




## Georgios Veisakis


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 LinkedIn: <https://www.linkedin.com/in/gveisakis>

 Work: Heraklion (Greece)

### WORK EXPERIENCE

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 **Foundation for Research and Technology - Hellas (FORTH), Institute of Electronic Structure & Laser** – Heraklion, Greece

#### Nanofabrication Infrastructure & R&D Engineer

[ 02/2023 – Current ]

##### Fabrication of:

- Silicon oxide layers on silicon wafers using thermal oxidation oven.

##### Design and development of experimental equipment:

- Compact Hall effect measurement prototype for device electrical characterization, featuring a cylindrical magnet for alternating magnetic field capability and a vacuum-compatible sample holder. Fully compatible with all probe stations.
- Static camouflage prototype for acoustic waves absorption.

##### Installation of lab equipment:

- Electrical installations
- Nitrogen, vacuum, water, and ultra-pure water pipes installation
- Ventilation and exhausts installations
- CVD system disassembly, relocation, and reassembly in another room.
- Technical support to the lab chemist with fume hoods upgrade modifications and various 3D- printed devices to support experiments.

 **Institute of Emerging Technologies, HMU Research Center** – Heraklion, Greece

#### Nanofabrication Infrastructure & R&D Engineer

[ 02/2017 – 12/2022 ]

##### Fabrication of:

- Transparent conductive electrodes TCEs with spray coating technique using graphene based materials and AgNWs
- Sensors using spray coating technique, such as humidity sensors, light sensors and biosensors
- Perovskite solar cells, using spin coating, vacuum thermal evaporation, spray coating, blade coating and screen printing techniques.
- Energy harvesters

##### Design and development of experimental equipment:

- Spray system prototype for thin film coatings into a mini glovebox, equipped with a nitrogen purge
- Humidity test chamber for Graphene Oxide energy harvesters electrical characterization measurements with Keithley
- 3D-printed special holders for the needs of Spectrofluorometer, ISOSun solar simulator and ossila spin coater

##### Installation and maintenance of lab equipment:

- Gloveboxes installations and maintenance
- Kelvin Probe System installation
- Nitrogen generator installation supervisor
- Pneumatic systems installations
- Ventilation and exhausts installations
- Ossila Solar Cell I-V Test System maintenance
- Spin coaters maintenace
- Thermal Vacuum Evaporator maintenance
- Computers service

- Electrical Installations
- Technical support to all the experimental processes of the laboratory
- Nitrogen and Oxygen gas bottles orders and handling
- Participation in the perovskite solar farm construction and installations
- Installation of a nitrogen spray nozzles system for cleaning substrates, with foot valve actuation prior to coating in the FOM Slot-die coating system, to prevent pin holes in the coating strip.
- Installation of the large scale lab facilities in NANO@HMU, including the construction of a nitrogen gas pipes supply network for the lab needs
- Directed and edited a representative NANO@HMU group video, promoting the activities of our laboratory which played in the local television as a cover video for our group leader interview

#### User of:

- Ossila Four-Point Probe
- Diener Atto plasma unit
- UV/ozone cleaner (MB-UV-O3)
- Keithley 2700 Multimeter/Data Acquisition System
- AT-25PA Digital Electric Flat Screen Printer
- Zehnter Automatic Film Applicator ZAA
- Ossila Solar Cell I-V Test System
- Ossila Spin Coater
- Ossila Contact Angle Goniometer
- FR Basic Thetametrisis
- Van der Pauw Ecopia HMS-3000 Hall Measurement System
- Prusa i3 MK3S+ 3D printer
- Autodesk Fusion 360

Participation in the 1st International Conference on Nanotechnologies and Bionanoscience 'NanoBio 2018', as a member of the organizing committee

<https://nanohmu.gr/>

 **LTFN-AUTH** – Thessaloniki, Greece

#### Laboratory Technician

[ 05/2015 – 09/2015 ]

- Participation in the installation, training and optimization of AIXTRON BM CVD in the LTFN-AUTH facilities.
- Participation in the installation of Coatema Roll to Roll Coating System.
- IT support, wiring connections and electrical power connections.
- Participation in the 12th International Conference on Nanosciences & Nanotechnologies, as a member of the organizing committee.

