



# Gabriel Craciun

Date of birth: 9/01/1968 | **Nationality:**Romanian | **Gender:** Male | (+40) |  
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## WORK EXPERIENCE

10/2018 – CURRENT – Bucharest, Romania

### SCIENTIFIC RESEARCHER III – NATIONAL INSTITUTE FOR RESEARCH AND DEVELOPMENT IN MICROTECHNOLOGIES -IMT BUCHAREST

Semiconductor technology cleanroom techniques and processes; PVD (Physical Vapor Deposition) techniques - particularly deposition of thin films by e-beam induced evaporation; SEM (Scanning Electron Microscopy) sample imagistic investigation technique; investigations and compositional analysis of materials by EDX (Energy-dispersive X-ray spectroscopy) technique. Participant in research projects.

06/2000 – 06/2005 – Liverpool, UK

### RESEARCH ASSISTENT – Electronics Instrumentation Laboratory, TU Delft, The Netherlands

STW Project DEL4577 “Development of dry etch technology for intelligent micromachined devices”.

- Development of high aspect ratio ICP plasma etching technology for intelligent inertial sensors. Development of an IC compatible process flow for implementing devices: adhesive wafer bonding, thinning, front to back-side alignment, deep high aspect ratio SF6-O2 cryogenic plasma process as a single post-processing step for defining and releasing the mechanical structure. Process is compatible with IC-technology and cleanroom restrictions; Signal-processing electronics can be integrated on the same chip.

09/1998 – 01/1999 – Liverpool, UK

### HONORARY RESEARCH ASSISTANT – Electrical Engineering and Electronics Department, University of Liverpool, Liverpool, UK.

Project: Processing and characterization of  $(\text{Si}/\text{SiO}_2)_n$  Interface Adsorbed Gas (IAG)-superlattices for visible light emission.

- Processing of visible light emitting multilayer Si/SiO<sub>2</sub> sandwiches by deposition of nanometer thick layers of Si. It was used an electron gun evaporator followed up by monolayer O<sub>2</sub> adsorption in an ultra-high vacuum setup with *in situ* characterization by RGA (Residual Gas Analysis) Quadrupole Mass Spectrometry and Auger Electron Spectroscopy.

12/1993 – 06/200 – Bucharest, Romania

### Microphysics Characterization and Simulation Laboratory, Institute for Microtechnologies - IMT, Bucharest, Romania.

1995, January	<b>Scientific researcher</b> - Microphysics Characterization and Simulation Laboratory, Institute for Microtechnologies -IMT, Bucharest, Romania.
1993, December	<b>Research assistant</b> - Microphysics Characterization and Simulation Laboratory, Institute for Microtechnologies - IMT, Bucharest, Romania.

- Study of luminescent and nonluminescent porous silicon formation mechanism and the influence of the processing parameters on the resulting morphology, its optical and electrical properties.
- Development of optoelectronic and gas sensing applications of porous silicon

## EDUCATION AND TRAINING

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1987 – 1993 – Bucuresti, Romania

**LICENSE IN PHYSICS** -Faculty of Physics, University of Bucharest

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Specialization: *Elementary Particles and Nuclear Interactions*

Graduation thesis title: *"Microstrip detectors for nuclear particles detection -Electrical and nuclear characteristics"*.

Title: *Physicist*

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EQF level 5

## LANGUAGE SKILLS

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Mother tongue(s): **ROMANIAN** Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
English	C1	C1	C1	C1	C1
Dutch	A	A	A	A	

*Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user*

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