Elder Alpes de Vasconcelos

List of Publications by Year
in descending order

57	741	567281 15	580821 25
papers	citations	h-index	g-index

57	57	57	920
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Potential of a simplified measurement scheme and device structure for a low cost label-free point-of-care capacitive biosensor. Biosensors and Bioelectronics, 2009, 25, 870-876.	10.1	62
2	Growth of sub-micron fibres of pure polyaniline using the electrospinning technique. Journal Physics D: Applied Physics, 2007, 40, 1068-1071.	2.8	49
3	Fabrication of high quality siliconâ€“polyaniline heterojunctions. Applied Surface Science, 2002, 190, 390-394.	6.1	45
4	Production of Ball-Lightning-Like Luminous Balls by Electrical Discharges in Silicon. Physical Review Letters, 2007, 98, 048501.	7.8	42
5	Enhanced lifetime in porous silicon light-emitting diodes with fluorine doped tin oxide electrodes. Thin Solid Films, 2008, 517, 870-873.	1.8	35
6	A study of silicon Schottky diode structures for NOx gas detection. Sensors and Actuators B: Chemical, 2000, 65, 154-156.	7.8	33
7	A simplified reactive thermal evaporation method for indium tin oxide electrodes. Applied Surface Science, 2008, 255, 755-757.	6.1	30
8	An improved description of the dielectric breakdown in oxides based on a generalized Weibull distribution. Physica A: Statistical Mechanics and Its Applications, 2006, 361, 209-215.	2.6	29
9	Highly sensitive thermistors based on high-purity polycrystalline cubic silicon carbide. Sensors and Actuators A: Physical, 2000, 83, 167-171.	4.1	26
10	Immobilization of urease on vapour phase stain etched porous silicon. Process Biochemistry, 2007, 42, 429-433.	3.7	25
11	Nanowire growth on Si wafers by oxygen implantation and annealing. Applied Surface Science, 2006, 252, 5572-5574.	6.1	22
12	A new method for luminescent porous silicon formation: reaction-induced vapor-phase stain etch. Physica Status Solidi (A) Applications and Materials Science, 2005, 202, 1539-1542.	1.8	21
13	Polyaniline nanofilms as a monitoring label and dosimetric device for gamma radiation. Materials Characterization, 2003, 50, 127-130.	4.4	20
14	Spectroscopic characteristics of doped nanoporous aluminum oxide. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 112, 171-174.	3.5	20
15	Conducting Polymer/Silicon Heterojunction Diode for Gamma Radiation Detection. Radiation Protection Dosimetry, 2002, 101, 85-88.	0.8	16
16	Photoluminescence characteristics of rare earth-doped nanoporous aluminum oxide. Applied Surface Science, 2004, 234, 457-461.	6.1	16
17	Gas response and modeling of NO-sensitive thin-Pt SiC schottky diodes. Sensors and Actuators B: Chemical, 2003, 92, 181-185.	7.8	15
18	Thermal-lens and photo-acoustic methods for the determination of SiC thermal properties. Microelectronics Journal, 2005, 36, 977-980.	2.0	15

#	Article	IF	Citations
19	A conducting polymerâ€“silicon heterojunction as a new ultraviolet photodetector. Applied Surface Science, 2008, 255, 688-690.	6.1	15
20	Synthesis and characterization of MCM-41 powder and its deposition by spin-coating. Optik, 2019, 185, 429-440.	2.9	15
21	Tailoring the Electrical Properties of ZnO/Polyaniline Heterostructures for Device Applications. Journal of the Korean Physical Society, 2011, 58, 1256-1260.	0.7	14
22	Electrical and microscopic characterization of ZnO films on p-SiC substrates. Solid State Communications, 2011, 151, 1252-1255.	1.9	12
23	Correlation between dopant reduction and interfacial defects in low-energy x-ray-irradiated MOS capacitors. Semiconductor Science and Technology, 1997, 12, 1032-1037.	2.0	11
24	A silicon-polymer heterostructure for sensor applications. Brazilian Journal of Physics, 2002, 32, 421-423.	1.4	11
25	AFM studies of polyaniline nanofilms irradiated with gamma rays. Microelectronics Journal, 2003, 34, 511-513.	2.0	10
26	Fabrication and electrical characterization of polyaniline/silicon carbide heterojunctions. Journal Physics D: Applied Physics, 2011, 44, 205101.	2.8	10
27	Effect of ageing on x-ray induced dopant passivation in MOS capacitors. Semiconductor Science and Technology, 2000, 15, 794-798.	2.0	9
28	Optical and electronic characterization of the band structure of blue methylene and rhodamine 6G-doped TiO2 solâ€“gel nanofilms. Microelectronics Journal, 2005, 36, 570-573.	2.0	9
29	Potential of High-purity Polycrystalline Silicon Carbide for Thermistor Applications. Japanese Journal of Applied Physics, 1998, 37, 5078-5079.	1.5	8
30	Time evolution of SiO2/Si interface defects and dopant passivation in MOS capacitors. Microelectronic Engineering, 2000, 51-52, 567-574.	2.4	8
31	Morphology of nanostructured luminescent silicon layers. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, S287-S290.	0.8	8
32	SiC/SiO2 interface states observed by x-ray photoelectron spectroscopy measurements under bias. Applied Physics Letters, 2001, 78, 96-98.	3.3	7
33	Statistical analysis of topographic images of nanoporous silicon and model surfaces. Microelectronics Journal, 2005, 36, 1011-1015.	2.0	7
34	Polyaniline nanofilms as a sensing device for ionizing radiation. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 17, 666-667.	2.7	6
35	Metal-insulator-semiconductor capacitors with water-containing hexagonal mesoporous silica (MCM-41) dielectric and high values of capacitance per unit area. Semiconductor Science and Technology, 2015, 30, 045003.	2.0	6
36	A percolation based dielectric breakdown model with randomic changes in the dielectric constant. Physica A: Statistical Mechanics and Its Applications, 2002, 305, 351-359.	2.6	5

