

Sebania Libertino

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6627871/publications.pdf>

Version: 2024-02-01

126
papers

2,271
citations

236833

25
h-index

243529

44
g-index

126
all docs

126
docs citations

126
times ranked

2166
citing authors

#	ARTICLE	IF	CITATIONS
1	The erbium-impurity interaction and its effects on the 1.54 μ m luminescence of Er ³⁺ in crystalline silicon. Journal of Applied Physics, 1995, 78, 3874-3882.	1.1	187
2	Evolution from point to extended defects in ion implanted silicon. Journal of Applied Physics, 1997, 82, 120-125.	1.1	138
3	The effects of oxygen and defects on the deep-level properties of Er in crystalline Si. Journal of Applied Physics, 1995, 78, 3867-3873.	1.1	87
4	Graphene oxide and titania hybrid Nafion membranes for efficient removal of methyl orange dye from water. Carbon, 2015, 82, 489-499.	5.4	86
5	Transition from small interstitial clusters to extended {311} defects in ion-implanted Si. Applied Physics Letters, 2000, 76, 321-323.	1.5	81
6	XPS and AFM Characterization of the Enzyme Glucose Oxidase Immobilized on SiO ₂ Surfaces. Langmuir, 2008, 24, 1965-1972.	1.6	77
7	Electrical signatures and thermal stability of interstitial clusters in ion implanted Si. Journal of Applied Physics, 1998, 84, 4749-4756.	1.1	75
8	Formation, evolution, and annihilation of interstitial clusters in ion-implanted Si. Physical Review B, 2001, 63, .	1.1	73
9	Immobilization of the Enzyme Glucose Oxidase on Both Bulk and Porous SiO ₂ Surfaces. Sensors, 2008, 8, 5637-5648.	2.1	69
10	Lifetime control in silicon devices by voids induced by He ion implantation. Journal of Applied Physics, 1996, 79, 9012-9016.	1.1	68
11	Depth profiles of vacancy- and interstitial-type defects in MeV implanted Si. Journal of Applied Physics, 1997, 81, 1639-1644.	1.1	67
12	Integrating printed microfluidics with silicon photomultipliers for miniaturised and highly sensitive ATP bioluminescence detection. Biosensors and Bioelectronics, 2018, 99, 464-470.	5.3	58
13	Cationic and anionic azo-dye removal from water by sulfonated graphene oxide nanosheets in Nafion membranes. New Journal of Chemistry, 2016, 40, 3654-3663.	1.4	49
14	Layer uniformity in glucose oxidase immobilization on SiO ₂ surfaces. Applied Surface Science, 2007, 253, 9116-9123.	3.1	46
15	Dark Current in Silicon Photomultiplier Pixels: Data and Model. IEEE Transactions on Electron Devices, 2012, 59, 2410-2416.	1.6	46
16	Design, fabrication, and testing of an integrated si-based light modulator. Journal of Lightwave Technology, 2003, 21, 228-235.	2.7	41
17	Evolution of interstitial- and vacancy-type defects upon thermal annealing in ion-implanted Si. Applied Physics Letters, 1997, 71, 389-391.	1.5	38
18	Biosensor integration on Si-based devices: Feasibility studies and examples. Sensors and Actuators B: Chemical, 2013, 179, 240-251.	4.0	38

