Short Curriculum Vitae: Ioannis Tsiaoussis

CURRENT POSITION	Permanent position as Research Teaching Fellow at the Aristotle University of Thessaloniki, Department of Physics, and I am involved as a Principal investigator in a new Project with catalytic materials.
UNDERGRADUATE EDUCATION	Diplom in Physics, Westfälische Universität Münster, Germany. Dipl. Thesis: "Surface study of Alkalihalogenen crystals using Atomic Force Microscope", received 1995
POST-GRADUATE EDUCATION	Ph.D. "Structural characterization of thin films, advanced materials with Microscopy Techniques: Pd /6H-SiC (0001), BN/ Si (100) and CeO2/Si (100)", Department of Physics, Aristotle University of Thessaloniki, Greece, received 2006 Dec. 2011/12 Post-doc position (High Resolution Transmission Electron Microscopy in nanostructured oxides by using a Jeol 2100 LaB6 equipped with EDX and a JEOL 2100F equipped with EDX, STEM and GIF) at the University de Bourgogne, Nano/SIOM Equipe, Dijon, in France.
PROFESSIONAL EXPERIENCE	**Research Teaching Fellow, Physics Department, Aristotle University Thessaloniki**, 54124 Thessaloniki, Greece (2014 – present) **Visiting Researcher, University de Bourgogne, Dijon, France**, Laboratoire Interdisciplinaire Carnot de Bourgogne (ICB), UMR 6303 CNRS, Université Bourgogne Franche-Comté, 9, Avenue Alain Savary, BP 47 870, F-21078 Dijon Cedex, France (2021) **Postdoctoral Researcher, CERTH, Center for Research&Technology HELLAS**, Electron Microscopy Laboratory, HREM, in situ Environmental TEM, Thessaloniki, Greece (2018 – 2020). **Visiting Researcher, Department of Materials Science, N.C.S.R. "Demokritos", Electron Microscopy and Nanomaterials Laboratory**, 153 10 Aghia Paraskevi, Attiki, Athens, (2017) **Visiting Researcher, University de Bourgogne, Dijon, France**, Laboratoire Interdisciplinaire Carnot de Bourgogne (ICB), UMR 6303 CNRS, Université Bourgogne Franche-Comté, 9, Avenue Alain Savary, BP 47 870, F-21078 Dijon Cedex, France (2017) **Visiting Researcher, University de Bourgogne, Dijon, France**, Laboratoire Interdisciplinaire Carnot de Bourgogne (ICB), UMR 6303 CNRS, Université Bourgogne Franche-Comté, 9, Avenue Alain Savary, BP 47 870, F-21078 Dijon Cedex, France (2015) **Visiting Researcher, University Duisburg-Esssen, Germany,** Faculty of Physics and Center for Nanointegration (CENIDE), University Duisburg–Essen, 47057 Duisburg, Germany (2014) **Researcher, Physics Department, Aristotle University Thessaloniki**, Electron Microscopy Laboratory, Thessaloniki, Greece (2012 – 2014) **Postdoctoral Researcher, University de Bourgogne, Dijon, France**, Laboratoire Interdisciplinaire Carnot de Bourgogne (ICB), UMR 6303 CNRS, Université Bourgogne Franche-Comté, 9, Avenue Alain Savary, BP 47 870, F-21078 Dijon Cedex, France (Dec. 2011-Dec.2012) **Visiting Researcher, Institute of Technology Genova, Italy**, Nanochemistry Department at the Italian Institute of Technology in Genova Italy (2010) **Postdoctoral Researcher, Physics Department, Aristotle University Thessaloniki**, Electron Microscopy Laboratory, Thessaloniki, Greece (2006 – 2011).

