

Antonio Lazaro

List of Publications by Year in descending order

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134
docs citations

134
times ranked

2249
citing authors

#	ARTICLE	IF	CITATIONS
1	ANALYSIS OF VITAL SIGNS MONITORING USING AN IR-UWB RADAR. Progress in Electromagnetics Research, 2010, 100, 265-284.	4.4	311
2	Passive Wireless Temperature Sensor Based on Time-Coded UWB Chipless RFID Tags. IEEE Transactions on Microwave Theory and Techniques, 2012, 60, 3623-3632.	4.6	134
3	Radio Link Budgets for UHF RFID on Multipath Environments. IEEE Transactions on Antennas and Propagation, 2009, 57, 1241-1251.	5.1	121
4	Techniques for Clutter Suppression in the Presence of Body Movements during the Detection of Respiratory Activity through UWB Radars. Sensors, 2014, 14, 2595-2618.	3.8	120
5	Compact-Modeling Solutions For Nanoscale Double-Gate and Gate-All-Around MOSFETs. IEEE Transactions on Electron Devices, 2006, 53, 2128-2142.	3.0	91
6	Chipless UWB RFID Tag Detection Using Continuous Wavelet Transform. IEEE Antennas and Wireless Propagation Letters, 2011, 10, 520-523.	4.0	84
7	A Survey of NFC Sensors Based on Energy Harvesting for IoT Applications. Sensors, 2018, 18, 3746.	3.8	83
8	Frequency-Coded Chipless RFID Tag Based on Dual-Band Resonators. IEEE Antennas and Wireless Propagation Letters, 2012, 11, 126-128.	4.0	82
9	Temporal Separation Detection for Chipless Depolarizing Frequency-Coded RFID. IEEE Transactions on Microwave Theory and Techniques, 2016, 64, 2326-2337.	4.6	78
10	Wireless Wearable Magnetometer-Based Sensor for Sleep Quality Monitoring. IEEE Sensors Journal, 2018, 18, 2145-2152.	4.7	73
11	Remote Sensing of Vital Signs Using a Doppler Radar and Diversity to Overcome Null Detection. IEEE Sensors Journal, 2012, 12, 512-518.	4.7	64
12	Chipless Dielectric Constant Sensor for Structural Health Testing. IEEE Sensors Journal, 2018, 18, 5576-5585.	4.7	55
13	Study of intermodulation in RF MEMS variable capacitors. IEEE Transactions on Microwave Theory and Techniques, 2006, 54, 1120-1130.	4.6	52
14	Wireless Breathing Sensor Based on Wearable Modulated Frequency Selective Surface. IEEE Sensors Journal, 2017, 17, 1285-1292.	4.7	51
15	EFFECTS OF INTERFERENCES IN UHF RFID SYSTEMS. Progress in Electromagnetics Research, 2009, 98, 425-443.	4.4	50
16	TIME-DOMAIN MEASUREMENT OF TIME-CODED UWB CHIPLESS RFID TAGS. Progress in Electromagnetics Research, 2011, 116, 313-331.	4.4	50
17	Battery-Less Soil Moisture Measurement System Based on a NFC Device With Energy Harvesting Capability. IEEE Sensors Journal, 2018, 18, 5541-5549.	4.7	48
18	A Depolarizing Chipless RF Label for Dielectric Permittivity Sensing. IEEE Microwave and Wireless Components Letters, 2018, 28, 371-373.	3.2	47

