

## Personal data

**Surname:** Sciuto

**Name:** Emanuele Luigi

**Nationality:** Italian

**Birth date:** 08 September 1988

**Birth place:** Catania (CT)

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## Education and Training

1. In November 2013 obtained the **Master's Degree in Cellular and Molecular Biology** at the University of Catania, with an experimental thesis entitled "**Study of fluorescent dyes for the development of optical DNA-chip based on silicon technology**", working at the CNR-IMM labs of Catania and the Department of Biomedical and Biotechnological Sciences of the University of Catania.
2. In February 2014 he was the winner of a **scholarship** - HIPPOCRATES project (PON02\_00355\_2964193) - with the main activity of "Study and manipulation of organometallic complexes for biosensing applications", at the CNR-IMM of Catania.
3. In March 2018 obtained his **PhD in Materials Science and Nanotechnology (cycle XXX)** at the Department of Physics and Astronomy of the University of Catania, with an industrial thesis entitled "**Development of Innovative Technologies for DNA extraction and detection**", carrying out the research activity at STMicroelectronics.
4. From February to August 2017, during the PhD course, he spent a period of 6 months as **visiting scientist at the University of Lausanne (Switzerland)**, working on a research activity mainly focused on the development of optical and electrochemical biosensors based on recombinant strains of Escherichia coli for the heavy metals monitoring in water.
5. In March 2018 he was the winner of a **post-doc scholarship** - FESR project on "**Development and application of biosensing technologies in genomics**" - at the CNR-ISM of Catania, working on the characterization and preparation of biomolecules for biosensing applications, sensor testing and development of nanotechnologies for Point-of-Care sensing applications.

## Working Experience

1. 11/05/2020-28/12/2021: **post-doc research fellow** at Azienda Ospedaliero Universitaria Policlinico "G. Rodolico - San Marco" of Catania, Objective Project PSN 2016 Project Line 4 - Action 4.9.4.

Research activities have been focused on the development of biosensing methods for the molecular detection of microbial pathogens of water.

2. 31/12/2021: **Researcher** (Chim/03) – PON “Ricerca e Innovazione” 2014-2020 (CUP: J45F21001750007) Project – at the Department of Chemical, Biological, Pharmaceutical and Environmental Sciences of University of Messina, working on research activities concerning the **development and characterization of nanostructured materials for innovative "Genetic Point of Care" sensors.**

## Awards

**June 2018** – Winner of the Third Thesis National Award Contest “Dario Scapaticci” organized by the MESAP (Smart Products and Manufacturing) industrial pole of Torino, for the presentation of the best doctoral thesis having industrial interest, entitled "*Development of Innovative Technologies for DNA extraction and detection*".

## Research activities

During his training and working period, Dr. Sciuto gained transversal and multidisciplinary skills on biosensing and nanotechnologies. Particular specializations concerned: the development of smart biointerfaces based on thiol and silane SAM for oligonucleotides, proteins and microorganisms anchoring on sensors; the development of advanced nanotechnologies for optical, electrical and electrochemical sensing; the characterization of organometallic complexes for sensor calibration and testing; DNA extraction and manipulation towards molecular probes to be used in genetic Point-of-Care sensors.

Dr. Sciuto research activities include 43 contributions:

- 31 publications on peer-reviewed international journals;
- 12 communications at national and international congresses;
- H-index: 11; Cit: 252 (Scopus).