RESEARCH INTERESTS	**HRTEM, STEM/EDS, STEM/EELS, HAADF, NBD, EFTEM in materials science,** especially **in multilayer thin films, nanostructured materials and magnetic nanoparticles.** **Advanced Transmission Electron Microscopy techniques , 3D Tomography ,Holography, in Cs corrected microscopes, and related spectroscopy's (EELS, EDS) , Environmental TEM for nanotechnology and materials science.**
BIBLIOMETRIC DATA	So far, I have published about **71 scientific works** (including **71research papers** in peer-reviewed international journals, 1 Chapter, 3 Conference papers, such as Nanotechnology, Acta Materialia, Physics Review B, Journal of Nanoparticle Research, Physica Status Solidi, Journal Chemistry of Materials, Materials Science and Engineering B, Applied Catalysis A, worldwide (including attracting over **1070 citations and earning h-index=17, Scopus 11/2021), 1192 citations, h-index: 18** (Researchgate, 11/2021)
DISTINCTIONS AND SCHOLARSHIPS	**Scholarship from the Aristotle University Thessaloniki** for a short period **Visiting Researcher** at the **Universitè de Bourgogne, Dijon, France**, Laboratoire Interdisciplinaire Carnot de Bourgogne (ICB), working on a Microscope JEOL 2100 (FEG) HRTEM/ STEM in Dijon, France (2021-22) **Scientist Award 2018**, Aristotle University Thessaloniki, **Thessaloniki, Greece**, (30 January 2018) **IAAM Scientist Medal Award 2017**, European Advanced Materials Congress (EAMC2017), **Stockholm Sweden**, (23 August 2017) **Scholarship from the Aristotle University Thessaloniki** for a short period **Visiting Researcher** at the **Universitè de Bourgogne, Dijon, France**, Laboratoire Interdisciplinaire Carnot de Bourgogne (ICB), working on a Microscope JEOL 2100 (FEG) HRTEM/ STEM in Dijon, France (2014-15) **1st place on the competition of Applied Research and Innovation "Greece Innovates"** with the project entitled:"Development and industrial exploitation of a Fe-Mn adsorbent for simultaneous removal of As(III) and As(V) from potable water"(2011) **Scholarship from the Aristotle University Thessaloniki** for a short period **Visiting Researcher** at the **Italian Institute of Technology, Genova Italy,** working on an

	aberration- corrected Microscope JEOL 2200 FS (FEG) HRTEM/ STEM (2010)
REPRESENTATIVE PUBLICATIONS	Goula, M.A., Charisiou, N.D., Siakavelas, G., Tzounis, L., Tsiaoussis, I., Panagiotopoulou, P., Goula, G., Yentekakis, I.V. Syngas production via the biogas dry reforming reaction over Ni supported on zirconia modified with CeO2 or La2O3 catalysts (2017) International Journal of Hydrogen Energy, 42 (19), pp. 13724-13740. Cited 3 times. DOI: 10.1016/j.ijhydene.2016.11.196 Cacucci, A., Tsiaoussis, I., Potin, V., Imhoff, L., Martin, N., Nyberg, T. The interdependence of structural and electrical properties in TiO2/TiO/Ti periodic multilayers (2013) Acta Materialia, 61 (11), pp. 4215-4225. Cited 5 times.DOI: 10.1016/j.actamat.2013.03.047 Kostopoulou, A., Thétiot, F., Tsiaoussis, I., Androulidaki, M., Cozzoli, P.D., Lappas, A. Colloidal anisotropic ZnO-Fe@Fe xO y nanoarchitectures with interface-mediated exchange-bias and band-edge ultraviolet fluorescence (2012) Chemistry of Materials, 24 (14), pp. 2722-2732. Cited 21 times. DOI: 10.1021/cm3008182
RELEVANT RESEARCH PROJECTS	1. "Deployment of in situ optical Monitoring Techniques for tailoring thin film properties for Specific Advanced industrial applications", (Sept. 1997-March 2000). My involvement included Transmission Electron Microscopy observation in thin films. 2. "Correlation of structure and magnetism in novel nanoscale magnetic particles", (Feb. 2000- July 2004). My involvement included AFM, TEM observations on magnetic nanoparticles and patterned multilayers. 3. European network RTN Syntorbmagn: "Synthesis and magnetic properties of nanoparticles with a core-shell structure", (2004-2008). 4. Greek-France joint research and technology programme: "Interaction between metallic or heterostructural interfaces and study of defects in wide band gap semiconductors. (2006-2008) 5. European network RTN with the title: "Promoting and structuring a Multidisciplinary Academic-Industrial Network through the hetero-polytype growth, characterisation and applications of 3C-SiC on hexagonal substrates", (2007-2010). My involvement included AFM and HRTEM observations of 3C-SiC on hexagonal substrates. 6. The Marie-Curie ToK DEV program, entitled "Hybrid NanoCrystals Exhibiting Advanced and Tailored Properties" (NANOTAIL) IESL-FORTH Crete, Greece, (2009-2011) Short visits at the host Institute and its Italian partner lab (IIT, Genova).

