Augusto Nascetti

List of Publications by Year in Descending Order

134 papers	1,167 citations	21 h-index	28 g-index
151 ext. papers	1,406 ext. citations	2.8 avg, IF	4.12 L-index

#	Paper	IF	Citations
134	Integrated Hybrid Glass-Plastic Chip for Sorting and Counting of Microparticles in Biomedical Applications. *Lecture Notes in Electrical Engineering*, **2023**, 39-44	0.2	
133	AstroBio CubeSat: On-Ground Validation of Lab-on-Chip Based Astrobiology Experiments. *Lecture Notes in Electrical Engineering*, **2023**, 14-20	0.2	0
132	Split Aptamers Immobilized on Polymer Brushes Integrated in a Lab-on-Chip System Based on an Array of Amorphous Silicon Photosensors: A Novel Sensor Assay. *Materials*, **2021**, 14,	3.5	2
131	Transparent Oxide/Metal/Oxide Thin Film Heater With Integrated Resistive Temperature Sensors. *IEEE Sensors Journal*, **2021**, 21, 18847-18854	4	0
130	On the Stability of Amorphous Silicon Temperature Sensors. *IEEE Transactions on Electron Devices*, **2020**, 67, 3348-3354	2.9	1
129	Micro-incubator Based on Lab-on-Glass Technology for Nanosatellite Missions. *Lecture Notes in Electrical Engineering*, **2020**, 83-89	0.2	1
128	Stability of Hydrogenated Amorphous Silicon Diodes as Thin Film Temperature Sensors. *Lecture Notes in Electrical Engineering*, **2020**, 259-264	0.2	
127	Thin Film Sensor Platform for on-Chip Detection of Fluorescence-Based Aptamer Assay **2019**,		1
126	Portable Optoelectronic System for Monitoring Enzymatic Chemiluminescent Reaction. *Lecture Notes in Electrical Engineering*, **2019**, 189-194	0.2	
125	On-Glass Integration of Thin Film Devices for Monitoring of Cell Bioluminescence. *Lecture Notes in Electrical Engineering*, **2019**, 45-51	0.2	
124	On-chip real-time monitoring of multiple displacement amplification of DNA. *Sensors and Actuators B: Chemical*, **2019**, 293, 16-22	8.5	10
123	Integrated chemiluminescence-based lab-on-chip for detection of life markers in extraterrestrial environments. *Biosensors and Bioelectronics*, **2019**, 123, 195-203	11.8	17
122	Implementation and Hardware-In-The-Loop Simulation of a Magnetic Detumbling and Pointing Control Based on Three-Axis Magnetometer Data. *Aerospace*, **2019**, 6, 133	2.5	3
121	Fluorescent Label-Free Aptasensor Integrated in a Lab-on-Chip System for the Detection of Ochratoxin A in Beer and Wheat.. *ACS Applied Bio Materials*, **2019**, 2, 5880-5887	4.1	15
120	On-chip LAMP-BART reaction for viral DNA real-time bioluminescence detection. *Sensors and Actuators B: Chemical*, **2018**, 262, 1024-1033	8.5	11
119	Integrated Sensor System for DNA Amplification and Separation Based on Thin Film Technology. *IEEE Transactions on Components, Packaging and Manufacturing Technology*, **2018**, 8, 1141-1148	1.7	5
118	Optoelectronic System for Mycotoxin Detection in Food Quality Control. *IEEE Transactions on Components, Packaging and Manufacturing Technology*, **2018**, 8, 1195-1202	1.7	4