#	ARTICLE	IF	CITATIONS
19	On the Relationship between Jetted Inks and Printed Biopatterns: Molecular-Thin Functional Microarrays of Glucose Oxidase. <i>Langmuir</i> , 2009, 25, 6312-6318.	1.6	34
20	Defects and electrical behavior in 1MeV Si ⁺ -ion-irradiated 4H-SiC Schottky diodes. <i>Journal of Applied Physics</i> , 2006, 99, 013515.	1.1	32
21	Materials issues and device performances for light emitting Er-implanted Si. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1995, 106, 386-392.	0.6	29
22	Si Photomultipliers for Bio-Sensing Applications. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2016, 22, 335-341.	1.9	29
23	Room-temperature diffusivity of self-interstitials and vacancies in ion-implanted Si probed by in situ measurements. <i>Applied Physics Letters</i> , 1998, 73, 3369-3371.	1.5	28
24	Improvement of sensitivity in continuous wave near infrared spectroscopy systems by using silicon photomultipliers. <i>Biomedical Optics Express</i> , 2016, 7, 1183.	1.5	28
25	Functionalization of Bulk SiO ₂ Surface with Biomolecules for Sensing Applications: Structural and Functional Characterizations. <i>Chemosensors</i> , 2018, 6, 59.	1.8	26
26	Ion irradiation of inhomogeneous Schottky barriers on silicon carbide. <i>Journal of Applied Physics</i> , 2005, 97, 123502.	1.1	25
27	Characterization of SiPMs With NIR Long-Pass Interferential and Plastic Filters. <i>IEEE Photonics Journal</i> , 2018, 10, 1-12.	1.0	25
28	Investigation of ZnO-decorated CNTs for UV Light Detection Applications. <i>Nanomaterials</i> , 2019, 9, 1099.	1.9	25
29	Formation, evolution and annihilation of interstitial clusters in ion implanted Si. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1999, 148, 247-251.	0.6	24
30	Experimental characterization of proteins immobilized on Si-based materials. <i>Microelectronic Engineering</i> , 2007, 84, 468-473.	1.1	23
31	Photo-physical characterization of fluorophore Ru(bpy) ₃ ²⁺ for optical biosensing applications. <i>Sensing and Bio-Sensing Research</i> , 2015, 6, 67-71.	2.2	23
32	The effect of impurity content on point defect evolution in ion implanted and electron irradiated Si. <i>Applied Physics Letters</i> , 1997, 70, 3002-3004.	1.5	21
33	Environmental Management of Legionella in Domestic Water Systems: Consolidated and Innovative Approaches for Disinfection Methods and Risk Assessment. <i>Microorganisms</i> , 2021, 9, 577.	1.6	21
34	Characterization of a fiber-less, multichannel optical probe for continuous wave functional near-infrared spectroscopy based on silicon photomultipliers detectors: in-vivo assessment of primary sensorimotor response. <i>Neurophotonics</i> , 2017, 4, 1.	1.7	20
35	Design and development of wearable sensing nanomaterials for smart textiles. <i>AIP Conference Proceedings</i> , 2018, , .	0.3	19
36	Miniaturizable Si-based electro-optical modulator working at 1.5 μm. <i>Applied Physics Letters</i> , 2005, 86, 201115.	1.5	18

