


## SHORT CV

	<p><b>THOMAS KEHAGIAS</b></p>
<i>Date and place of birth</i>	May 27 <sup>th</sup> , 1962 – Thessaloniki, Greece
<i>Academic Status</i>	Associate Professor, Department of Physics, Aristotle University of Thessaloniki (A.U.Th.)
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<i>Studies</i>	<p>B.Sc. in Physics, Department of Physics, Aristotle University of Thessaloniki, 1985</p> <p>Ph.D. in Solid State Physics, “A study of the structure and crystal defects of oxide dispersion strengthened superalloys”, Department of Physics, Aristotle University of Thessaloniki, 1991</p>
<i>Research interests</i>	<p><u>Main topic:</u> Characterization of structural properties of solids by conventional and high-resolution Transmission Electron Microscopy (CTEM-HRTEM).</p> <p><u>Particular interests:</u></p> <ul style="list-style-type: none"> <li>• Structural characterization of semiconductor films grown on various substrates for photonic and microelectronic applications</li> <li>• Crystal and mechanical properties of 0D, 1D and 2D nanostructures, i.e., quantum dots, nanowires and quantum wells</li> <li>• Determination of the chemical composition of nanostructures by energy dispersive X-ray analysis (EDX), high-angle annular dark field (HAADF) imaging and electron energy loss spectroscopy (EELS)</li> <li>• Metallic nanoparticles in amorphous matrices</li> <li>• Analysis of amorphous and nanocrystalline materials produced by powder metallurgy methods</li> <li>• Interfaces in deformed metals and semiconductors</li> <li>• Microstructure of metallic alloys, metallic thin films and magnetic multilayers</li> <li>• Structural properties of vitrified hazardous materials</li> <li>• Vitreous and glass-ceramic materials</li> </ul>

<i>Research activities</i>	<p><i>Participation in research projects</i></p> <ul style="list-style-type: none"> <li>• Coordinator in two national and one industrial projects</li> <li>• Principal Researcher in 7 European and 14 national projects</li> </ul> <p><i>Member of research groups/laboratories</i></p> <p>1) Nanostructured Materials Microscopy Group (NMMG), Physics Department A.U.Th. (<a href="http://nmmg.physics.auth.gr">http://nmmg.physics.auth.gr</a>)</p> <p>2) Electron Microscopy Laboratory, Physics Department A.U.Th. (<a href="http://elmiclab.physics.auth.gr">http://elmiclab.physics.auth.gr</a>)</p> <p><i>Peer-reviewed publications (number)</i></p> <ul style="list-style-type: none"> <li>• 103 in international journals</li> <li>• 26 in special volumes of international conferences</li> <li>• 2 review papers</li> <li>• 76 in special volumes of local conferences</li> </ul> <p><i>Cited by (number):</i> 850</p> <p><i>Member in Scientific Associations</i></p> <ul style="list-style-type: none"> <li>• Greek Physicists Union</li> <li>• Greek Electron Microscopy Society</li> <li>• Greek Society of Physics and Technology of Condensed Matter</li> <li>• European Microscopy Society</li> <li>• Micro &amp; Nano</li> </ul> <p><i>Reviewer in International Journals</i></p> <ul style="list-style-type: none"> <li>• Nanotechnology</li> <li>• Journal of Applied Physics</li> <li>• Applied Surface Science</li> <li>• Journal of Alloys and Compounds</li> <li>• Journal of Crystal Growth</li> <li>• Journal of Hazardous Materials</li> <li>• Journal of Non-Crystalline Solids</li> <li>• Materials Science and Engineering B</li> <li>• Physica E</li> <li>• Physica Status Solidi</li> </ul> <p><i>Member of Organizing Committees (International Conferences)</i></p> <ul style="list-style-type: none"> <li>• International Conference on Extended Defects in Semiconductors (EDS 2012), June 24-29, Thessaloniki, Greece</li> <li>• International Conference on Intergranular and Interphase Boundaries in Materials (IIB 2013), June 23-28, Chalkidiki, Greece</li> </ul> <p><i>Editor of Scientific Publications</i></p> <p>Guest Editor of The Journal of Materials Science, Proceedings of the IIB 2013 International Conference.</p>
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### **LIST OF IMPORTANT PUBLICATIONS (last 5 years)**

