Paula Louro

List of Publications by Citations

138 papers	424 citations	9 h-index	15 g-index
170 ext. papers	529 ext. citations	2.6 avg, IF	3.02 L-index

#	Paper	IF	Citations
138	Laser-scanned p-i-n photodiode (LSP) for image detection. *IEEE Sensors Journal*, **2001**, 1, 158	4	51
137	Light-Activated Amplification in Si-C Tandem Devices: A Capacitive Active Filter Model. *IEEE Sensors Journal*, **2012**, 12, 1755-1762	4	29
136	Self-biasing effect in colour sensitive photodiodes based on double p-i-n a-SiC:H heterojunctions. *Vacuum*, **2008**, 82, 1512-1516	3.7	26
135	Image capture devices based on pIN silicon carbides for biometric applications. *Journal of Non-Crystalline Solids*, **2002**, 299-302, 1245-1249	3.9	21
134	Transport mechanism in high resistive silicon carbide heterostructures. *Applied Surface Science*, **2001**, 184, 144-149	6.7	20
133	Pinpi'n and pinpii'n multilayer devices with voltage controlled optical readout. *Journal of Nanoscience and Nanotechnology*, **2009**, 9, 4022-7	1.3	15
132	Optical signal processing for data error detection and correction using a-SiCH technology. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2015**, 12, 1393-1400		13
131	Optical multiplexer for short range communications. *Physica E: Low-Dimensional Systems and Nanostructures*, **2009**, 41, 1082-1085	3	13
130	Bias sensitive multispectral structures for imaging applications. *Thin Solid Films*, **2007**, 515, 7566-7570	2.2	11
129	Indoor positioning system using a WDM device based on a-SiC:H technology. *Journal of Luminescence*, **2017**, 191, 135-138	3.8	8
128	Optoelectronic logic functions using optical bias controlled SiC multilayer devices. *Materials Research Society Symposia Proceedings*, **2013**, 1536, 91-96		8
127	Voltage controlled amorphous Si/SiC photodiodes and phototransistors as wavelength selective devices: Theoretical and electrical approaches. *Materials Research Society Symposia Proceedings*, **2009**, 1153, 1		8
126	An amorphous SIC/SI image photodetector with voltage-selectable spectral response. *Thin Solid Films*, **2006**, 511-512, 167-171	2.2	8
125	On the a-Si:H film growth: the role of the powder formation. *Journal of Non-Crystalline Solids*, **1996**, 198-200, 1207-1211	3.9	8
124	Optoelectronic characterization of a-SIC:H stacked devices. *Journal of Non-Crystalline Solids*, **2004**, 338-340, 345-348	3.9	7
123	Image and color recognition using amorphous silicon pIN photodiodes. *Sensors and Actuators A: Physical*, **2005**, 123-124, 326-330	3.9	7
122	SiC Multilayer Structures as Light Controlled Photonic Active Filters. *Plasmonics*, **2013**, 8, 63-70	2.4	6

121	Optical demultiplexer device operating in the visible spectrum. *Sensors and Actuators A: Physical*, **2011**, 172, 35-39	3.9	5
120	Large area double pIn heterostructure for signal multiplexing and demultiplexing in the visible range. *Thin Solid Films*, **2009**, 517, 6435-6439	2.2	5
119	LSP image sensors based on SiC heterostructures. *Applied Surface Science*, **2001**, 184, 471-476	6.7	5
118	Cooperative vehicular communication systems based on visible light communication. *Optical Engineering*, **2018**, 57, 1	1.1	5
117	Light-emitting diodes aided indoor localization using visible light communication technology. *Optical Engineering*, **2018**, 57, 1	1.1	5
116	Bi-directional communication between infrastructures and vehicles through visible light **2019**,		5
115	Optical signal processing for indoor positioning using a-SiCH technology. *Optical Engineering*, **2016**, 55, 107105	1.1	4
114	SiC monolithically integrated wavelength selector with 4 channels. *Materials Research Society Symposia Proceedings*, **2013**, 1536, 79-84		4
113	Colour sensitive devices based on double p-i-n-i-p stacked photodiodes. *Thin Solid Films*, **2007**, 515, 7526-7529	2.2	4
112	Optically addressed read/write device based on tandem heterostructure. *Journal of Non-Crystalline Solids*, **2004**, 338-340, 754-757	3.9	4
111	Simple and Complex Logical Functions in a SiC Tandem Device. *IFIP Advances in Information and Communication Technology*, **2014**, 592-601	0.5	4
110	A Simulation Study of Surface Plasmons in Metallic Nanoparticles: Dependence on the Properties of an Embedding a-Si:H Matrix. *Physica Status Solidi (A) Applications and Materials Science*, **2018**, 215, 1700487	1.6	4
109	Optical communication applications based on white LEDs. *Journal of Luminescence*, **2017**, 191, 122-125	3.8	3
108	Optical signal processing for a smart vehicle lighting system using a-SiCH technology **2017**,		3
107	Detection of FRET signals with a wavelength sensitive device based on a-SiC:H. *Applied Surface Science*, **2013**, 275, 49-53	6.7	3
106	Logical functions in a tandem SiC device. *Microelectronic Engineering*, **2014**, 126, 79-83	2.5	3
105	AND, OR, NOT Logical Functions in a SiC Tandem Device. *Procedia Technology*, **2014**, 17, 557-565		3
104	Photodetector with integrated optical thin film filters. *Journal of Physics: Conference Series*, **2013**, 421, 012011	0.3	3