#	ARTICLE	IF	CITATIONS
37	Silicon nitride surfaces as active substrate for electrical DNA biosensors. <i>Sensors and Actuators B: Chemical</i> , 2017, 252, 492-502.	4.0	18
38	Design and fabrication of integrated Si-based optoelectronic devices. <i>Materials Science in Semiconductor Processing</i> , 2000, 3, 375-381.	1.9	17
39	Radiation hardness of silicon photomultipliers under ^{60}Co γ -ray irradiation. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2014, 767, 347-352.	0.7	17
40	SiPM as miniaturised optical biosensor for DNA-microarray applications. <i>Sensing and Bio-Sensing Research</i> , 2015, 6, 95-98.	2.2	17
41	Biosensors in Monitoring Water Quality and Safety: An Example of a Miniaturizable Whole-Cell Based Sensor for Hg ²⁺ Optical Detection in Water. <i>Water (Switzerland)</i> , 2019, 11, 1986.	1.2	17
42	Schottky-Ohmic Transition in Nickel Silicide/SiC System: Is it Really a Solved Problem?. <i>Materials Science Forum</i> , 2003, 433-436, 721-724.	0.3	16
43	Feasibility Studies on Si-Based Biosensors. <i>Sensors</i> , 2009, 9, 3469-3490.	2.1	16
44	Structural Characterization and Adsorption Properties of Dunino Raw Halloysite Mineral for Dye Removal from Water. <i>Materials</i> , 2021, 14, 3676.	1.3	16
45	Damage Formation and Evolution in Alon-Implanted Crystalline Si. <i>Topics in Applied Physics</i> , 2009, , 147-212.	0.4	15
46	Radiation Tolerance of NROM Embedded Products. <i>IEEE Transactions on Nuclear Science</i> , 2010, 57, 2309-2317.	1.2	14
47	Noise Reduction in Silicon Photomultipliers for Use in Functional Near-Infrared Spectroscopy. <i>IEEE Transactions on Radiation and Plasma Medical Sciences</i> , 2017, 1, 212-220.	2.7	13
48	Silicon photomultiplier device architecture with dark current improved to the ultimate physical limit. <i>Applied Physics Letters</i> , 2013, 102, 183502.	1.5	12
49	Octahedral faceted Si nanoparticles as optical traps with enormous yield amplification. <i>Scientific Reports</i> , 2015, 5, 8354.	1.6	12
50	Photocatalytic properties of carbon nanotubes/titania nanoparticles composite layers deposited by electrophoresis. <i>Materials Science in Semiconductor Processing</i> , 2016, 42, 45-49.	1.9	12
51	Feasibility analysis of laser action in erbium-doped silicon waveguides. <i>IEEE Journal of Quantum Electronics</i> , 2000, 36, 1206-1213.	1.0	11
52	Ionizing Radiation Effects on Non Volatile Read Only Memory Cells. <i>IEEE Transactions on Nuclear Science</i> , 2012, 59, 3016-3020.	1.2	11
53	Antimicrobial s-PBC Coatings for Innovative Multifunctional Water Filters. <i>Molecules</i> , 2020, 25, 5196.	1.7	11
54	Characterization and patterning of bacteriorhodopsin films on Si-based materials. <i>Synthetic Metals</i> , 2003, 138, 71-74.	2.1	10

#	ARTICLE	IF	CITATIONS
55	Development of Si-based electrical biosensors: Simulations and first experimental results. <i>Sensing and Bio-Sensing Research</i> , 2015, 6, 72-78.	2.2	10
56	Electro-Optical Characterization of SiPMs With Green Bandpass Dichroic Filters. <i>IEEE Sensors Journal</i> , 2017, 17, 4075-4082.	2.4	10
57	Cluster formation and growth in Si ion implanted c-Si. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2000, 71, 137-142.	1.7	9
58	Effect of Oxygen on the Diffusion of Nitrogen Implanted in Silicon. <i>Electrochemical and Solid-State Letters</i> , 2004, 7, G161.	2.2	9
59	Design and development of a fNIRS system prototype based on SiPM detectors. , 2014, , .		9
60	Electrical Characterization of Biological Molecules Deposition in MOS Capacitors. <i>Sensor Letters</i> , 2008, 6, 531-536.	0.4	9
61	Experimental Evidences of Carrier Distribution and Behavior in Frequency in a BMFET Modulator. <i>IEEE Transactions on Electron Devices</i> , 2005, 52, 2374-2378.	1.6	8
62	SiPM as novel optical biosensor transduction and applications. , 2014, , .		8
63	Imaging System Based on Silicon Photomultipliers and Light Emitting Diodes for Functional Near-Infrared Spectroscopy. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 1068.	1.3	8
64	Innovative Antibiofilm Smart Surface against Legionella for Water Systems. <i>Microorganisms</i> , 2022, 10, 870.	1.6	8
65	Optical doping of materials by erbium ion implantation. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1996, 116, 77-84.	0.6	7
66	A multi-scale atomistic study of the interstitials agglomeration in crystalline Si. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2001, 178, 154-159.	0.6	7
67	Schottky Barrier Inhomogeneities in Nickel Silicide Transrotational Contacts. <i>Applied Physics Express</i> , 2011, 4, 115701.	1.1	7
68	Study of a Miniaturizable System for Optical Sensing Application to Human Cells. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 975.	1.3	7
69	Electro-Optical Modulators in Silicon. , 2006, , 53-95.		7
70	Crucial aspects for the use of silicon photomultiplier devices in continuous wave functional near-infrared spectroscopy. <i>Biomedical Optics Express</i> , 2018, 9, 4679.	1.5	7
71	Room temperature migration of ion beam injected point defects in crystalline silicon. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1996, 120, 9-13.	0.6	6
72	Sulfide Species Optical Monitoring by a Miniaturized Silicon Photomultiplier. <i>Sensors</i> , 2018, 18, 727.	2.1	6

