

# Maria Androulidaki

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**Birthday: 05 April 1965, Married.**

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## EDUCATION

**1987:** Graduate Diploma at Physics(B.Sc), University of Crete

**1988:** Summer school of national program NATO Advanced Study Institute at plasma Physics, Alicante, Spain.

**1991:** Master degree (M.Sc.) from Physics Department, University of Crete with specialist at Solid State Physics.

## WORK

**June1987-Mars1991:** Research Assistant in amorphous semiconductor lab in Institute electronic structure and lasers (IESL) for growth and characterization Ge-Si thin films.

**March1991-today:** Research Assistant at Microelectronic group in IESL, FORTH, Greece with main activity the optical and optoelectronics semiconductor materials and device characterization for MRG group, IESL labs and many external users. Participation in numerous National and European funded research projects in my group.

**May2013-Aug2013:** Research Assistant at Institut national de la recherche scientifique (INRS) and training for XPS characterization Montreal, Canada.

**Feb2017-today:** PL characterizations services to the external users of the European Research infrastructure "Nanoscience Foundries and Fine Analysis (NFFA) ".

**Mars1991-today:** Students training and supervision in the lab.

## **RESEARCH EXPERIENCE**

### **Optical Characterization of Semiconductors and other materials.**

Semiconductors thin films, nanostructure and heterostructures characterization using and developing many optical setups like Photoluminescence (PL), micro-PL, Transmission(T) and Reflectance(R) measurements, micro-Raman and Fourier Transform Infrared measurements (FTIR) and X-ray photoelectron Spectroscopy (XPS).

**Materials:** 1) III-V compound (GaAs, AlAs, InAs, GaN, InN, AlN and their alloys)  
2) Oxides e.g. ZnO, SiO<sub>2</sub>, HfO<sub>2</sub> etc.  
3) Nanomaterials: nanowire, quantum dots, quantum wells, nanotubes etc.  
4) 2D materials e.g. graphene etc.  
5) Chemical solution and biomaterials e.g. perovskite  
6) Mineral materials

### **Optoelectronic Device Characterization.**

Semiconductors device characterization with photoconductivity, time resolved and responsivity measurements using developed experimental setups and software.

**Device:** 1) Photodetector on thin films  
2) Photodetector on membrane  
3) LED and Laser structure  
4) Solar Cells

**Software knowledge:** Visual Basic, C++, Lab View, Mathematica, Spectra analysis, software for mechanical part design.

**Publication:** A total of 92 publications and over 750 citations and a corresponding Hirsch factor of 16 (SCOPUS database, Dec 2018)