103	Semiconductor device as optical demultiplexer for short range optical communications. *Journal of Nanoscience and Nanotechnology*, **2011**, 11, 5318-22	1.3	3
102	Multilayer architectures based on a-SiC:H material: tunable wavelength filters in optical processing devices. *Journal of Nanoscience and Nanotechnology*, **2011**, 11, 5299-304	1.3	3
101	Double Pin Photodiodes with Two Optical Gate Connections for Light Triggering **2010**,		3
100	a-SiC:H/a-Si:H tandem photodiods: a numerical simulation. *Sensors and Actuators A: Physical*, **2004**, 113, 324-328	3.9	3
99	Bias-dependent photocurrent collection in pⅡ a-Si:H/SiC:H heterojunction. *Sensors and Actuators A: Physical*, **2002**, 97-98, 221-226	3.9	3
98	A two terminal optical signal and image processing pⅡ/pⅡ image and colour sensor. *Sensors and Actuators A: Physical*, **2005**, 123-124, 331-336	3.9	3
97	pⅡ flexible imaging devices with optical readout. *Optical Materials*, **2005**, 27, 1069-1073	3.3	3
96	Influence of the transducer configuration on the p-i-n image sensor resolution. *Thin Solid Films*, **2001**, 383, 65-68	2.2	3
95	Coupled data transmission and indoor positioning by using transmitting trichromatic white LEDs and a SiC optical MUX/DEMUX mobile receiver **2017**,		2
94	Error control on spectral data of four-wave mixing based on a-SiC technology. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2015**, 12, 181-186		2
93	Tuning optical a-SiC/a-Si active filters by UV bias light in the visible and infrared spectral ranges. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2014**, 11, 1674-1677		2
92	Logic functions based on optical bias controlled SiC tandem devices. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2014**, 11, 211-216		2
91	Integrated photonic filters based on SiC multilayer structures. *Applied Surface Science*, **2013**, 275, 185-192	2.7	2
90	Capacitive effects in pinpin photodiodes. *Microelectronic Engineering*, **2013**, 108, 195-199	2.5	2
89	Visible Light Communication in Traffic Links Using an a-SiC:H Multilayer Photodetector. *Procedia Technology*, **2014**, 17, 550-556		2
88	SiC multilayer photonic structures with self optical bias amplification. *Materials Research Society Symposia Proceedings*, **2012**, 1426, 229-235		2
87	Direct color sensor, optical amplifier and demux device integrated on a single monolithic SiC photodetector. *Procedia Engineering*, **2010**, 5, 232-235		2
86	Optical processing devices based on a-SiC:H multilayer architectures. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2010**, 7, NA-NA		2