#	ARTICLE	IF	CITATIONS
19	RF and noise performance of double gate and single gate SOI. Solid-State Electronics, 2006, 50, 826-842.	1.4	46
20	WAVELET-BASED BREAST TUMOR LOCALIZATION TECHNIQUE USING A UWB RADAR. Progress in Electromagnetics Research, 2009, 98, 75-95.	4.4	46
21	Color Measurement and Analysis of Fruit with a Battery-Less NFC Sensor. Sensors, 2019, 19, 1741.	3.8	45
22	SIMULATED AND EXPERIMENTAL INVESTIGATION OF MICROWAVE IMAGING USING UWB. Progress in Electromagnetics Research, 2009, 94, 263-280.	4.4	42
23	A Passive Harmonic Tag for Humidity Sensing. International Journal of Antennas and Propagation, 2014, 2014, 1-11.	1.2	41
24	Battery-Less NFC Sensor for pH Monitoring. IEEE Access, 2019, 7, 33226-33239.	4.2	36
25	Electrothermally Actuated RF MEMS Switches Suspended on a Low-Resistivity Substrate. Journal of Microelectromechanical Systems, 2007, 16, 1061-1070.	2.5	34
26	Design of tapered slot Vivaldi antenna for UWB breast cancer detection. Microwave and Optical Technology Letters, 2011, 53, 639-643.	1.4	34
27	Semi-Passive Time-Domain UWB RFID System. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 1700-1708.	4.6	33
28	A Novel UWB RFID Tag Using Active Frequency Selective Surface. IEEE Transactions on Antennas and Propagation, 2013, 61, 1155-1165.	5.1	33
29	Tunable dual-band bandpass filter for WLAN applications. Microwave and Optical Technology Letters, 2009, 51, 2025-2028.	1.4	31
30	Modulated Frequency Selective Surfaces for Wearable RFID and Sensor Applications. IEEE Transactions on Antennas and Propagation, 2016, 64, 4447-4456.	5.1	29
31	FET noise-parameter determination using a novel technique based on 50- $\hat{\text{I}}^{\circ}$ noise-figure measurements. IEEE Transactions on Microwave Theory and Techniques, 1999, 47, 315-324.	4.6	28
32	A compact quantum model of nanoscale double-gate metal-oxide-semiconductor field-effect transistor for high frequency and noise simulations. Journal of Applied Physics, 2006, 100, 084320.	2.5	28
33	Study on the Reading of Energy-Harvested Implanted NFC Tags Using Mobile Phones. IEEE Access, 2020, 8, 2200-2221.	4.2	28
34	IR-UWB radar system and tag design for time-coded chipless RFID. , 2012, , .		26
35	Seat-Occupancy Detection System and Breathing Rate Monitoring Based on a Low-Cost mm-Wave Radar at 60 GHz. IEEE Access, 2021, 9, 115403-115414.	4.2	26
36	Wireless Concrete Mixture Composition Sensor Based on Time-Coded UWB RFID. IEEE Microwave and Wireless Components Letters, 2015, 25, 681-683.	3.2	22

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37	Smart Face Mask with an Integrated Heat Flux Sensor for Fast and Remote People's Healthcare Monitoring. <i>Sensors</i> , 2021, 21, 7472.	3.8	22
38	Oxygen plasma treated carbon nanotubes for the wireless monitoring of nitrogen dioxide levels. <i>Sensors and Actuators B: Chemical</i> , 2015, 208, 444-449.	7.8	21
39	RF and noise model of gate-all-around MOSFETs. <i>Semiconductor Science and Technology</i> , 2008, 23, 075022.	2.0	20
40	DC self-heating effects modelling in SOI and bulk FinFETs. <i>Microelectronics Journal</i> , 2015, 46, 320-326.	2.0	20
41	Investigation of radio channel uncertainty in distance estimation in wireless sensor networks. <i>Telecommunication Systems</i> , 2013, 52, 1549-1558.	2.5	19
42	Passive Harmonic RFID System for Buried Assets Localization. <i>Sensors</i> , 2018, 18, 3635.	3.8	19
43	Battery-Less Smart Diaper Based on NFC Technology. <i>IEEE Sensors Journal</i> , 2019, 19, 10848-10858.	4.7	19
44	Room-Level Localization System Based on LoRa Backscatters. <i>IEEE Access</i> , 2021, 9, 16004-16018.	4.2	18
45	Extraction of an avalanche diode noise model for its application as an on-wafer noise source. <i>Microwave and Optical Technology Letters</i> , 2003, 38, 89-92.	1.4	17
46	Read range reduction in UHF RFID due to antenna detuning and gain penalty. <i>Microwave and Optical Technology Letters</i> , 2011, 53, 144-148.	1.4	17
47	Signal Processing Techniques for Chipless UWB RFID Thermal Threshold Detector Detection. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2016, 15, 618-621.	4.0	15
48	Time-coded chipless RFID tags: Design, characterization and application. , 2012, , .		14
49	Passive wireless permittivity sensor based on frequency-coded chipless RFID tags. , 2012, , .		14
50	Time-Domain UWB RFID Tag Based on Reflection Amplifier. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2013, 12, 520-523.	4.0	14
51	New Radar Micro-Doppler Tag for Road Safety Based on the Signature of Rotating Backscatters. <i>IEEE Sensors Journal</i> , 2021, 21, 8604-8612.	4.7	14
52	Car2Car Communication Using a Modulated Backscatter and Automotive FMCW Radar. <i>Sensors</i> , 2021, 21, 3656.	3.8	14
53	Spoofing Attacks on FMCW Radars with Low-Cost Backscatter Tags. <i>Sensors</i> , 2022, 22, 2145.	3.8	14
54	Active UWB Reflector for RFID and Wireless Sensor Networks. <i>IEEE Transactions on Antennas and Propagation</i> , 2013, 61, 4767-4774.	5.1	13