117	Integration of Amorphous Silicon Photosensors with Thin Film Interferential Filter for Biomolecule Detection. *Lecture Notes in Electrical Engineering*, **2018**, 121-127	0.2	
116	Amorphous Silicon Temperature Sensors Integrated with Thin Film Heaters for Thermal Treatments of Biomolecules. *Lecture Notes in Electrical Engineering*, **2018**, 183-193	0.2	0
115	Design, Fabrication and Testing of a Capillary Microfluidic System with Stop-and-Go Valves Using EWOD Technology. *Lecture Notes in Electrical Engineering*, **2018**, 200-208	0.2	
114	Enhancement in PDMS-Based Microfluidic Network for On-Chip Thermal Treatment of Biomolecules. *Lecture Notes in Electrical Engineering*, **2018**, 99-106	0.2	
113	Autonomous Microfluidic Capillary Network for on Chip Detection of Chemiluminescence. *Lecture Notes in Electrical Engineering*, **2018**, 295-302	0.2	
112	Optoelectronic System-on-Glass for On-Chip Detection of Fluorescence. *Lecture Notes in Electrical Engineering*, **2018**, 143-149	0.2	2
111	Integrated Optoelectronic Device for Detection of Fluorescent Molecules. *IEEE Transactions on Biomedical Circuits and Systems*, **2018**, 12, 1337-1344	5.1	7
110	On-Glass Optoelectronic Platform for On-Chip Detection of DNA. *Proceedings (mdpi)*, **2018**, 2, 1014	0.3	1
109	Reconfigurable S-Band Patch Antenna Radiation Patterns for Satellite Missions **2018**,		6
108	An All-Glass Microfluidic Network with Integrated Amorphous Silicon Photosensors for on-Chip Monitoring of Enzymatic Biochemical Assay. *Biosensors*, **2017**, 7,	5.9	7
107	Integrated System Based on Thin Film Technologies for Cell-Based Bioluminescence Assays. *Proceedings (mdpi)*, **2017**, 1, 513	0.3	1
106	Portable detection system for Ochratoxin A by real time chromatography and a-Si:H photodiodes **2017**,		2
105	Multifunctional System-on-Glass for Lab-on-Chip applications. *Biosensors and Bioelectronics*, **2017**, 93, 315-321	11.8	18
104	Lab-on-glass system for DNA treatments **2017**,		1
103	Technologies for autonomous integrated lab-on-chip systems for space missions. *Acta Astronautica*, **2016**, 128, 401-408	2.9	7
102	Chemiluminescence lateral flow immunoassay cartridge with integrated amorphous silicon photosensors array for human serum albumin detection in urine samples. *Analytical and Bioanalytical Chemistry*, **2016**, 408, 8869-8879	4.4	35
101	Reconfigurable S-band patch antenna system for cubesat satellites. *IEEE Aerospace and Electronic Systems Magazine*, **2016**, 31, 6-13	2.4	33
100	Microfluidic cartridge with integrated array of amorphous silicon photosensors for chemiluminescence detection of viral DNA. *Sensing and Bio-Sensing Research*, **2016**, 7, 127-132	3.3	3

99	Aptamer-based sandwich assay for on chip detection of Ochratoxin A by an array of amorphous silicon photosensors. *Sensors and Actuators B: Chemical*, **2016**, 230, 31-39	8.5	38
98	Thin Film Differential Photosensor for Reduction of Temperature Effects in Lab-on-Chip Applications. *Sensors*, **2016**, 16, 267	3.8	3
97	Integration of Amorphous Silicon Balanced Photodiodes and Thin Film Heaters for Biosensing Application. *Procedia Engineering*, **2016**, 168, 1434-1437		1
96	Integration of Capillary and EWOD Technologies for Autonomous and Low-power Consumption Micro-analytical Systems. *Procedia Engineering*, **2016**, 168, 1370-1373		2
95	Thermally actuated microfluidic system for lab on chip applications **2015**,		3
94	Drop position sensing in digital microfluidics based on capacitance measurement **2015**,		1
93	Design and experimental characterization of thin film heaters on glass substrate for Lab-on-Chip applications. *Sensors and Actuators A: Physical*, **2015**, 229, 203-210	3.9	16
92	Thermal characterization of thin film heater for lab-on-chip application **2015**,		4
91	The TIGRIsat camera A nanosatellite optical payload for detecting dust and sand storms **2015**,		3
90	2-D digital microfluidic system for droplet handling using Printed Circuit Board technology **2015**,		3
89	Rapid prototyping of glass microfluidic chips based on autonomous capillary networks for physiological solutions **2015**,		2
88	Design and fabrication of microfluidics system integrated with temperature actuated microvalve. *Sensors and Actuators A: Physical*, **2015**, 236, 206-213	3.9	16
87	High-Gain S-band Patch Antenna System for Earth-Observation CubeSat Satellites. *IEEE Antennas and Wireless Propagation Letters*, **2015**, 14, 434-437	3.8	51
86	Detection of viral DNA by isothermal NASBA amplification and chemiluminescence gene probe hybridization assay in a microfluidic cartridge. *Journal of Clinical Virology*, **2015**, 70, S91-S92	14.5	2
85	Multilayer integrated structure for selective detection of Ochratoxin A **2015**,		1
84	Amorphous silicon p-i-n structure acting as light and temperature sensor. *Sensors*, **2015**, 15, 12260-72	3.8	21
83	On-chip detection performed by amorphous silicon balanced photosensor for lab-on chip application. *Sensing and Bio-Sensing Research*, **2015**, 3, 53-58	3.3	6
82	Lab-on-chip system combining a microfluidic-ELISA with an array of amorphous silicon photosensors for the detection of celiac disease epitopes. *Sensing and Bio-Sensing Research*, **2015**, 6, 51-58	3.3	27