#	ARTICLE	IF	CITATIONS
73	Interaction and Migration Properties of Ion Beam Induced Point Defects in Crystalline Silicon: Basic Research and Technological Relevance. Defect and Diffusion Forum, 1998, 153-155, 137-158.	0.4	5
74	Defect Evolution in Ion Implanted Si: from Point to Extended Defects. Materials Research Society Symposia Proceedings, 1997, 504, 3.	0.1	5
75	Point defect diffusion and clustering in ion implanted c-Si. Nuclear Instruments & Methods in Physics Research B, 2001, 178, 25-32.	0.6	5
76	Optical and structural characterization of bacterio-rhodopsin films on Si-based materials. Synthetic Metals, 2003, 138, 141-144.	2.1	5
77	Silicon Carbide: Defects and Devices. Solid State Phenomena, 2005, 108-109, 663-670.	0.3	5
78	Electrical characterization of deoxyribonucleic acid hybridization in metal-oxide-semiconductor-like structures. Applied Physics Letters, 2012, 101, 093703.	1.5	5
79	Photo-Fenton Degradation of Methyl Orange with Dunino Halloysite as a Source of Iron. Catalysts, 2022, 12, 257.	1.6	5
80	Defect evolution in ion implanted crystalline Si probed by in situ conductivity measurements. Nuclear Instruments & Methods in Physics Research B, 1995, 96, 219-222.	0.6	4
81	Room temperature defect diffusion in ion implanted c-Si. Nuclear Instruments & Methods in Physics Research B, 2002, 186, 265-270.	0.6	4
82	Correlation between Leakage Current and Ion-Irradiation Induced Defects in 4H-SiC Schottky Diodes. Materials Science Forum, 2006, 527-529, 1167-1170.	0.3	4
83	Radiation effects in nitride read-only memories. Microelectronics Reliability, 2010, 50, 1857-1860.	0.9	4
84	CY5 fluorescence measured with silicon photomultipliers. , 2014, , .		4
85	Silicon photomultipliers applications to biosensors. , 2014, , .		4
86	Ion implantation doping of Si for optoelectronic applications. Nuclear Instruments & Methods in Physics Research B, 1996, 120, 74-80.	0.6	3
87	<title>Diamond-based vacuum UV photodetectors for space applications</title>. , 2001, , .		3
88	Effects of implantation defects on the carrier concentration of 6H-SiC. Applied Physics A: Materials Science and Processing, 2006, 82, 543-547.	1.1	3
89	Monte Carlo Analysis of the Evolution from Point to Extended Interstitial Type Defects in Crystalline Silicon. Materials Research Society Symposia Proceedings, 2000, 610, 1151.	0.1	2
90	Atomistic simulations and the requirements of process simulator for novel semiconductor devices. Computational Materials Science, 2002, 24, 213-222.	1.4	2