85	Multilayered a-SiC:H device for Wavelength-Division (de)Multiplexing applications in the visible spectrum. *Materials Research Society Symposia Proceedings*, **2008**, 1066, 1		2
84	Optical confinement and colour separation in a double colour laser scanned photodiode (D/CLSP). *Sensors and Actuators A: Physical*, **2004**, 114, 219-223	3.9	2
83	Memory effects in highly resistive p□□ heterojunctions for optical applications. *Thin Solid Films*, **2002**, 403-404, 363-367	2.2	2
82	Laser scanned photodiodes (LSPs) for image sensing. *Sensors and Actuators A: Physical*, **2002**, 97-98, 98-103	3.9	2
81	Bias controlled spectral sensitivity in a-SiC:H p□□ devices. *Thin Solid Films*, **2003**, 427, 196-200	2.2	2
80	Non-pixeled amorphous silicon-based image sensors. *Physica E: Low-Dimensional Systems and Nanostructures*, **2003**, 16, 563-567	3	2
79	Enhanced short wavelength response in laser-scanned-photodiode image sensor using an a-SiC:H/a-Si:H tandem structure. *Sensors and Actuators A: Physical*, **2005**, 123-124, 343-348	3.9	2
78	Optoelectronic Digital Capture Device Based on Si/C Multilayer Heterostructures. *IFIP Advances in Information and Communication Technology*, **2013**, 555-562	0.5	2
77	Five channel WDM communication using a single a:SiC-H double pin photo device. *Applied Surface Science*, **2016**, 380, 318-325	6.7	1
76	Transmission of Signals Using White LEDs for VLC Applications1. *Materials Today: Proceedings*, **2016**, 3, 780-787	1.4	1
75	Viability of the use of thin-film a-SiC:H photodiodes for protein identification. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2014**, 11, 228-233		1
74	Reconfigurable SiC Embedded Photonic Structures with Self Optical Bias Control. *Plasmonics*, **2013**, 8, 45-51	2.4	1
73	Preparation and Characterization of a-SiC:H Absorber Layer for Semi-transparent Solar Cells. *Energy Procedia*, **2015**, 84, 56-61	2.3	1
72	SiC pinpin photonic filters for linking the visible spectrum to the telecom gap. *Microelectronic Engineering*, **2014**, 126, 179-183	2.5	1
71	DEMUX devices based on a-SiC:H. *Sensors and Actuators A: Physical*, **2012**, 186, 143-147	3.9	1
70	SiC multilayer add/drop filter for optical interconnects. *Materials Research Society Symposia Proceedings*, **2013**, 1559, 1		1
69	Photo-sensing devices using a-Si based materials. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2011**, 8, 1079-1082		1
68	Modeling a-SiC:H tandem pinpin and pinip photodiodes for color sensor application. *Journal of Nanoscience and Nanotechnology*, **2009**, 9, 4028-33	1.3	1

67	Optical Demultiplexer Device: Frequency and optical bias analysis. *Materials Research Society Symposia Proceedings*, **2011**, 1321, 449		1
66	Self optical gain in multilayered silicon-carbon heterostructures: A capacitive active band-pass filter model. *Materials Research Society Symposia Proceedings*, **2011**, 1321, 441		1
65	Novel device for implementation of WDM in the visible spectrum. *Materials Research Society Symposia Proceedings*, **2012**, 1438, 55		1
64	Characterization of a monolithic device for detection of FRET signals. *Materials Research Society Symposia Proceedings*, **2012**, 1426, 187-192		1
63	Optical demultiplexer based on an a-SiC:H voltage controlled device. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2010**, 7, NA-NA		1
62	Preliminary Results on Large Area X-ray a-SiC:H Multilayer Detectors with Optically Addressed Readout. *Materials Research Society Symposia Proceedings*, **2007**, 989, 2		1
61	Low leakage current a-Si:H/a-SiC:H n□p photodiode with Cr/a-SiNx front contact. *Journal of Non-Crystalline Solids*, **2006**, 352, 1837-1840	3.9	1
60	Light filtering in a-SIC:H multilayers stacked devices using the LSP technique. *Journal of Non-Crystalline Solids*, **2006**, 352, 1809-1812	3.9	1
59	Colour filtering in a-SiC:H based p-i-n-p-i-n cells: A trade-off between bias polarity and absorption regions. *Sensors and Actuators A: Physical*, **2006**, 132, 218-223	3.9	1
58	Tuning the spectral distribution of p□□ a-SiC:H devices for colour detection. *Sensors and Actuators A: Physical*, **2005**, 120, 88-93	3.9	1
57	Optimized Laser Scanned Photodiode (LSP) Imaging Transducer. *Physica Status Solidi A*, **2001**, 185, 129-135		1
56	Positioning and advertising in large indoor environments using visible light communication. *Optical Engineering*, **2019**, 58, 1	1.1	1
55	Simulation of localized surface plasmon in metallic nanoparticles embedded in amorphous silicon **2017**,		1
54	Double junction photodiodes for multiwavelength photoplethysmography **2018**,		1
53	On the use of visible light communication in cooperative vehicular communication systems **2018**,		1
52	Indoor positioning and intuitive advertising using visible light communication **2019**,		1
51	Connected cars: road-to-vehicle communication through visible light **2019**,		1
50	Bi-directional VLC LED-assisted navigation system for large indoor environments **2019**,		1

