

Curriculum Vitae



Personal information

First name / Surname

Antonella Sciuto

Address

Telephone

0039 0955968257 (office)
00390955968282 (laboratory)

Mobile:

E-mail

antonella.sciuto@imm.cnr.it

Nationality

Italian

Date of birth

18-11-1972

Gender

Female

Actual Work position

From December 2012

Scientist Researcher

Name and address of employer

IMM-CNR, Institute for Microelectronic and Microsystems of the Italian National Research Council, VIII Strada n° 5, 95121 Catania - Italy

Type of business or sector

Public Research Organisation

Main activities and responsibilities

Main research activities:

design, fabrication and characterisation of micro and nano-scaled Si and SiC based devices, for applications in the microelectronic, opto-electronic and sensor fields

Laboratory Supervisor Responsibilities:

2019 Responsible of *Raith 150 ElectronBeam Lithography* at laboratories of IMM-CNR Catania

2019 Responsible of *ElettroRava Sputtering apparatus* at laboratories of IMM-CNR Catania

2017 Responsible of *ElettroRava Thermal Evaporator* at laboratories of IMM-CNR Catania

Previous Work experiences

October 2012 - December 2012

Name and address of employer

Temporary Scientist Researcher
IMM-CNR, Agrate Unit - Italy

July 2012 - October 2012

Name and address of employer

Temporary Scientist Researcher
ETC s.r.l. Pantano D'Arci, 95121 Catania -Italy

July 2010 – July 2011

Name and address of employer

Post doc fellow
IMM-CNR

October 2008- July 2010

Name and address of employer

Temporary Scientist Researcher
IMM-CNR

April 1999- October 2008

Name and address of employer

Engaged with post doc or collaboration research contract or with research grant
IMM-CNR

Education and training												
	2004	Physics Ph.D. degree, University of Catania - Italy										
	2004	“Materials and Devices for sensors” School participation ,organised by SISM/AISEM, Lecce-Italy										
	2001	“IX Material Science” School participation, organised by INFN & CINECA, Genova-Italy										
	1998	Physics degree (Final evaluation 110/110), University of Catania - Italy										
Personal Skills and competences												
	Mother tongue	Italian										
	Other languages											
	Self-assessment European level (*)	Understanding					Speaking				Writing	
		Listening		Reading		Spoken interaction		Spoken production				
	English		B1		B1		B1		B1		B1	
	French		B1		B1		B1		B1		B1	
		(*) Common European Framework of Reference for Languages										
	Organizational/managerial skills	Management of research activities with Industrial partner . Management of technological processes Coordination of research unit in National project ClasSiC- INFN .										
Research Projects Participation		<ul style="list-style-type: none">• 2020-2023 “4 FRAILTY – Sensoristica intelligente, infrastrutture e modelli gestionali per la sicurezza di soggetti fragili” National Italian project PON ARS01_00345• 2019-2022 “Before-Hand Boosting Performance of Phase Change Devices by Hetero- and Nano-Structure Material Design” European project Horizon 2020• 2018-2022: “REACTION -first and euRoPEAn siC eigTh Inches pilOt liNe” National Italian project PON FESR• 2018-2019: “Sviluppo ed applicazione di tecnologie biosensoristiche in genomica” P.O. FSE 2014/2020• 2015-2017: “ClasSiC-Cherenkov Light detection with silicon carbide” National Italian project within CSN V - INFN – Italy• 2013-2016: “CaloCube - A high performances calorimeter for the detection of high-energy cosmic rays in space” National Italian project within CSN V – INFN –Italy• 2013-2015: “Plastics - Elettronica su plastica per sistemi Smart Disposable” National Italian project PON02_00355_3416798• 2013-2015: “Energetic - Tecnologie per l’energia e l’efficienza energetica” National Italian project PON02-00355_3391233• 2013-2015: “Hippocrates - Sviluppo di micro e nano-tecnologie e sistemi avanzati per la salute dell’uomo” National Italian project PON02_00355_2964193• 2012-2014: HI QUAD National Italian project MS01_00038• 2011-2014: “EFOR Energia da Fonti Rinnovabili” National Italian CNR project• 2010-2013: ATEMOX European project, Grant Agreement n. 258547• 2005-2008: “Tecnologie sensoristiche e sistemi automatici intelligenti per l’innalzamento competitivo delle attività produttive” POR-Sicilia 2000/2006 Misura 3.15										
Research outputs		Total number of publication in international journal : 82 Total number of citations: 909 from WofK & 1472 from SCOPUS Number of citation without self-citations: 863 from WofK H- index: 17 from WofK & 16 from SCOPUS										

