

Curriculum Vitae Emmanouil Amargianitakis

Emmanouil Amargianitakis

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PERSONAL INFORMATION

Date of Birth: May 15 1989

Nationality: Greek

Gender: Male

EDUCATION

2016-till now PhD student at the Department of Materials Science and Technology, University of Crete

2013-2016 Master of Science in "Micro/Optoelectronics", University of Crete, Department of Physics, GPA: 8.62/10

2007-2013 Bachelor in Physics, University of Crete, Department of Physics, GPA: 7.26/10

2007 High school final grade 17,22/20

LANGUAGES

Greek: Native Speaker

English: Level (C2)

- Certificate of Proficiency in English - University of Michigan
- IELTS Academic Module "Score 7" (2012)

French: Level (B2)

- Certificat d'état de connaissance des langues

PROGRAMMING/SOFTWARE

- Fortran 77, C++
- LaTeX
- Matlab
- Wolfram Mathematica
- Microsoft Office
- OriginLab
- Nextnano³
- WSxM
- PHP, HTML, CSS, MYSQL
- Moodle and Open-Eclass

Network Diploma: CompTIA Network Certified Professional since 2008

Experience: Operator at the University of Crete

WORKING EXPERIENCE

- Teaching Assistant at the course Programming with Fortran, (2009)
- Practical Exercise: "Cold field emission study of Carbon nano-sheets" at the Institute of Electronic Structure and Laser (IESL), Foundation for Research and Technology – Hellas, (FORTH), (2010)
Supervisors: Costas Fotakis, Emmanouil Stratakis
- Erasmus Placement: "Graphene characterization on SiO₂ and SrTiO₃ with SPM techniques and field effect measurements" at the Leiden Institute of Physics in the group Magnetic and Superconducting Materials, (2012-2013). Supervisor: Jan Aarts

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- Master thesis: “Nitride polariton structures with improved characteristics” at the University of Crete in the group of Microelectronics Research Group, (2014 – 2016).
Supervisor: Nikos Pelekanos
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CONFERENCES

- *Ultra-low threshold GaN polariton lasing at room temperature.*

R. Jayaprakash, F. G. Kalaitzakis, E. Amargianitakis, G. Christmann, K. Tsagaraki, M. Hocevar, B. Gayral, E. Monroy, N.T. Pelekanos, Book of Abstracts of 31st Panhellenic Conference on Solid-State Physics and Materials Science, Thessaloniki, September 2015
(invited talk)

- *Ultra-low threshold GaN polariton lasing in a zero dimensional trap.*

R. Jayaprakash, F. G. Kalaitzakis, E. Amargianitakis, G. Christmann, K. Tsagaraki, M. Hocevar, B. Gayral, E. Monroy, N.T. Pelekanos, Book of Abstracts E-MRS 2016, Fall meeting, Symposium F, Warsaw, September 2016
(invited talk)

- *Improved GaN quantum well microcavities for robust room temperature polaritonics*

E. Amargianitakis, F. Miziou, M. Androulidaki, K. Tsagaraki, A. Kostopoulos, G. Konstantinidis, E. Delamadeleine, E. Monroy, N. T. Pelekanos, Book of Abstracts International Conference on Physics of Semiconductors (ICPS) 2018, Montpellier, August 2018 (poster)

PARTICIPATIONS

- “21st Advanced Physics Summer School, on the Topic of Nano-electronics” organized by the Physics Department of University of Crete and the Scientific Society Micro & Nano, (2011)
 - “Bio-photonics and molecular imaging (BIMI) summer school” organized by the Institute of Electronic Structure and Laser (IESL) of the Foundation for Research and Technology - Hellas (FORTH) in collaboration with Biology Department of University of Crete (2015)
 - “Diagnostic and therapeutic approaches of 21st century in analytical, forensic and environmental toxicology” organized by the Medical Department of University of Crete (2015)
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RESEARCH EXPERIENCE & SKILLS

- Optical and electrical characterization of semiconductor nanostructures
 - Photoluminescence/Reflectance: power and temperature dependent measurements
 - Cryogenics (variable temperature cryostat, 10-300K)
 - Micro-Photoluminescence/k-space imaging of microcavities
 - Photo-electrochemical etching of nitride materials
 - Atomic Force Microscopy of thin films
 - I-V / C-V of organic solar cells
 - Fabrication of organic solar cells (OPV's)
 - Cold field emission of graphene flakes
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DISTINCTION

2017-2019 I have been awarded with the ELIDEK fellowship from Hellenic Foundation for Research and Innovation, to pursue my doctoral thesis work on Nitride Polariton Lasers.