49	Light Memory Operation Based on a Double Pin SiC Device. *IFIP Advances in Information and Communication Technology*, **2015**, 265-272	0.5	1
48	Measurement of Photo Capacitance in Amorphous Silicon Photodiodes. *IFIP Advances in Information and Communication Technology*, **2013**, 547-554	0.5	1
47	Optical vehicular communication based on a-SiC:H technology. *Science and Technology of Materials*, **2018**, 30, 151-156		1
46	Home VLC using pinpin a-SiC:H multilayer devices. *Materials Research Society Symposia Proceedings*, **2014**, 1693, 81		0
45	Optical processor based on a-SiC technology for spectral data error control. *Microelectronic Engineering*, **2015**, 146, 6-10	2.5	
44	4 Channels WDM Device for Operation in the Visible. *Procedia Technology*, **2014**, 17, 566-573		
43	Optical Filter Design Using Background Wavelength Processing Techniques. *Plasmonics*, **2013**, 8, 121-127	2.4	
42	Light memory function in a double pin SiC device. *Microelectronic Engineering*, **2015**, 146, 99-104	2.5	
41	VIS/NIR wavelength selector based on a multilayer pi'n/pin a-SiC:H optical filter. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2015**, 12, 1387-1392		
40	Add/drop filters based on SiC technology for optical interconnects. *IOP Conference Series: Materials Science and Engineering*, **2014**, 56, 012008	0.4	
39	Bridging the Visible Spectrum to Telecom Gap with SiC Nanophotonic Spectral Translation. *Procedia Technology*, **2014**, 17, 310-318		
38	Increased sensitivity in a-SiC pinpin multilayers in the VIS-NIR range under UV light. *Materials Research Society Symposia Proceedings*, **2014**, 1666, 71		
37	Near-UV background as a bridge between visible and infrared communication. *Materials Research Society Symposia Proceedings*, **2014**, 1666, 65		
36	Integrated Visible optical filter and photodetector for detection of FRET signals. *Materials Research Society Symposia Proceedings*, **2014**, 1689, 1		
35	Optical nonlinearity in tandem Si-C photodetectors. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2012**, 9, 2054-2057		
34	Design of an optical transmission WDM link using plastic optical fibers. *Materials Research Society Symposia Proceedings*, **2013**, 1536, 85-90		
33	Detection of change in fluorescence between reactive cyan and the yellow fluorophores using a-SiC:H multilayer transducers. *Journal of Nanoscience and Nanotechnology*, **2011**, 11, 8657-62	1.3	
32	Light-triggered silicon-carbon pi'npin devices with self amplification. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2011**, 8, 1083-1086		