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55	In-depth analysis and modelling of self-heating effects in nanometric DGMOSFETs. Solid-State Electronics, 2013, 79, 179-184.	1.4	13
56	Solar-Powered Wireless Temperature Sensor Based on UWB RFID With Self-Calibration. IEEE Sensors Journal, 2015, 15, 3764-3772.	4.7	13
57	Feasibility of Backscatter Communication Using LoRAWAN Signals for Deep Implanted Devices and Wearable Applications. Sensors, 2020, 20, 6342.	3.8	13
58	Characterization of Dynamics and Power Handling of RF MEMS Using Vector Measurement Techniques. IEEE Transactions on Microwave Theory and Techniques, 2004, 52, 2627-2633.	4.6	11
59	Time-coded chipless RFID temperature sensor with self-calibration based on a Vivaldi antenna. , 2013, , .		11
60	Battery-Less NFC Bicycle Tire Pressure Sensor Based on a Force-Sensing Resistor. IEEE Access, 2021, 9, 103975-103987.	4.2	11
61	A Low-Power-Consumption Out-of-Plane Electrothermal Actuator. Journal of Microelectromechanical Systems, 2007, 16, 719-727.	2.5	10
62	A compact quantum model for fin-shaped field effect transistors valid from dc to high frequency and noise simulations. Journal of Applied Physics, 2008, 103, 084507.	2.5	10
63	High-frequency compact analytical noise model for double-gate metal-oxide-semiconductor field-effect transistor. Journal of Applied Physics, 2009, 105, 034510.	2.5	10
64	Active Backscatter Transponder for FMCW Radar Applications. IEEE Antennas and Wireless Propagation Letters, 2015, 14, 1610-1613.	4.0	10
65	ANALYSIS OF ON-BODY TRANSPONDERS BASED ON FREQUENCY SELECTIVE SURFACES. Progress in Electromagnetics Research, 2016, 157, 133-143.	4.4	10
66	MEMS-Based 180° Phase Switch for Differential Radiometers. IEEE Transactions on Microwave Theory and Techniques, 2010, 58, 1264-1272.	4.6	9
67	Measurement uncertainty analysis in incoherent Doppler lidars by a new scattering approach. Optics Express, 2006, 14, 7699.	3.4	8
68	High frequency and noise model of gate-all-around metal-oxide-semiconductor field-effect transistors. Journal of Applied Physics, 2009, 105, 074505.	2.5	8
69	Nitrogen Dioxide Wireless Sensor Based on Carbon Nanotubes and UWB RFID Technology. IEEE Antennas and Wireless Propagation Letters, 2015, 14, 1145-1148.	4.0	8
70	Near-Field Soil Moisture Sensor with Energy Harvesting Capability. , 2018, , .		8
71	A method for characterizing coplanar waveguide-to-microstrip transitions, and its application to the measurement of microstrip devices with coplanar microprobes. Microwave and Optical Technology Letters, 2003, 39, 373-378.	1.4	7
72	Electrothermally-actuated RF-MEMS suspended parallel switch. Microwave and Optical Technology Letters, 2007, 49, 2894-2896.	1.4	7

