electrodes for ubiquitous electrocardiogram monitoring. <i>Npj Flexible Electronics</i> , 2019, 3, .	10.7	35
20	Recent Advances in Printed Capacitive Sensors. <i>Micromachines</i> , 2020, 11, 367.	2.9	35
21	Fabrication and Characterization of Humidity Sensors Based on Graphene Oxide/PEDOT:PSS Composites on a Flexible Substrate. <i>Micromachines</i> , 2020, 11, 148.	2.9	34
22	Printed single-chip UHF passive radio frequency identification tags with sensing capability. <i>Sensors and Actuators A: Physical</i> , 2014, 220, 281-289.	4.1	33
23	Integration of a Thin Film PDMS-Based Capacitive Sensor for Tactile Sensing in an Electronic Skin. <i>Journal of Sensors</i> , 2016, 2016, 1-7.	1.1	33
24	Next Generation Antennas Based on Screen-Printed and Transparent Silver Nanowire Films. <i>Advanced Optical Materials</i> , 2019, 7, 1900995.	7.3	33
25	Carbonate Precipitation of Bacterial Strains Isolated from Sediments and Seawater: Formation Mechanisms. <i>Geomicrobiology Journal</i> , 2013, 30, 840-850.	2.0	30
26	A Potassium Metal-Organic Framework based on Perylene-3,4,9,10-tetracarboxylate as Sensing Layer for Humidity Actuators. <i>Scientific Reports</i> , 2018, 8, 14414.	3.3	27
27	Precipitation of carbonates by bacteria isolated from wastewater samples collected in a conventional wastewater treatment plant. <i>International Journal of Environmental Science and Technology</i> , 2013, 10, 141-150.	3.5	26
28	Towards low-power electronics: self-recovering and flexible gas sensors. <i>Journal of Materials Chemistry A</i> , 2018, 6, 7107-7113.	10.3	23
29	Isolation and metagenomic characterization of bacteria associated with calcium carbonate and struvite precipitation in a pure moving bed biofilm reactor-membrane bioreactor. <i>Biofouling</i> , 2015, 31, 333-348.	2.2	22
30	Tunable MEMS piezoelectric energy harvesting device. <i>Microsystem Technologies</i> , 2016, 22, 823-830.	2.0	22
31	Low-Cost Gas Sensing: Dynamic Self-Compensation of Humidity in CNT-Based Devices. <i>ACS Sensors</i> , 2019, 4, 3141-3146.	7.8	22
32	Cost-Effective PEDOT:PSS Temperature Sensors Inkjetted on a Bendable Substrate by a Consumer Printer. <i>Polymers</i> , 2019, 11, 824.	4.5	21
33	A Facile and Efficient Protocol for Preparing Residual-Free Single-Walled Carbon Nanotube Films for Stable Sensing Applications. <i>Nanomaterials</i> , 2019, 9, 471.	4.1	21
34	Precipitation of Phosphate Minerals by Microorganisms Isolated from a Fixed-Biofilm Reactor Used for the Treatment of Domestic Wastewater. <i>International Journal of Environmental Research and Public Health</i> , 2014, 11, 3689-3704.	2.6	20
35	Wireless Chipless System for Humidity Sensing. <i>Sensors</i> , 2018, 18, 2275.	3.8	20
36	Over-Stretching Tolerant Conductors on Rubber Films by Inkjet-Printing Silver Nanoparticles for Wearables. <i>Polymers</i> , 2018, 10, 1413.	4.5	19

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37	Screen-Printed Chipless Wireless Temperature Sensor. IEEE Sensors Journal, 2019, 19, 12011-12015.	4.7	19
38	Light and Pressure Sensors Based on PVDF With Sprayed and Transparent Electrodes for Self-Powered Wireless Sensor Nodes. IEEE Sensors Journal, 2019, 19, 1114-1126.	4.7	19
39	Comparison of Fabrication Techniques for Flexible UHF RFID Tag Antennas [Wireless Corner]. IEEE Antennas and Propagation Magazine, 2017, 59, 159-168.	1.4	18
40	Improved manufacturing process for printed cantilevers by using water removable sacrificial substrate. Sensors and Actuators A: Physical, 2015, 235, 171-181.	4.1	16
41	Inexpensive Graphene Oxide Heaters Lithographed by Laser. Nanomaterials, 2019, 9, 1184.	4.1	16
42	Compact readout system for chipless passive LC tags and its application for humidity monitoring. Sensors and Actuators A: Physical, 2018, 280, 287-294.	4.1	15
43	A Handwriting Method for Low-Cost Gas Sensors. ACS Applied Materials & Interfaces, 2018, 10, 34683-34689.	8.0	15