#	ARTICLE	IF	CITATIONS
91	Formation, Evolution And Thermal Stability Of Interstitial Clusters In Ion Implanted c-Si. AIP Conference Proceedings, 2003, , .	0.3	2
92	Defects in He<sup>+</sup>+</sup> Irradiated 6H-SiC Probed by DLTS and LTPL Measurements. Materials Science Forum, 2004, 457-460, 493-496.	0.3	2
93	Fabrication and characterization of polymeric optical waveguides using standard silicon processing technology. , 0, , .		2
94	Miniaturizable Si-based light intensity Modulator for integrated sensing applications. Journal of Lightwave Technology, 2006, 24, 1403-1408.	2.7	2
95	Dark count in single photon avalanche Si detectors. , 2010, , .		2
96	Preliminary radiation hardness tests of single photon Si detectors. , 2010, , .		2
97	Threshold Voltage Variability of NROM Memories After Exposure to Ionizing Radiation. IEEE Transactions on Electron Devices, 2012, 59, 2597-2602.	1.6	2
98	Impact of long-pass interferential filters on dark current and background light rejection in Silicon Photomultipliers. Journal of Instrumentation, 2018, 13, P02016-P02016.	0.5	2
99	The electrical properties of terbium ions in crystalline Si. Journal of Applied Physics, 1999, 85, 2093-2099.	1.1	1
100	Room Temperature Point Defect Migration in Crystalline Si. Solid State Phenomena, 2002, 82-84, 207-212.	0.3	1
101	Self-Interstitial Kinetics and Transient Phenomena in Si Crystals. Solid State Phenomena, 2001, 82-84, 171-176.	0.3	1
102	Design, fabrication, and testing of an integrated Si-based light modulator: experimental evidence of plasma redistribution. , 2002, , .		1
103	Porous-Si-based bioreactors for glucose monitoring and drugs production. , 2003, , .		1
104	Porous-Si based bioreactors for glucose monitoring. , 2003, , .		1
105	Ion-Beam Induced Modifications of Titanium Schottky Barrier on 4H-SiC. Materials Science Forum, 2005, 483-485, 729-732.	0.3	1
106	Defect Evolution in Ion Irradiated 6H-SiC Epitaxial Layers. Materials Science Forum, 2005, 483-485, 485-488.	0.3	1
107	Radiation Effects on Programmed NROM Cells. ECS Transactions, 2008, 14, 311-317.	0.3	1
108	Compact instrumentation for radiation tolerance test of flash memories in space environment. , 2010, , .		1

#	ARTICLE	IF	CITATIONS
109	Silicon photomultipliers with embedded optical filters for wearable healthcare applications. , 2017, , .		1
110	A Miniaturized Microbe-Silicon-Chip Based on Bioluminescent Engineered Escherichia coli for the Evaluation of Water Quality and Safety. International Journal of Environmental Research and Public Health, 2021, 18, 7580.	1.2	1
111	Migration and interaction properties of ion beam generated point defects in c-Si. Nuclear Instruments & Methods in Physics Research B, 1999, 147, 23-28.	0.6	0
112	Design, fabrication, and testing of an integrated Si-based light modulator. , 2003, , .		0
113	An integrated Si-based electro-optical modulator. , 2004, , .		0
114	Silicon resonant cavity enhanced photodetectors at 1.55 μ m. , 2005, , .		0
115	Thermo-opto-electrical analysis of an optical modulator integrated in a silicon planar structure. , 2005, , .		0
116	A miniaturizable integrated Si-based light modulator. , 2005, , .		0
117	Design of a RCE photodetectors based on the internal photoemission effect. , 2006, 6183, 446.		0
118	Experimental analysis of a BMFET light intensity modulator: from static distributions to the carrier plasma dynamic and electro-optical device performance. Semiconductor Science and Technology, 2006, 21, 890-897.	1.0	0
119	New method for the detection of enzyme immobilized on Si-based glucose Biosensors. , 2006, , .		0
120	Glucose oxidase characterization for the fabrication of hybrid microelectronic devices. , 2007, 6592, 289.		0
121	Potentialities of silicon photomultiplier. , 2014, , .		0
122	The Silicon Photomultiplier: Optimum design, performance, applications. , 2014, , .		0
123	Single Atom Detection Through HAADF-STEM and EELS/EDX Characterization of Fluorophore Ru(bpy) ₃ ²⁺ for Optical DNA-Chip Applications. Microscopy and Microanalysis, 2015, 21, 1429-1430.	0.2	0
124	Flexible CW-fNIRS system based on Silicon Photomultipliers: In-vivo characterization of sensorimotor response. , 2017, , .		0
125	An Innovative Optical Chem-Sensor Based on a Silicon Photomultipliers for the Sulfide Monitoring. Lecture Notes in Electrical Engineering, 2019, , 75-81.	0.3	0
126	Interstitial Cluster Evolution and Transient Phenomena in Si-crystal. , 2001, , 120-123.		0