31	Demultiplexer/Photodetector Integrated System Based on a-SiC:H Multilayered Structures. *Materials Research Society Symposia Proceedings*, **2010**, 1245, 1	
30	Reviewing Photo-sensing Devices Using a-SiC Based Materials. *Materials Research Society Symposia Proceedings*, **2010**, 1245, 1	
29	a-SiC:H Based Devices as Optical Demultiplexers. *Materials Research Society Symposia Proceedings*, **2010**, 1246, 1	
28	Monolithic a-SiC:H stack architectures as tunable optical filters for spectral analysis. *Materials Research Society Symposia Proceedings*, **2010**, 1246, 1	
27	Light-triggered Silicon-carbon Pi□pin Devices for Optical Communications: Theoretical and Electrical Approaches. *Materials Research Society Symposia Proceedings*, **2010**, 1245, 1	
26	Fine Tuning of the Spectral Sensitivity in a-SiC:H Stacked p-i□n Graded Cells. *Materials Research Society Symposia Proceedings*, **2009**, 1153, 1	
25	Optical Processing Devices for Optical Communications: Multilayered a-SiC:H Architectures. *Materials Research Society Symposia Proceedings*, **2009**, 1153, 1	
24	Optical bias controlled amplification in tandem Si-C pinpin devices. *Materials Research Society Symposia Proceedings*, **2011**, 1321, 417	
23	Use of a-SiC:H multilayer transducers for detection of fluorescence signals from reactive cyan and yellow fluorophores. *Materials Research Society Symposia Proceedings*, **2011**, 1321, 223	
22	DEMUX SiC optical transducers for fluorescent proteins detection. *Materials Research Society Symposia Proceedings*, **2011**, 1324, 137	
21	Three Transducers Embedded into a Single SiC Photodetector: LSP Direct Image Sensor, Optical Amplifier and Demux. *Journal of Nano Research*, **2012**, 18-19, 265-270	1
20	Photonic active filters based on SiC multilayer structures. *Materials Research Society Symposia Proceedings*, **2012**, 1438, 35	
19	Light filtering devices using background wavelength processing techniques. *Materials Research Society Symposia Proceedings*, **2012**, 1426, 175-180	
18	Photocurrent and spectral response analysis of a-SiC:H pinip and pinpin photodiodes. *Journal of Nanoscience and Nanotechnology*, **2009**, 9, 4254-8	1.3
17	Optical demultiplexer device operating in the visible spectrum. *Procedia Engineering*, **2010**, 5, 657-660	
16	Non-selective optical wavelength-division multiplexing devices based on a-SiC:H multilayer heterostuctures. *Materials Research Society Symposia Proceedings*, **2008**, 1076, 1	
15	a-SiC:H/a-Si:H tandem structure analysis for RGB color recognition in LSP devices. *Journal of Non-Crystalline Solids*, **2006**, 352, 1805-1808	3.9
14	Bias sensitive spectral sensitivity in double a-SiC:H pin structures. *Superlattices and Microstructures*, **2006**, 40, 619-625	2.8

List of Publications

13	Fine-tuning of the spectral collection efficiency in multilayer junctions. *Thin Solid Films*, **2006**, 511-512, 84-88	2.2
12	A non-pixel image reader for continuous image detection based on tandem heterostructures. *Sensors and Actuators A: Physical*, **2004**, 115, 191-195	3.9
11	Modelling a-Si:H based p-i-n structures for optical sensor applications. *Thin Solid Films*, **2002**, 403-404, 354-358	2.2
10	Analog readout image sensor based on p□□ hydrogenated amorphous silicon. *Vacuum*, **2002**, 64, 249-254	3.7
9	Optical signal and image processing device optimized for optical readout. *Optical Materials*, **2005**, 27, 1064-1068	3.3
8	Optical Transducers Based on Amorphous Si/SiC Photodiodes. *International Federation for Information Processing*, **2011**, 604-611	
7	SiC Multilayer Photonic Structures with Self Optical Bias Amplification. *International Federation for Information Processing*, **2012**, 511-518	
6	Photonics Active Filters Based on SiC Multilayer Structures: A Two Stage Active Circuit. *International Federation for Information Processing*, **2012**, 503-510	
5	Optoelectronic Logic Functions Based on Reconfigurable SiC Multilayer Devices. *IFIP Advances in Information and Communication Technology*, **2013**, 539-546	0.5
4	Use of a-SiC:H Semiconductor-Based Transducer for Glucose Sensing through FRET Analysis. *IFIP Advances in Information and Communication Technology*, **2013**, 631-638	0.5
3	Simulation in Amorphous Silicon and Amorphous Silicon Carbide Pin Diodes. *IFIP Advances in Information and Communication Technology*, **2014**, 602-609	0.5
2	Amorphous Silicon Photovoltaic Modules on Flexible Plastic Substrates. *MRS Advances*, **2016**, 1, 2923-2928	2.7
1	Majority Logical Function Using a pi□pin a-SiC:H Structure. *Materials Today: Proceedings*, **2016**, 3, 772-779	1.4