

Short Curriculum Vitae: Komninou Philomela

<i>Current Position:</i>	Professor, Director of the Electron Microscopy and Structural Characterization of Materials Laboratory Department of Physics, Aristotle University of Thessaloniki GR-54124 Thessaloniki, Greece Email: komnhnoy@auth.gr http://www.nmmg.web.auth.gr , http://elmiclab.web.auth.gr
<i>Undergraduate Education:</i>	Diploma in Physics (Department of Physics, Aristotle University of Thessaloniki, 1979)
<i>Post-graduate Education:</i>	Master in Radioelectronics, (Department of Physics, Aristotle University of Thessaloniki, 1982) PhD, (Department of Physics, Aristotle University of Thessaloniki, 1987)
<i>Areas of Interest</i>	<i>Structural, electronic and mechanical properties of materials.</i> Microstructure of nanocrystals, thin films and low-dimensional nanostructured-heterostructures, interfacial and extended defects and their correlation with the electronic and physical properties using analytical and atomic resolution quantitative Transmission Electron Microscopy techniques combined with theoretical modeling.
<i>Bibliometric Data:</i>	<ul style="list-style-type: none">▪ > 220 papers in peer reviewed International Journals▪ 5 invited chapters in international scientific books▪ > 240 participations in National and International Conferences▪ > 2700 Citations, h=25, (Scopus Author ID: 7004203536)▪ 35 invited talks in International Conferences and Workshops▪ Guest editor of 5 international scientific volumes▪ Supervisor of numerous PhD and MSc theses - Author of educational material
<i>National and International Distinctions:</i>	<ul style="list-style-type: none">▪ President of the Hellenic Microscopy Society - a branch of the European Microscopy Society▪ Member of the General Assembly of ELIDEK, AUTH representative▪ Member of International Advisory Board of International Conferences: a) <i>Extended Defects in Semiconductors “EDS”</i>, b) <i>Intergranular and Interphase Boundaries in Materials “iib”</i> c) <i>Defects in Semiconductors “ICDS”</i>▪ Chair of three International Conferences: EDS2012, iib2013 and EDS2018▪ Member of the organizing and program committees of more than 25 International Conference and Workshops.▪ Referee in more than 20 scientific international journals▪ Evaluator of competitive research projects (National, EU, Foreign Agencies)▪ Member in National and International scientific societies▪ FP6: National delegate in the EC “RESEARCH AND INNOVATION” program committee 2004-2006. FP7: National expert in the “PEOPLE” program committee 2008-2010, and FP7: National delegate in the “Steering Group on Human Recourses and Mobility” 2010 –today▪ Coordination and/or partnership in more than 35 competitive research projects funded by National resources/EC/ESA.

Recent selected publications

- [Decorated Dislocations against Phonon Propagation for Thermal Management](#), S. Giaremis, ..., Ph. Komninou, K. Termentzidis, *ACS Appl. Energy Mater.* **3**, 3, 2682-2694 (2020)
- [Effects of ultrathin AlN prelayers on the spontaneous growth of GaN nanowires by plasma assisted molecular beam epitaxy](#) Eftychis, S., ..., Komninou, Ph., Georgakilas, A., *J. Cryst. Growth* **514** 89–97(2019)
- [Compositional and strain analysis of In\(Ga\)N/GaN short period superlattices](#), G. P. Dimitrakopoulos, ..Ph. Komninou, *J. Appl. Phys.*, *accepted* (2018). (**highlight article**)
- [Structural and electronic properties of a -edge dislocations along «1-100» in GaN](#), Giaremis, S., Komninou, P.et al., *J. Appl. Phys.*, **123**, 244301 (2018) (**featured article**)
- [High quality large area MoSe2 and MoSe2/Bi2Se3 heterostructures on AlN\(0001\)/Si\(111\) substrates by molecular beam epitaxy](#), E. Xenogiannopoulou,, Ph. Komninou, et al., *Nanoscale* **7**, 7896 (2015)
- [Observation of Surface Dirac Cone in High-Quality Ultrathin Epitaxial Bi2Se3 Topological Insulator on AlN\(0001\) Dielectric](#) P. Tsipas, E. Xenogiannopoulou, S. Kassavetis, D. Tsoutsou, E. Golias, C. Bazioti, G. P. Dimitrakopoulos, Ph. Komninou, Hu Liang, M. Caymax, and A. Dimoulas, *ACS Nano* **8** (7), 6614 (2014)
- [Growth mechanism and microstructure of low defect density InN \(0001\) In-face thin films on Si \(111\) substrates](#), Th. Kehagias, ... Ph. Komninou, and A. Georgakilas, *J. Appl. Phys.* **114**, 163519 (2013)
- [Nanostructure and strain in InGaN/GaN superlattices grown in GaN nanowires](#), Th. Kehagias, and Ph. Komninou, *Nanotechnology* **24**, 435702 (2013) (**featured article**)

Selected Research projects

- **2018-2020**: “FEG TEM/STEM”– Strengthening research, technological development and innovation – EYDEP, Region of Central Macedonia: “Transmission-scanning/transmission electron microscope with field emission gun electron source”
- **2018-2021**: “EINSTEIN”, “Bilateral R&T Cooperation between Greece and Russia” under the Operational Program “Competitiveness, Entrepreneurship and Innovation (EPANEK)”：“Experimental and theoretical studies of physical properties of low dimensional quantum nanoelectronic systems”
- **2018-2021**: “INNOVATION-EL”, Action “Reinforcement of the Research and Innovation Infrastructure”, funded by the Operational Programme “Competitiveness, Entrepreneurship and Innovation” (NSRF 2014-2020) and co-financed by Greece and the European Union (European Regional Development Fund)
- **2012 – 2015**: **Thales Program GSRT**, "Education and Lifelong Learning", National Strategic Reference Framework, «*Spontaneous growth, properties and devices of III-V semiconductor nanowires*”
- **2012 – 2015**: **Thales Program GSRT**, "Education and Lifelong Learning", National Strategic Reference Framework, «*High Efficiency III-Nitride Semiconductor Photovoltaic Devices*»
- **2008 – 2011**: **IST- STREP – GA 224212 “DOTSENSE”**, «*Group III-Nitride quantum Dots as optical transducers for chemical sensors*»
- **2005 – 2009**: **Coordinator “PARSEM”**: Marie Curie Research Training Network (MCRTN), Contract MRTN-CT-2004-005583 of the EU, «*Interfacial Phenomena at Atomic Resolution and multiscale properties of novel III-V SEMiconductors*»