

Andrea Scorzoni

List of Publications by Year in descending order

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60
papers

1,658
citations

304701

22
h-index

302107

39
g-index

60
all docs

60
docs citations

60
times ranked

1492
citing authors

#	ARTICLE	IF	CITATIONS
1	Flexible tag microlab development: Gas sensors integration in RFID flexible tags for food logistic. Sensors and Actuators B: Chemical, 2007, 127, 2-7.	7.8	147
2	Electromigration in thin-film interconnection lines: models, methods and results. Materials Science and Engineering Reports, 1991, 7, 143-220.	5.8	131
3	Layered Distribution of Charge Carriers in Organic Thin Film Transistors. Physical Review Letters, 2010, 104, 246602.	7.8	130
4	Activation energy in the early stage of electromigration in Al-1% Si/TiN/Ti bamboo lines. Semiconductor Science and Technology, 1995, 10, 255-259.	2.0	122
5	Thermal characterization of a microheater for micromachined gas sensors. Sensors and Actuators A: Physical, 2004, 115, 8-14.	4.1	89
6	Automated defect detection in uniform and structured fabrics using Gabor filters and PCA. Journal of Visual Communication and Image Representation, 2013, 24, 838-845.	2.8	85
7	An RFID reader with onboard sensing capability for monitoring fruit quality. Sensors and Actuators B: Chemical, 2007, 127, 143-149.	7.8	81
8	Metal/semiconductor contact resistivity and its determination from contact resistance measurements. Materials Science and Engineering Reports, 1988, 3, 79-137.	5.8	62
9	Characterization of Low-Cost Capacitive Soil Moisture Sensors for IoT Networks. Sensors, 2020, 20, 3585.	3.8	62
10	Radiation hardness after very high neutron irradiation of minimum ionizing particle detectors based on 4H-SiC p/sup +/n junctions. IEEE Transactions on Nuclear Science, 2006, 53, 1557-1563.	2.0	59
11	Ultra-low-power components for an RFID Tag with physical and chemical sensors. Microsystem Technologies, 2008, 14, 581-588.	2.0	42
12	Current crowding and misalignment effects as sources of error in contact resistivity measurementsâ€”Part I: Computer simulation of conventional CER and CKR structures. IEEE Transactions on Electron Devices, 1987, 34, 525-531.	3.0	29
13	Electromigration in thin-films for microelectronics. Microelectronics Reliability, 1993, 33, 1779-1805.	1.7	29
14	Use of a CMOS Image Sensor for an Active Personal Dosimeter in Interventional Radiology. IEEE Transactions on Instrumentation and Measurement, 2013, 62, 1065-1072.	4.7	29
15	Interaction between electromigration and mechanical-stress-induced migration; New insights by a simple, wafer-level resistometric technique. IEEE Transactions on Electron Devices, 1991, 38, 469-475.	3.0	28
16	Numerical simulation of ISFET structures for biosensing devices with TCAD tools. BioMedical Engineering OnLine, 2015, 14, S3.	2.7	28
17	A resistometric method to characterize electromigration at the wafer level. Microelectronics Reliability, 1990, 30, 123-132.	1.7	26
18	A Programmable Interface Circuit for an Ultralow Power Gas Sensor. IEEE Transactions on Instrumentation and Measurement, 2011, 60, 282-289.	4.7	26

#	ARTICLE	IF	CITATIONS
19	Design and experimental characterization of thin film heaters on glass substrate for Lab-on-Chip applications. <i>Sensors and Actuators A: Physical</i> , 2015, 229, 203-210.	4.1	26
20	Contact resistivity of silicon/silicide structures formed by thin film reactions. <i>Thin Solid Films</i> , 1985, 130, 37-45.	1.8	25
21	Improved electrical characterization of Al/Ti ohmic contacts on p-type ion implanted 6H-SiC. <i>Semiconductor Science and Technology</i> , 2003, 18, 554-559.	2.0	25
22	Environmental monitoring system compliant with the IEEE 1451 standard and featuring a simplified transducer interface. <i>Sensors and Actuators A: Physical</i> , 2007, 137, 175-184.	4.1	24
23	Thermal Conductivity Detector for Gas Chromatography: Very Wide Gain Range Acquisition System and Experimental Measurements. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2013, 62, 974-981.	4.7	24
24	A System for the Dynamic Control and Thermal Characterization of Ultra Low Power Gas Sensors. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2011, 60, 1876-1883.	4.7	22
25	Physical modeling of silicon microstrip detectors: influence of the electrode geometry on critical electric fields. <i>IEEE Transactions on Nuclear Science</i> , 2000, 47, 1468-1473.	2.0	20
26	A simple interface circuit for micromachined gas sensors. <i>Sensors and Actuators A: Physical</i> , 2003, 109, 131-136.	4.1	19
27	Experimental Characterization of a Personal Wireless Sensor Network for the Medical X-Ray Dosimetry. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2016, 65, 2002-2011.	4.7	19
28	The effect of sheet resistance modifications underneath the contact on the extraction of the contact resistivity: application to the cross Kelvin resistor. <i>IEEE Transactions on Electron Devices</i> , 1988, 35, 386-388.	3.0	18
29	Drawbacks to using NIST electromigration test-structures to test bamboo metal lines. <i>IEEE Transactions on Electron Devices</i> , 1994, 41, 2276-2280.	3.0	18
30	Measurements and simulations of charge collection efficiency of p+/n junction SiC detectors. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2005, 546, 218-221.	1.6	16
31	A percolative approach to electromigration in metallic lines. <i>Journal Physics D: Applied Physics</i> , 2001, 34, 1421-1429.	2.8	15
32	Contact Resistivity and Barrier Height of Al/Ti Ohmic Contacts on p-Type Ion Implanted 4H- and 6H-SiC. <i>Materials Science Forum</i> , 2004, 457-460, 881-884.	0.3	15
33	Degradation mechanisms induced by high current density in Al-gate GaAs MESFET's. <i>IEEE Transactions on Electron Devices</i> , 1987, 34, 205-211.	3.0	14
34	Current crowding and misalignment effects as sources of error in contact resistivity measurements – Part II: Experimental results and computer simulation of self-aligned test structures. <i>IEEE Transactions on Electron Devices</i> , 1987, 34, 532-536.	3.0	14
35	Contact resistivity of Al/Ti ohmic contacts on p-type ion implanted 4H- and 6H-SiC.. <i>Materials Research Society Symposia Proceedings</i> , 2002, 742, 621.	0.1	13
36	Performance of CMOS imager as sensing element for a Real-time Active Pixel Dosimeter for Interventional Radiology procedures. <i>Journal of Instrumentation</i> , 2014, 9, C01036-C01036.	1.2	12