1. Structural anisotropic properties of a-plane GaN epilayers grown on r-plane sapphire by molecular beam epitaxy, A. Lotsari, Th. Kehagias, et al., JOURNAL OF APPLIED PHYSICS Volume: 115 Issue: 21 Article Number: 213506 Published: JUN 3 2014
2. Self-annihilation of inversion domains by high energy defects in III-Nitrides, T. Koukoula, J. Kioseoglou, Th. Kehagias, A. O. Ajagunna, Ph. Komninou, and A. Georgakilas, APPLIED PHYSICS LETTERS Volume: 104 Issue: 14 Article Number: 141914 Published: APR 11 2014
3. Nanostructure and strain in InGaN/GaN superlattices grown in GaN nanowires, Kehagias, Th.; Dimitrakopoulos, G. P.; Becker, P.; et al., NANOTECHNOLOGY Volume: 24 Issue: 43 Article Number: 435702 Published: NOV 1 2013
4. Growth mechanism and microstructure of low defect density InN (0001) In-face thin films on Si (111) substrates, Kehagias, Th.; Dimitrakopoulos, G. P.; Ajagunna, A. O.; et al., JOURNAL OF APPLIED PHYSICS Volume: 114 Issue: 16 Article Number: 163519 Published: OCT 28 2013
5. Nanostructural and electronic properties of polytypes in InN nanocolumns, Kioseoglou, J.; Koukoula, T.; Komninou, Ph; et al., JOURNAL OF APPLIED PHYSICS Volume: 114 Issue: 7 Article Number: 074312 Published: AUG 21 2013
6. InGaN/GaN quantum dots as optical probes for the electric field at the GaN/electrolyte interface, Teubert, J.; Koslowski, S.; Lippert, S.; et al., JOURNAL OF APPLIED PHYSICS Volume: 114 Issue: 7 Article Number: 074313 Published: AUG 21 2013
7. Optical properties of GaN-based nanowires containing a single Al<sub>0.14</sub>Ga<sub>0.86</sub>N/GaN quantum disc, Jacopin, G.; Rigutti, L.; Teubert, J.; et al., NANOTECHNOLOGY Volume: 24 Issue: 12 Article Number: 125201 Published: MAR 29 2013
8. Structure and strain state of polar and semipolar InGaN quantum dots, Koukoula, T.; Lotsari, A.; Kehagias, Th.; et al., APPLIED SURFACE SCIENCE Volume: 260 Pages: 7-12 Published: NOV 1 2012
9. Structural, static and dynamic magnetic properties of dextran coated gamma-Fe<sub>2</sub>O<sub>3</sub> nanoparticles studied by Fe-57 NMR, Mossbauer, TEM and magnetization measurements, Fardis, M.; Douvalis, A. P.; Tsitrouli, D.; et al., JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 24 Issue: 15 Article Number: 156001 Published: APR 18 2012
10. Morphology and origin of V-defects in semipolar (11-22) InGaN, Lotsari, A.; Das, A.; Kehagias, Th.; et al., JOURNAL OF CRYSTAL GROWTH Volume: 339 Issue: 1 Pages: 1-7 Published: JAN 15 2012
11. Optical Encoding by Plasmon-Based Patterning: Hard and Inorganic Materials Become Photosensitive, Siozios, A.; Koutsogeorgis, D. C.; Lidorikis, E.; et al., NANO LETTERS Volume: 12 Issue: 1 Pages: 259-263 Published: JAN 2012
12. Properties of GaN Nanowires Grown by Molecular Beam Epitaxy, Geelhaar, Lutz; Cheze, Caroline; Jenichen, Bernd; et al., IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS Volume: 17 Issue: 4 Pages: 878-888 Published: JUL-AUG 2011
13. Improved luminescence and thermal stability of semipolar (11-22) InGaN quantum dots, Das, A.; Dimitrakopoulos, G. P.; Kotsar, Y.; et al., APPLIED PHYSICS LETTERS Volume: 98 Issue: 20 Article Number: 201911 Published: MAY 16 2011
14. Internal quantum efficiency of III-nitride quantum dot superlattices grown by plasma-assisted molecular-beam epitaxy, Gacevic, Z.; Das, A.; Teubert, J.; et al., JOURNAL OF APPLIED PHYSICS Volume: 109 Issue: 10 Article Number: 103501 Published: MAY 15 2011
15. Piezoelectric InAs (211)B quantum dots grown by molecular beam epitaxy: Structural and optical properties, Dialynas, G. E.; Kalliakos, S.; Xenogianni, C.; Androulidaki, M.; Kehagias, T. et al., JOURNAL OF APPLIED PHYSICS Volume: 108 Issue: 10 Article Number: 103525 Published: NOV 15 2010
16. Direct comparison of catalyst-free and catalyst-induced GaN nanowires, Cheze, Caroline; Geelhaar, Lutz; Brandt, Oliver; Weber et al., NANO RESEARCH Volume: 3 Issue: 7 Pages: 528-538 Published: JUL 2010
17. Nanoscale indium variation along InGaN nanopillars grown on (111) Si substrates, Thomas Kehagias, PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES Volume: 42 Issue: 9 Pages: 2197-2202 Published: JUL 2010
18. Interfacial structure of semipolar AlN grown on m-plane sapphire by MBE, Kehagias, Th.; Lahourcade, L.; Lotsari, A.; Monroy, E.; Dimitrakopoulos, G. P.; Komninou, Ph., PHYSICA STATUS SOLIDI B Volume: 247 Issue: 7 Pages: 1637-1640 Published: JUL 2010