<http://www.ltfn.gr/>

 **OET - Organic Electronic Technologies P.C.** – Thessaloniki, Greece

#### Laboratory Technician / Internship training

[ 12/2014 – 05/2015 ]

- Installation of electric grids, networks and various lab equipment.
- Participation in testing and optimization processes of various materials during the manufacturing of OPV prototypes with gravure printing technique.

<https://oe-technologies.com/>


 **Cretan Energy Conferences** – Heraklion, Greece

#### Partner

[ 09/2019 – 2022 ]

member of organizing committee

<https://cretanenergyconferences.org/>

 **self employed** – Heraklion, Greece

### **Computer Repair Technician**

[ 2005 – 2018 ]

Complete Computer Repair & Support


 **ATEKE** – Heraklion, Greece

### **Maintenance Technician**

[ 10/2016 – 11/2016 ]

Fuell stations pumps maintenance

[https://www.ateke.gr/index\\_en.htm](https://www.ateke.gr/index_en.htm)

 **Entec Contractors S.A. [GR]** – Heraklion, Greece

### **Electrical Technician**

[ 07/2009 – 08/2009 ]

Installations of photovoltaic tracker systems and panels.

<http://www.entec.gr/contractors/#/home>

 **E. MOUSTAKAS & Co L.P. ELECTRICAL INSTALLATIONS** – Heraklion, Greece

### **Electrical Technician**

[ 2007 – 2010 ]

Electrical installations in:  
industries,hotels,hospitals,athletic centers,museums,super markets,malls

## **PROJECTS**

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[ 01/2022 – 15/12/2022 ]

### **Emerging Printed Electronics Research Infrastructure (EMERGE)**

<https://nanohmu.gr/https://emerge-infrastructure.eu/https://cordis.europa.eu/project/id/101008701>

[ 12/2018 – 03/2022 ]

### **PRINTWIN - Low cost inkjet printable perovskite solar glass panels**

<https://nanohmu.gr/printwin/>

[ 04/2018 – 03/2020 ]

### **Graphene Flagship Core Project 2**

<https://nanohmu.gr/https://cordis.europa.eu/project/id/785219>

[ 04/12/2014 – 31/12/2014 ]

### **Reinforce Organic Electronics Research Potential in Kentriki Makedonia (ROleMAK)**

<http://www.lfn.gr/http://www.rolemak.eu/https://cordis.europa.eu/article/id/91798-organic-electronics-receives-a-boost-in-central-macedonia>

## **PUBLICATIONS**

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[2023]

### **Piezo-Phototronic In<sub>2</sub>Se<sub>3</sub> Nanosheets as a Material Platform for Printable Electronics toward Multifunctional Sensing Applications**

[2023]

## **An efficient approach for controlling the crystallization, strain, and defects of the perovskite film in hybrid perovskite solar cells through antisolvent engineering**

[2022]

### **Geometric Tuning for Enhanced Moisture-Driven Electricity Generation Enabled by Graphene-Oxide Flakes**

[2019]

### **Updating the Role of Reduced Graphene Oxide Ink on Field Emission Devices in Synergy with Charge Transfer Materials**

## **EDUCATION AND TRAINING**

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### **Master of Science in Organic Electronics & Applications (OREA)**

*Hellenic Mediterranean University - former (Technological Educational Institute of Crete)*

Website: <https://hmu.gr/>

### **Bachelor's Degree in Electrical Engineering**

*Hellenic Mediterranean University - former (Technological Educational Institute of Crete)*

Website: <https://hmu.gr>

## **CONFERENCES AND SEMINARS**

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[ 02/07/2024 – 05/07/2024 ] Thessaloniki, Greece