81	Optical payload for high-resolution Earth imaging suitable for microsatellites **2015**,		1
80	Thermal control system based on thin film heaters and amorphous silicon diodes **2015**,		8
79	Amorphous silicon photosensors integrated in microfluidic structures as a technological demonstrator of a "true" Lab-on-Chip system. *Sensing and Bio-Sensing Research*, **2015**, 3, 98-104	3.3	11
78	Sophie: A General Purpose Sub-Picoamps Current Readout Electronics. *Lecture Notes in Electrical Engineering*, **2015**, 285-289	0.2	3
77	Amorphous Silicon Photosensors for Food Quality Control Applications. *Lecture Notes in Electrical Engineering*, **2015**, 249-253	0.2	1
76	Thermal characterization of a thin film heater on glass substrate for lab-on-chip applications **2014**,		6
75	On-chip detection of multiple serum antibodies against epitopes of celiac disease by an array of amorphous silicon sensors. *RSC Advances*, **2014**, 4, 2073-2080	3.7	34
74	Multiwell cartridge with integrated array of amorphous silicon photosensors for chemiluminescence detection: development, characterization and comparison with cooled-CCD luminograph. *Analytical and Bioanalytical Chemistry*, **2014**, 406, 5645-56	4.4	25
73	Amorphous silicon photosensors for on-chip detection in digital microfluidic system. *Sensors and Actuators A: Physical*, **2014**, 216, 1-6	3.9	5
72	A prototype hybrid pixel detector ASIC for the CLIC experiment. *Journal of Instrumentation*, **2014**, 9, C01012-C01012		11
71	DEMOCHEM: Integrated System for Mycotoxins Detection. *Procedia Engineering*, **2014**, 87, 1354-1357		4
70	Accurate analog temperature control of a thin film microheater on glass substrate for lab-on-chip applications **2014**,		4
69	Multi-channel Very-low-noise Current Acquisition System with On-board Voltage Supply for Sensor Biasing and Readout. *Procedia Engineering*, **2014**, 87, 1577-1580		2
68	Improvement of the Thermal Resistance of Thin Film Heaters on Glass Substrate for Lab-on-Chip Applications. *Procedia Engineering*, **2014**, 87, 959-962		3
67	Polydimethylsiloxane material as hydrophobic and insulating layer in electrowetting-on-dielectric systems. *Microelectronics Journal*, **2014**, 45, 1684-1690	1.8	22
66	On-Chip Diagnosis of Celiac Disease by an Amorphous Silicon Chemiluminescence Detector. *Lecture Notes in Electrical Engineering*, **2014**, 183-187	0.2	15
65	Chemiluminescence-Based Micro-Total-Analysis System with Amorphous Silicon Photodiodes. *Lecture Notes in Electrical Engineering*, **2014**, 207-211	0.2	4
64	Thermally Actuated Microfluidic System for Polymerase Chain Reaction Applications. *Lecture Notes in Electrical Engineering*, **2014**, 23-27	0.2	2