44	Fully 3D-Printed RFID Tags based on Printable Metallic Filament: Performance Comparison with other Fabrication Techniques. , 2019, , .		15
45	Biominalisation of carbonate and sulphate by the halophilic bacterium Halomonas maura at different manganese concentrations. Extremophiles, 2017, 21, 1049-1056.	2.3	14
46	16S rRNA gene-based characterization of bacteria potentially associated with phosphate and carbonate precipitation from a granular autotrophic nitrogen removal bioreactor. Applied Microbiology and Biotechnology, 2017, 101, 817-829.	3.6	14
47	Low-Cost Bio-Impedance Analysis System for the Evaluation of Fruit Ripeness. , 2018, , .		14
48	Asymmetric enhanced surface interdigitated electrode capacitor with two out-of-plane electrodes. Sensors and Actuators B: Chemical, 2018, 254, 588-596.	7.8	13
49	Time stability of carbon nanotube gas sensors. Measurement: Journal of the International Measurement Confederation, 2019, 136, 323-325.	5.0	13
50	Cost-Effective Printed Electrodes Based on Emerging Materials Applied to Biosignal Acquisition. IEEE Access, 2020, 8, 127789-127800.	4.2	12
51	treNch: Ultra-Low Power Wireless Communication Protocol for IoT and Energy Harvesting. Sensors, 2020, 20, 6156.	3.8	12
52	Laser-Induced Graphene Electrodes Modified with a Molecularly Imprinted Polymer for Detection of Tetracycline in Milk and Meat. Sensors, 2022, 22, 269.	3.8	11
53	Laser-Induced Graphene, Fused Filament Fabrication, and Aerosol Jet Printing for Realizing Conductive Elements of UHF RFID Antennas. IEEE Journal of Radio Frequency Identification, 2022, 6, 601-609.	2.3	11
54	Reconfigurable electronics: Addressing the uncontrolled increase of waste electrical and electronic equipment. Resources, Conservation and Recycling, 2018, 138, 47-48.	10.8	10

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55	Carbon Dots as Sensing Layer for Printed Humidity and Temperature Sensors. <i>Nanomaterials</i> , 2020, 10, 2446.	4.1	10
56	Technological Integration in Printed Electronics. , 0, , .		9
57	On the sintering of solution-based silver nanoparticle thin-films for sprayed and flexible antennas. <i>Nanotechnology</i> , 2018, 29, 485701.	2.6	9
58	Shear-Force Sensors on Flexible Substrates Using Inkjet Printing. <i>Journal of Sensors</i> , 2019, 2019, 1-11.	1.1	8
59	Printed and Flexible Microheaters Based on Carbon Nanotubes. <i>Nanomaterials</i> , 2020, 10, 1879.	4.1	8
60	Design and Characterization of Ink-Jet and Screen Printed HF RFID Antennas. , 2012, , .		7
61	Fully Transparent Gas Sensor Based on Carbon Nanotubes. <i>Sensors</i> , 2019, 19, 4591.	3.8	7
62	Functionalized and oxidized silicon nanosheets: Customized design for enhanced sensitivity towards relative humidity. <i>Sensors and Actuators B: Chemical</i> , 2019, 283, 451-457.	7.8	7
63	Fabrication of low cost and low impact RH and temperature sensors for the internet of environmental-friendly things. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2021, 267, 115081.	3.5	7
64	Frequency response of variants of a cantilever beam. , 2012, , .		6
65	Flexible NH ₃ sensor based on spray deposition and inkjet printing. , 2016, , .		6
66	Rational design of an unusual 2D-MOF based on Cu(<i>scp</i>) and 4-hydroxypyrimidine-5-carbonitrile as linker with conductive capabilities: a theoretical approach based on high-pressure XRD. <i>Chemical Communications</i> , 2020, 56, 9473-9476.	4.1	6
67	Laser-Fabricated Antennas for RFID Applications. , 2021, , .		6
68	The influence of Salt Concentration on the Precipitation of Magnesium Calcite and Calcium Dolomite by <i>Halomonas Anticariensis</i> . <i>Expert Opinion on Environmental Biology</i> , 2016, 5, .	0.2	6
69	Characterization of an Interdigitated Capacitive Structure With Branches for Relative Humidity Sensing. , 2017, 1, 1-4.		5
70	Transparent thermocouples based on spray-coated nanocomposites. , 2017, , .		5
71	Scalable Deposition of Nanomaterial-Based Temperature Sensors for Transparent and Pervasive Electronics. <i>Journal of Sensors</i> , 2018, 2018, 1-9.	1.1	4