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73	High Frequency and Noise Model of Gate-All-Around MOSFETs. , 2009, , .		7
74	WEIGHTED CENTROID METHOD FOR BREAST TUMOR LOCALIZATION USING AN UWB RADAR. Progress in Electromagnetics Research B, 2010, 24, 1-15.	1.0	7
75	Time-domain UWB RFID tags for smart floor applications. , 2014, , .		7
76	Modulated corner reflector using frequency selective surfaces for FMCW radar applications. , 2015, , .		7
77	Thermal Resistance Characterization for Multifinger SOI-MOSFETs. IEEE Transactions on Electron Devices, 2018, 65, 3626-3632.	3.0	7
78	Generation of third and higher-order intermodulation products in MEMS capacitors, and their effects. , 2005, , .		6
79	Tunable dual-band resonators for communication systems. International Journal of Microwave and Wireless Technologies, 2010, 2, 245-253.	1.9	6
80	Numerical dc self-heating in planar double-gate MOSFETs. Semiconductor Science and Technology, 2011, 26, 095014.	2.0	6
81	Progress in green chipless RFID sensors. , 2017, , .		6
82	Temperature-Dependent Thermal Capacitance Characterization for SOI-MOSFETs. IEEE Transactions on Electron Devices, 2019, 66, 4120-4125.	3.0	6
83	Bias-dependence of FET intrinsic noise sources, determined with a quasi-2D model. Microwave and Optical Technology Letters, 2003, 39, 317-319.	1.4	5
84	Multi-sensor UWB time-coded RFID tags for smart cities applications. , 2014, , .		5
85	Analytical Energy Model for the Dynamic Behavior of RF MEMS Switches Under Increased Actuation Voltage. Journal of Microelectromechanical Systems, 2014, 23, 1428-1439.	2.5	5
86	Temperature sensor based on frequency-coded chipless RFID tags. Microwave and Optical Technology Letters, 2014, 56, 2411-2415.	1.4	5
87	RF Extraction of Thermal Resistance for GaN HEMTs on Silicon. IEEE Transactions on Electron Devices, 2022, 69, 2307-2312.	3.0	5
88	RF and Noise Performance of Multiple-Gate SOI MOSFETs. , 2006, , .		4
89	In-Plane Electrostatically-Actuated RF MEMS Switch Suspended on a Low-Resistivity Substrate. , 2006, , .		4
90	Influence of materials in time-coded chipless RFID tags characterized using a low-cost UWB reader. , 2012, , .		4

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91	Diversity Study of a Frequency Selective Surface Transponder for Wearable Applications. IEEE Transactions on Antennas and Propagation, 2017, 65, 2701-2706.	5.1	4
92	Design of wireless sensors by using chipless RFID technology. , 2017, , .		4
93	RF-MEMS Switches Designed for High-Performance Uniplanar Microwave and mm-Wave Circuits. , 2018, , .		4
94	NFC Sensors Based on Energy Harvesting for IoT Applications. , 0, , .		4
95	Cold-FET ENR Characterisation Applied to the Measurement of On-Wafer Transistor Noise Parameters. , 2002, , .		3
96	In-Plane Electrostatically-Actuated RF MEMS Switch Suspended on a Low-Resistivity Substrate. , 2006, , .		3
97	Compact RF Modeling of Multiple-Gate MOSFETs. , 2006, , .		3
98	Sensing of thermal thresholds using UWB RFID passive tags. , 2014, , .		3
99	Car-to-car communication based on modulated active backscatter and automotive radar. , 2022, , .		3
100	Noise in SOI MOSFETs and Gate-All Around Transistors. AIP Conference Proceedings, 2005, , .	0.4	2
101	Distortion produced by RF MEMS varactors on digital communication signals. Microwave and Optical Technology Letters, 2006, 48, 246-449.	1.4	2
102	Charge-Based Compact Modeling of Multiple-Gate MOSFET. , 2007, , .		2
103	Dual-band bandpass filter based on a hole resonator. Microwave and Optical Technology Letters, 2009, 51, 1649-1652.	1.4	2
104	High-frequency compact analytical noise model of gate-all-around MOSFETs. Semiconductor Science and Technology, 2010, 25, 035015.	2.0	2
105	Analytical high frequency GaN HEMT model for noise simulations. Semiconductor Science and Technology, 2017, 32, 125012.	2.0	2
106	Technique for wireless reading of passive microfluidic sensors. Electronics Letters, 2018, 54, 150-151.	1.0	2
107	Star-Shaped Wheel for Mechanical Micro-Doppler Modulation. IEEE Antennas and Wireless Propagation Letters, 2021, , 1-1.	4.0	2
108	Gate Length-Dependent Thermal Impedance Characterization of PD-SOI MOSFETs. IEEE Transactions on Electron Devices, 2022, 69, 469-474.	3.0	2