63	Thin Film Device for Background Photocurrent Rejection in Biomolecular Analysis Systems. *Lecture Notes in Electrical Engineering*, **2014**, 281-285	0.2	
62	. *IEEE Sensors Journal*, **2013**, 13, 2595-2602	4	33
61	Electrowetting-on-dielectric system based on polydimethylsiloxane **2013**,		5
60	Performances of amorphous silicon photodiodes integrated in chemiluminescence based TAS **2013**,		1
59	Amorphous silicon balanced photodiode for microfluidic applications **2013**,		1
58	Fractional charge packet counting with constant relative resolution. *International Journal of Circuit Theory and Applications*, **2012**, 40, 175-187	2	5
57	Amorphous Silicon Photosensors for Detection of Ochratoxin a in Wine. *IEEE Sensors Journal*, **2012**, 12, 2674-2679	4	23
56	Monitoring of Temperature Distribution in a Thin Film Heater by an Array of a-Si:H Temperature Sensors. *IEEE Sensors Journal*, **2012**, 12, 1209-1213	4	25
55	Design of pixel electronics based on asynchronous self-reset approach with floating-point output representation for high dynamic range imagers. *Journal of Instrumentation*, **2011**, 6, C01070-C01070	1	
54	Use of fractional packet counting for high dynamic range imaging applications. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2011**, 648, S146-S149	1.2	
53	Modeling of the photo-response of a smart thin layer chromatography system **2011**,		5
52	**2011**,		2
51	Stress-Induced Via Voiding in a 130-nm CMOS Imager Process. *IEEE Transactions on Device and Materials Reliability*, **2010**, 10, 100-107	1.6	
50	Detection system based on a novel large area hybrid detector. *Microelectronics Journal*, **2010**, 41, 752-757	1.8	
49	a-Si:H temperature sensor integrated in a thin film heater. *Physica Status Solidi (A) Applications and Materials Science*, **2010**, 207, 708-711	1.6	15
48	Linear Photosensor Array for On-Chip Food Quality Control Based on Thin Layer Chromatography. *Sensor Letters*, **2010**, 8, 465-469	0.9	4
47	Lab-on-glass system for DNA analysis using thin and thick film technologies. *Materials Research Society Symposia Proceedings*, **2009**, 1191, 48		20
46	Charge to digital converter with constant resolution over the dynamic range. *Nuclear Physics, Section B, Proceedings Supplements*, **2009**, 197, 302-305		1

45	On the fabrication and characterization of amorphous silicon ultra-violet sensor array. *Thin Solid Films*, **2009**, 517, 6422-6425	2.2	2
44	Amorphous silicon twin photodiode structure for differential current measurements. *Thin Solid Films*, **2009**, 517, 6418-6421	2.2	1
43	Amorphous silicon balanced photodiode for detection of ultraviolet radiation. *Sensors and Actuators A: Physical*, **2009**, 153, 1-4	3.9	6
42	Amorphous silicon balanced photodiode for application in biomolecular analysis **2009**,		1
41	Large area hybrid detector technology based on amorphous silicon photosensors **2009**,		1
40	Chromatography system based on amorphous silicon sensor. *Journal of Non-Crystalline Solids*, **2008**, 354, 2615-2618	3.9	4
39	Characterization of chromium silicide thin layer formed on amorphous silicon films. *Journal of Non-Crystalline Solids*, **2008**, 354, 2171-2175	3.9	17
38	Innovative Amorphous Silicon Balanced Ultraviolet Photodiode. *IEEE Electron Device Letters*, **2008**, 29, 1299-1301	4.4	1
37	Innovative design of amorphous/crystalline silicon heterojunction solar cell. *Thin Solid Films*, **2008**, 516, 6771-6774	2.2	7
36	Detailed Study of Amorphous Silicon Ultraviolet Sensor With Chromium Silicide Window Layer. *IEEE Transactions on Electron Devices*, **2008**, 55, 452-456	2.9	26
35	Two-Color Sensor for Biomolecule Detection. *Sensor Letters*, **2008**, 6, 542-547	0.9	6
34	Innovative Optoeletronic Approaches to Biomolecular Analysis with Arrays of Silicon Devices **2008**, 37-53		
33	Smart thin layer chromatography plate. *Lab on A Chip*, **2007**, 7, 978-80	7.2	25
32	Innovative Detection System of Ochratoxin A by Thin Film Photodiodes. *Sensors*, **2007**, 7, 1317-1322	3.8	20
31	Improving the stability of amorphous silicon ultraviolet sensors. *Thin Solid Films*, **2007**, 515, 7517-7521	2.2	9
30	Counting and Integrating Readout for Direct Conversion X-ray Imaging: Concept, Realization and First Prototype Measurements. *IEEE Transactions on Nuclear Science*, **2007**, 54, 383-390	1.7	34
29	Chromium silicide film on ceramic substrate for pressure measurement. *Thin Solid Films*, **2007**, 515, 7647-7649		12
28	Amorphous Silicon Sensors for Single and Multicolor Detection of Biomolecules. *IEEE Sensors Journal*, **2007**, 7, 1274-1280	4	22