List of recent relevant publications

- A Sciuto, L Calcagno, S Di Franco, D Pellegrino, LM Selgi, G D'Arrigo, Radiation Hardness of 4H-SiC PN Junction UV Photo-Detector Materials 15 (1), 264, 2022
- G D'Arrigo, M Scuderi, A Mio, G Favarò, M Conte, A Sciuto, M Buscema, Mechanical characterization and properties of continuous wave laser irradiated Ge2Sb2Te5 stripes, Materials & Design 202, 109545, 2021
- D Pellegrino, L Calcagno, M Zimbone, S Di Franco, A Sciuto, Correlation between Defects and Electrical Performances of Ion-Irradiated 4H-SiC p-n Junctions, Materials 14 (8), 1966, 2, 2021
- A Sciuto, L Calcagno, M Mazzillo, D Mello, PP Barbarino, M Zimbone, 4H-SiC pn Junction-Based Near IR Photon Source IEEE Sensors Journal 21 (2), 1504-1509, 3, 2020
- G D'Arrigo, AM Mio, JE Boschker, A Meli, S Cecchi, E Zallo, A Sciuto, Crystallization of nano amorphized regions in thin epitaxial layer of Ge2Sb2Te5 Journal of Physics D: Applied Physics 53 (19), 194001, 1, 2020
- S Boscarino, S Filice, A Sciuto, S Libertino, M Scuderi, C Galati, S Scalese Investigation of ZnO-decorated CNTs for UV light detection applications Nanomaterials 9 (8), 1099, 16, 2019
- G Giudice, A Sciuto, A Meli, G D'Arrigo, D Longo SO2 Monitoring With Solid State-Based UV Spectroscopy Compact Apparatus IEEE Sensors Journal 19 (16), 7089-7094, 4, 2019
- Sciuto, et al., Large-Area SiC-UV Photodiode for Spectroscopy Portable System. IEEE Sensors Journal, 2019. 19(8): p. 2931-2936.

International Patents

1. MC Mazzillo, VC Martino, A Sciuto Heterostructure optoelectronic device for emitting and detecting electromagnetic radiation, and manufacturing process thereof, US Patent App. 17/357,653 2021
2. MC Mazzillo, PP Barbarino, DP Mello, A Sciuto Low power optical sensor for consumer, industrial, and automotive applications US Patent 11,133,424, 1, 2021
3. MC Mazzillo, VC Martino, A Sciuto Heterostructure optoelectronic device for emitting and detecting electromagnetic radiation, and manufacturing process thereof US Patent 11,049,990, 1, 2021
4. MC Mazzillo, A Sciuto System and method for detecting the concentration of metal particles US Patent App. 16/685,618, 2020
5. MC Mazzillo, A Sciuto, D Sutura Avalanche photodiode for detecting ultraviolet radiation and manufacturing method thereof US Patent 10,461,209, 3, 2019
6. A Santangelo, MC Mazzillo, S Cascino, G Longo, A Sciuto Silicon carbide ultraviolet light photodetector and manufacturing process thereof US Patent App. 16/370,636, 2019
7. MC Mazzillo, A Sciuto Optoelectronic device for the selective detection of volatile organic compounds and related manufacturing process US Patent 10,416,142, 2019
8. MC Mazzillo, A Sciuto, P Badalà Integrated electronic device for detecting ultraviolet radiation US Patent 10,371,572, 1, 2019
9. MC Mazzillo, A Sciuto Monolithic integration of ultraviolet and infrared radiation detectors and manufacturing process thereof US Patent 10,209,125
10. M. Mazzillo and A. Sciuto, Semiconductor device for detecting ultraviolet and infrared radiation and related manufacturing process. 2018, US Patent 9,952,094.
11. M. Mazzillo, A. Sciuto and D. Sutura, Multiband double junction photodiode and related manufacturing process. 2017, US Patent App. 15/479,034.

Industrial collaboration contracts	<ul style="list-style-type: none"> • 2021 -2024 collaboration with STMicroelectronics-Catania for the <i>Electro-mechanical characterisation of Si and GaN based devices</i> • 2021 -2024 collaboration with STMicroelectronics-Catania for the <i>Development of processes and characterisation for SiC based power devices</i> • 2017-2020 collaboration with STMicroelectronics-Catania for the <i>Study and fabrication of SiC based Power Devices</i> • 2017-2018 collaboration with STMicroelectronics-Catania for the <i>Study of Materials and Technologies for Microelectronics</i> • 2015- 2016 collaboration with STMicroelectronics-Catania for <i>Electro-optical and structural characterisation of 4H-SiC based UV photosensors</i> • 2014- 2015 collaboration with STMicroelectronics-Catania for <i>Research and development of innovative materilas, processes and devices for microelectronics</i> • 2013-2014 collaboration with STMicroelectronics-Catania for <i>Development, fabrication and characterization of SiC based UV sensor</i> • 2008-2010 collaboration with STMicroelectronics-Catania for <i>Development of SiC based UV sensor</i>
Academic collaboration	<ul style="list-style-type: none"> • 2019-2021 collaboration agreement between CNR-IMM, UNICT-Di3A and INGV for the development of volcanic and environmental monitoring systems - Protocollo IMM 383.29/01/2019 & 754.13/02/2019.
International IDs	<p>Orcid ID: 0000-0001-6271-8032</p> <p>Scopus Author ID: 7003368726</p>

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV

Catania, 31-03-2023