72	Acoustic characterization of laser-induced graphene film thermoacoustic loudspeakers. , 2019, , .		4

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73	Dual-Band Store-and-Use System for RF Energy Harvesting With Off-the-Shelf DC/DC Converters. IEEE Internet of Things Journal, 2021, 8, 3678-3688.	8.7	4
74	Facile manufacturing of sub-mm thick CNT-based RC filters. Materials Letters, 2021, 297, 129939.	2.6	4
75	Paper and Salt: Biodegradable NaCl-Based Humidity Sensors for Sustainable Electronics. Frontiers in Electronics, 2022, 3, .	3.2	4
76	Feasibility Study of a Simple and Low-Cost Device for Monitoring Trihalomethanes Presence in Water Supply Systems Based on Statistical Models. Water (Switzerland), 2014, 6, 3590-3602.	2.7	3
77	Cantilever Fabrication by a Printing and Bonding Process. Journal of Microelectromechanical Systems, 2015, 24, 880-886.	2.5	3
78	Hybrid printed device for simultaneous vapours sensing. IEEE Sensors Journal, 2016, , 1-1.	4.7	3
79	Development of a printed sensor for volatile organic compound detection at $\hat{1}/4\text{g/L}$ -level. Sensors and Actuators B: Chemical, 2016, 230, 115-122.	7.8	3
80	Read Range Enhancement of a Sensing RFID Tag by Photovoltaic Panel. Journal of Sensors, 2017, 2017, 1-7.	1.1	3
81	Optimization of Cost-Effective and Reproducible Flexible Humidity Sensors Based on Metal-Organic Frameworks. Sensors, 2020, 20, 6981.	3.8	3
82	Screen Printed Security-Button for Radio Frequency Identification Tags. IEEE Access, 2020, 8, 49224-49228.	4.2	3
83	Comparative study of printed capacitive sensors. , 2015, , .		2
84	Optimization of process parameters for inkjet printing of CNT random networks on flexible substrates. , 2016, , .		2
85	Context-Awareness in a Service Oriented e-Health Platform. Lecture Notes in Computer Science, 2011, , 172-179.	1.3	1
86	An Optimized Measurement Algorithm for Gas Sensors Based on Carbon Nanotubes: Optimizing Sensor Performance and Hardware Resources. IEEE Internet of Things Journal, 2019, 6, 9140-9146.	8.7	1
87	Cost-Effective Techniques for Sensors Technology. Journal of Sensors, 2019, 2019, 1-2.	1.1	1
88	Flexible Carbon Nanotube Sensors with Screen Printed and Interdigitated Electrodes. , 2019, , .		1
89	Temperature sensing by Laser Reduced Graphene Oxide at different Laser Power Levels. , 2020, , .		1
90	Properties of silver chloride and carbon screen printed patterns on different textiles. Textile Reseach Journal, 2022, 92, 2711-2718.	2.2	1

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91	Optimization of a Handwriting Method by an Automated Ink Pen for Cost-Effective and Sustainable Sensors. Chemosensors, 2021, 9, 264.	3.6	1
92	Readout Portable System For Wireless Chipless Biosensing. , 2021, , .		1
93	Portable electronic system for fast detection of bacteria lactase fermentation in water samples. Sensors and Actuators A: Physical, 2022, 338, 113486.	4.1	1
94	Screen-printed capacitive pressure sensors with high sensitivity and accuracy on flexible substrates. Flexible and Printed Electronics, 0, , .	2.7	1
95	Geometrical analysis of a MEMS microphone. , 2012, , .		0
96	Fabrication, characterization and modeling of flexible electronic components based on CNT networks. , 2016, , .		0
97	Design, simulation and fabrication strategies for printed out-of-plane thermoelectric devices. , 2017, , .		0
98	Surface Engineering of Two-Dimensional Hydrogenated Silicon Nanosheets for Tailored Applications. Journal of Physics: Conference Series, 2018, 1092, 012080.	0.4	0
99	Laser-fabricated flexible nanographene-based sensor for pH detection in saliva. , 2020, , .		0
100	Selectivity of Relative Humidity Using a CP Based on S-Block Metal Ions. Sensors, 2022, 22, 1664.	3.8	0
101	Reconfigurable Electronic Platforms: A Top-Down Approach to Learn about Design and Integration of Electronic Systems. Micromachines, 2022, 13, 442.	2.9	0