27	Hydrogenated amorphous silicon ultraviolet sensor for deoxyribonucleic acid analysis. *Applied Physics Letters*, **2006**, 88, 083904	3.4	45
26	Innovative Optoelectronic Approaches to Biomolecular Analysis with Arrays of Silicon Devices **2006** ,		2
25	Spectral tuned amorphous silicon pIN for DNA detection. *Journal of Non-Crystalline Solids*, **2006**, 352, 2004-2006	3.9	25
24	Innovative window layer for amorphous silicon/amorphous silicon carbide UV sensor. *Journal of Non-Crystalline Solids*, **2006**, 352, 1818-1821	3.9	2
23	Maximum power point tracker for portable photovoltaic systems with resistive-like load. *Solar Energy*, **2006**, 80, 982-988	6.8	45
22	Analysis of lead oxide (PbO) layers for direct conversion X-ray detection. *IEEE Transactions on Nuclear Science*, **2005**, 52, 2035-2040	1.7	50
21	Linear system models for lag in flat dynamic x-ray detectors **2005**,		8
20	PbO as direct conversion x-ray detector material **2004**,		25
19	Flat detector with integrated dose sensing **2003**, 5030, 246		2
18	Amorphous silicon phototransistor as nonlinear optical device for high dynamic range imagers. *IEEE Transactions on Electron Devices*, **2002**, 49, 395-399	2.9	12
17	Photocapacitance of Hydrogenated Amorphous Silicon Phototransistors. *Materials Research Society Symposia Proceedings*, **2001**, 664, 2631		
16	Non Linear Optical Gain in Bulk Barrier Amorphous Silicon Phototransistor. *Materials Research Society Symposia Proceedings*, **2000**, 609, 1231		
15	A Junction Field Effect Transistor Based on Hydrogenated Amorphous Silicon. *Materials Research Society Symposia Proceedings*, **2000**, 609, 3111		
14	Metastability of hot-wire amorphous-silicon thin-film transistors. *Journal of Non-Crystalline Solids*, **2000**, 266-269, 464-468	3.9	13
13	Noise model of a-Si:H IR photodetectors. *Journal of Non-Crystalline Solids*, **2000**, 266-269, 1193-1197	3.9	
12	On the relation between defect density and dopant concentration in amorphous silicon films. *Journal of Non-Crystalline Solids*, **2000**, 266-269, 565-568	3.9	6
11	High energy-barrier for defect creation in thin-film transistors based on hot-wire amorphous silicon. *Applied Physics Letters*, **1999**, 75, 3674-3676	3.4	14
10	Experimental evidence of boron induced charged defects in amorphous silicon materials. *Thin Solid Films*, **1999**, 348, 79-83	2.2	2

9	Study of the transient response of microcompensated amorphous silicon detector in the near infrared range. *IEEE Transactions on Electron Devices*, **1999**, 46, 1140-1145	2.9	4
8	Near Infrared Response of Amorphous Silicon Detector Grown with Microcompensated Absorber Layer. *Materials Research Society Symposia Proceedings*, **1999**, 557, 839		1
7	A new analytical model for the amorphous silicon bulk barrier phototransistor. *Solid-State Electronics*, **1998**, 42, 339-348	1.7	5
6	Microdoped and microcompensated amorphous silicon films for infrared detection. *IEEE Photonics Technology Letters*, **1998**, 10, 1147-1149	2.2	5
5	Infrared photodetection at room temperature using photocapacitance in amorphous silicon structures. *Applied Physics Letters*, **1998**, 72, 1229-1231	3.4	18
4	A Novel Room Temperature Infrared Detector Using Micro-Compensated Amorphous Silicon. *Materials Research Society Symposia Proceedings*, **1998**, 507, 219		1
3	Amorphous silicon thin film as tuneable and high sensitive photodetector in the UV and far UV spectral range. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **1997**, 387, 243-245	1.2	4
2	Counting and integrating readout for direct conversion X-ray imaging concept, realization and first prototype measurements		1
1	Modelling the interaction of the Astro Bio Cube Sat with the Van Allen Belt radiative field using Monte Carlo transport codes. *Radiation Detection Technology and Methods*,1	0.7	0