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37	Reliability physics study for semiconductor-polymer device development. Microelectronics Journal, 2003, 34, 713-715.	2.0	5
38	Visible photoluminescence from Ge nanoclusters implanted in nanoporous aluminum oxide films. Microelectronics Journal, 2005, 36, 992-994.	2.0	5
39	Dynamic Photocurrent Images of a Gas Sensing Surface. Japanese Journal of Applied Physics, 1999, 38, 2893-2898.	1.5	4
40	Dynamics of SiO2/SiOx/Si multilayer growth and interfacial effects on silicon quantum well confinement properties. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2000, 74, 188-192.	3.5	4
41	NO Gas Detection at High Temperature Using Thin-Pt 4H-SiC and 6H-SiC Schottky Diodes. Materials Science Forum, 2003, 433-436, 961-964.	0.3	4
42	A versatile technique to transfer multi-walled carbon nanotubes membranes to surfaces. Translational Materials Research, 2016, 3, 035001.	1.2	4
43	Post-irradiation dopant passivation in MOS capacitors exposed to high doses of x-rays. Semiconductor Science and Technology, 1998, 13, 1313-1316.	2.0	3
44	X-Ray Radiation Response of Epitaxial and Nonepitaxial n-6Hâ€“SiC Metal-Oxide-Semiconductor Capacitors. Japanese Journal of Applied Physics, 2001, 40, 2987-2990.	1.5	3
45	Optical and electrical characterization of the band structure of polyaniline nanofilms and polyaniline/silicon heterojunctions. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 2982-2985.	0.8	3
46	High-temperature thin-catalytic gate devices for combustion emissions control. Brazilian Journal of Physics, 2004, 34, 577-580.	1.4	3
47	Ionizing radiation and hot carrier effects in SiC MOS devices. Brazilian Journal of Physics, 2002, 32, 389-391.	1.4	2
48	The role of multiple damaged layers at the Si/SiO2 interface on the dielectric breakdown of MOS capacitors. Applied Surface Science, 2002, 190, 35-38.	6.1	2
49	Synthesis and characterization of carbon nanotubes/silica composites using gum arabic. Materials Research Express, 2018, 5, 075028.	1.6	2
50	A wrinkled ZnO/MCM-41 nanocomposite: hydrothermal synthesis and characterization. Materials Research Express, 2021, 8, 065011.	1.6	2
51	Monte Carlo study of interfacial silicon suboxide layers and oxidation kinetics. Applied Surface Science, 2002, 190, 30-34.	6.1	1
52	Thermal Lens Technique for the Determination of SiC Thermo-Optical Properties. Materials Science Forum, 2006, 527-529, 703-706.	0.3	1
53	Highly Stable Tea Taste Detection Using SPV Method and Ion Electrodes. IEEJ Transactions on Sensors and Micromachines, 1998, 118, 608-613.	0.1	1
54	Silicon-carbide Schottky diodes with sputtered and laser-ablated thin-Pt gate as NO gas sensors in high temperature. , 0, , .		0

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55	The Role of Non-abrupt Interfaces in SiC MOS Devices: Quantum Mechanical Simulations and Experiments. AIP Conference Proceedings, 2005, , .	0.4	0
56	Vapor-Phase Growth and Characterization of Luminescent Silicon Layers. AIP Conference Proceedings, 2005, , .	0.4	0
57	NO_x Detection with Schottky Diodes and Heterojunction Structures. IEEJ Transactions on Sensors and Micromachines, 1998, 118, 614-620.	0.1	0