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37	Experimental Characterization of a Wireless Personal Sensor Node for the Dosimetry During Interventional Radiology Procedures. IEEE Transactions on Instrumentation and Measurement, 2016, 65, 1070-1078.	4.7	12
38	Electromigration and Matthiessen's rule: Experiments on non-passivated Al-1%Si films. Thin Solid Films, 1990, 191, 31-36.	1.8	11
39	Comparison between analytical models and finite-difference simulations in transmission-line tap resistors and L-type cross-Kelvin resistors. IEEE Transactions on Electron Devices, 1990, 37, 1099-1103.	3.0	10
40	Resistance decay after electromigration as the effect of mechanical stress relaxation. Microelectronics Reliability, 1993, 33, 1841-1844.	1.7	9
41	Offset voltage evaluation of analog blocks in a configurable mixed architecture for smart capacitive sensor applications. Sensors and Actuators A: Physical, 2007, 140, 162-167.	4.1	9
42	Personnel real time dosimetry in interventional radiology. Physica Medica, 2016, 32, 1724-1730.	0.7	8
43	Al/Ti Ohmic Contacts to p-Type Ion-Implanted 6H-SiC: Mono- and Two- Dimensional Analysis of TLM Data. Materials Science Forum, 2003, 433-436, 673-676.	0.3	7
44	The circular resistor (CR)-a novel structure for the analysis of VLSI contacts. IEEE Transactions on Electron Devices, 1990, 37, 1750-1757.	3.0	6
45	A Configurable Mixed-Signal Architecture for Label-Free Smart Biosensor Applications. IEEE Transactions on Instrumentation and Measurement, 2009, 58, 1333-1344.	4.7	6
46	Thermal Modeling and Characterization of a Thin-Film Heater on Glass Substrate for Lab-on-Chip Applications. IEEE Transactions on Instrumentation and Measurement, 2015, 64, 1098-1098.	4.7	6
47	Measurement of the local latch-up sensitivity by means of computer-controller scanning electron microscopy. IEEE Journal of Solid-State Circuits, 1988, 23, 597-603.	5.4	5
48	A proposal for a standard procedure for moderately accelerated electromigration tests on metal lines. Microelectronics Reliability, 1999, 39, 615-626.	1.7	5
49	Investigation of the role of compositional effects on electromigration damage of metallic interconnects. Computational Materials Science, 2001, 22, 13-18.	3.0	5
50	A novel method of preparation of silicon-on-diamond materials. Diamond and Related Materials, 2010, 19, 950-955.	3.9	5
51	Ohmic contact electromigration. Microelectronics Reliability, 1992, 32, 167-174.	1.7	2
52	On the Astm electromigration test structure applied to Al-1%Si/TiN/Ti bamboo metal lines. Quality and Reliability Engineering International, 1995, 11, 33-39.	2.3	2
53	Ultra-low-power electronics and devices for a multisensing RFID tag. , 2007, , .		2
54	Experiences on reliability simulation in the framework of the PROPHECY project. Microelectronics Reliability, 1999, 39, 661-672.	1.7	1

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55	A configurable architecture for the detection of DNA sequences based on a E<sup>2</sup>PROM device. , 2007, , .		1
56	Smart Capacitive Biosensor Based on a Programmable System-on-Chip, Featuring a Novel Method for Improving the Performance of its Analog Blocks. , 2008, , .		1
57	A Wireless Personal Sensor Node for Real Time Dosimetry of Interventional Radiology Operators. Lecture Notes in Electrical Engineering, 2017, , 1-7.	0.4	1
58	Electromigration Reliability Assessment of Cu-based Metallization Systems by a Wafer-Level Approach. ECS Transactions, 2007, 8, 157-162.	0.5	0
59	Direct detection of DNA sequences based on capacitance measurements through a configurable mixed-signal architecture. , 2008, , .		0
60	A SystemVerilog-UVM Methodology for the Design, Simulation and Verification of Complex Readout Chips in High Energy Physics Applications. Lecture Notes in Electrical Engineering, 2017, , 35-41.	0.4	0