**21th International Conference on Nanosciences and Nanotechnologies (NN24) Poster presentation:** Development of Hall Measurements in Nanomaterials

Link: <https://www.nanotextology.com/2024/index.php/nn>

[ 04/07/2023 – 07/07/2023 ] Thessaloniki, Greece

**20th International Conference on Nanosciences and Nanotechnologies (NN23)**

Link: <https://www.nanotextology.com/2023/index.php/nn>

[ 04/11/2019 – 06/11/2019 ] Erlangen, Germany

**3rd Intensive Course in Laser Based Patterning & Sintering Processes, Chair for Electronic Materials and Energy Technology, Department of Materials, FAU**

Link: <https://ipenche.chania.teicrete.gr/3rd-intensive-course-in-laser-based-patterning-sintering-processes-chair-for-electronic-materials-and-energy-technology-department-of-materials-fau-erlangen-germany/>

[ 13/05/2019 – 16/05/2019 ] Milano, Italy

**2nd Intensive Course in Laser Spectroscopy and Safety, Physics Department of Politecnico Di Milano, Milano**

Link: <https://ipenche.chania.teicrete.gr/the-ipen-educational-platform/2nd-intensive-course-in-laser-spectroscopy-and-safety-physics-department-of-politecnico-di-milano-milano-italy-14-15th-of-may-2019/>

[ 24/09/2018 – 28/09/2018 ] Heraklion, Crete, Greece

**1st International Conference on Nanotechnologies and Bionanoscience (NanoBio 2018) WORKSHOP 1:** Nanobiomaterials and Nanomedicine  
**WORKSHOP 2:** Perovskite optoelectronics and solar cells  
**WORKSHOP 3:** Tissue Engineering and Regenerative Medicine  
**WORKSHOP 4:** Graphene and related two-dimensional (2D) materials  
**WORKSHOP 5:** Nanoelectronics and nanophotonics  
**WORKSHOP 6:** Bioelectronics and lab-on-chip systems

Link: <https://nanobioconf.com>

[ 01/07/2018 – 08/07/2018 ] Chania, Crete, Greece

**6th ELBYSIER Intensive Course in Graphene Technologies and nano-electronics Erasmus+ Electronics Beyond Silicon Era (ELBYSIER)**

1. Organic Electronics & Applications, 2. Perovskites & Solar Cells and Sensors, 3. Oxide Electronics, 4. Spintronics, 5. Cultivation of

Soft Skills (Ethics, How to write papers, Interview Tips),6. Cultural Activities.

Link: <https://erasmus-plus.ec.europa.eu/projects/search/details/2015-1-EL01-KA203-013988>






[ 07/07/2015 – 10/07/2015 ] Thessaloniki, Greece

**12th International Conference on Nanosciences and Nanotechnologies** Workshops, Events and Round Tables, covering the latest developments in the fields of Photovoltaics, Polymer Nanotechnologies, Bioelectronics, Graphene and related materials, NanoMedicine related Issues, NanoConstruction, Commercialization and EU funded Projects on Nanosciences and Nanotechnologies

Link: <https://www.nanotechnology.com/2015/index.php/nn>

## DIGITAL SKILLS TEST RESULTS

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 Information and data literacy	<b>ADVANCED</b> Level 6 / 6
 Communication and collaboration	<b>ADVANCED</b> Level 6 / 6
 Digital content creation	<b>ADVANCED</b> Level 6 / 6
 Safety	<b>ADVANCED</b> Level 6 / 6
 Problem solving	<b>ADVANCED</b> Level 6 / 6

Results from a [self-assessment](#) based on [The Digital Competence Framework 2.1](#)

## LANGUAGE SKILLS

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**Mother tongue(s):** Greek

**Other language(s):** English

## DRIVING LICENCE

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**Driving Licence:** A2

**Driving Licence:** A

**Driving Licence:** B

## CEPT RADIO AMATEUR LICENCE

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**INTERNATIONAL AMATEUR RADIO UNION – I.A.R.U.**

Link: <https://www.iaru.org/>