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109	Long-Range LoRaWan backscatter based sensors for medical and wearable applications. , 2022, , .		2
110	Noise model of a reverse-biased cold-FET applied to the characterization of its ENR. Microwave and Optical Technology Letters, 2004, 40, 326-330.	1.4	1
111	A method for the determination of a distributed FET noise model based on matched-source noise-figure measurements. Microwave and Optical Technology Letters, 2004, 41, 221-225.	1.4	1
112	Simultaneous extraction of the small-signal equivalent circuit elements and noise parameters of HBTs. , 2004, , .		1
113	A MEMS capacitor with improved RF power handling capability. , 2005, , .		1
114	Non linear actuation model for lateral electrostatically-actuated DC-contact RF MEMS series switches. , 2007, , .		1
115	A Compact Quantum Model of Nanoscale Double-Gate MOSFET for RF and Noise Simulations. , 2007, , .		1
116	Nonlinear actuation model for lateral electrostatically-actuated DC-contact RF MEMS series switches. Microwave and Optical Technology Letters, 2007, 49, 1238-1241.	1.4	1
117	Linearity study of DG MOSFETs. , 2009, , .		1
118	An advanced drain current model for DGMOSFETs including self-heating effects. , 2012, , .		1
119	Nanoscale FETs. Advances in Imaging and Electron Physics, 2012, , 261-347.	0.2	1
120	UWB time-coded RFID sensors: A comparison between passive and semi-passive approaches. , 2013, , .		1
121	Permittivity sensor using chipless time-coded UWB RFID. , 2014, , .		1
122	Wearable sensors based on modulated frequency selective surfaces. , 2017, , .		1
123	Non-contact Material Monitoring by Using Depolarizing Chipless RFID Tags. , 2018, , .		1
124	EMERGENT Project: ChiplEss MultisEnsor Rfid for GrEen NeTworks. , 2019, , .		1
125	NFC Battery-Less Colour Sensor and its Applications. , 2020, , .		1
126	A method to simultaneously extract the small-signal equivalent circuit and noise parameters of heterojunction bipolar transistors. Microwave and Optical Technology Letters, 2006, 48, 1372-1379.	1.4	0

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127	A CAD model of Nanoscale Double-Gate MOSFET for RF and Noise applications including quantum and non-stationary effects. , 2007, , .		0
128	A method for characterization of intermodulation distortion produced in MEMS switches. Microwave and Optical Technology Letters, 2009, 51, 526-529.	1.4	0
129	Phase Noise Modelling in Parallel-plate MEMS variable capacitors. , 2009, , .		0
130	DC thermal numerical simulation of DG MOSFET. , 2011, , .		0
131	Backscatter tag based on frequency selective surface for FMCW radar applications. , 2015, , .		0
132	Large-Signal DG-MOSFET Modelling for RFID Rectification. Advances in Condensed Matter Physics, 2016, 2016, 1-6.	1.1	0
133	RF noise model for AlGaIn/GaN HEMT. , 2017, , .		0