7. National program of the Linköping Linnaeus Initiative LiLi-NFM in the area of Novel Functional Materials as well as the Swedish Government Strategic Research Area Grant in Materials Science (SFO-MatLiU) on Advanced Functional Materials (AFM) at Linköping University, (2009-2012).

8. High-Temperature Nanocomposite Materials for Thermoelectric Power Generation (THERMO-PRESS) Funding Agency: Cyprus Research Promotion Foundation, (2009-2013). This project aims to develop new thermoelectric materials with improved properties. The idea is based on the recent trends on thermoelectric where nano-features are expected to significantly increase figure-of-merit. Additionally, our approach is based on powder technology techniques, as advantageous techniques for industrial application through lower cost compared to other techniques in use for nanostructure fabrication, mass production, development of different shapes, etc.

9. Optimized Nanocomposite Thermoelectric Material Funding Agency: Cyprus Research Promotion Foundation, PENEK, (2009-2013). The aim of this project was the synthesis of nanocomposite materials with enhanced thermoelectric properties. The performance of thermoelectric materials is evaluated in terms of a dimensionless figure of merit ZT.

10. Marie-Curie ToK DEV program: "Hybrid NanoCrystals Exhibiting Advanced and Tailored Properties" (NANOTAIL). I became involved (2009 to 2011) in the training as well as the research aspects of the program for which the IESL-FORTH (Crete, Greece) is the host. In that respect, (i) I introduced members of the host team (namely, a PhD student and a post doctorate researcher, as well as a technician) in some practical and theoretical aspects of high-resolution electron microscopy (HRTEM). (ii) During short visits both at the host Institute and its Italian partner lab (IIT, Genova), I was engaged also in the science program by conducting HRTEM studies on the anisotropic nanocrystals (with room-temperature magneto-optical properties) made at IESL-FORTH.

11.National program of the Linköping Linnaeus Initiative LiLi-NFM in the area of Novel Functional Materials as well as the Swedish Government Strategic Research Area Grant in Materials Science (SFO-MatLiU) on Advanced Functional Materials (AFM) at Linköping University. (2009-2012). My involvement is to do HRTEM/STEM experiments on vertical ZnO nanorods, which have been grown by using Ag, as a catalyst.

12.IKYDA: Greek-German collaboration: Tuning magnetism in shape-controlled hybrid nanoparticles for enhanced hyperthermia efficiency and heat-activated drug delivery (2012-2014)

13.Development of a magnetic nanostructured material to remove hexavalent chromium from the water "ChroMagNano" ESPA (2007-13).

14. Action «Supporting Postdoctoral Researchers» of the Operational Program "Education and Lifelong Learning" (Action's Beneficiary:General Secretariat for Research and Technology), co-financed by the European Social Fund (ESF) and the Greek State (2013-14).

15. Hydrogen production via the reforming reaction using Ni catalysts based on alumina (Al2O3) or zirconia (ZrO2) dopped with ceria (CeO2) or lanthanum (La2O3), TEI Western Macedonia, Kozani, Greece (2015-16). My involvement was to do HRTEM/STEM experiments on those catalytic materials.