

PERSONAL INFORMATION	
SURNAME:	KALTSAS
NAME:	GRIGORIS
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Scopus ID:	7004156207
Googlescholar:	https://scholar.google.com/citations?user=jTiU7BEAAAAJ&hl=en
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ResearchGate	https://www.researchgate.net/profile/Grigoris-Kaltsas

CURRENT POSITION	
03.2018 - Today	Professor School of Engineering, Department of Electrical and Electronics Engineering, University of West Attica, Greece

PREVIOUS POSITIONS	
03.2012 - 03.2018	Professor School of Engineering, Department of Electronic Engineering, Technological Educational Institute of Athens, Greece
08.2007 - 03.2012	Associate Professor School of Engineering, Department of Electronic Engineering, Technological Educational Institute of Athens, Greece
03.2003 – 03.2012	Research Associate, Institute of Microelectronics, NCSR “Demokritos”, Greece
03.2003 – 08.2007	Assistant Professor School of Engineering, Department of Electronic Engineering, Technological Educational Institute of Athens, Greece
09.2001 – 03.2003	Laboratory Associate School of Engineering, Department of Electronic Engineering, Technological Educational Institute of Athens, Greece
07.2001 – 03.2003	Post Doctor Fellow Institute of Microelectronics, NCSR “Demokritos”, Greece
03.1994 – 07.2001	Research Associate, Institute of Microelectronics, NCSR “Demokritos”, Greece
01.1994 – 01.1999	Computer system administrator - Network administrator Geodynamic Institute, National Observatory of Athens, Greece
03.1993 – 09.1997	Ph.D. Fellow (scholarship recipient) Institute of Microelectronics, NCSR “Demokritos”, Greece

EDUCATION	
11.1993 - 03.1999	School of applied mathematical & physical sciences, National Technical University of Athens, Greece, Ph.D. in Microelectronics, Thesis title: “Integrated gas flow and gas sensors using porous silicon technology”
03.1993 – 06.1994	Institute of Microelectronics, NCSR “Demokritos”, Greece, MSc in Microelectronics
09.1988 – 03.1993	Physics Dept., University of Athens, Greece, B. Sc. in Physics

RESEARCH GRANTS			
Project Title	Funding source	Period	Role of the PI
CURE: “Constructing a ‘Eubiosis Reinstatement Therapy’ for Asthma”	FET-Horizon 2020, Grant No 767015	2017-2021	Research Collaborator

Development of flexible printed sensors with inkjet technology	Internal TEI-A Project	2015-2016	Coordinator
Design and fabrication of ecological envelop with embedded electronic device	Industrial project (funded by Greenmind)	2014-2015	Coordinator
“Integrating devices and materials: a challenge for new instrumentation in ICT (IDEM)”	COST Action IC1208	2013-2017	Member of management committee
“New possibilities for print media and packaging - combining print with digital”	COST Action FP1104	2012-2014	Member of management committee
DISFER: Distributed Sensor Systems for Emergency Response	THALES II, National project	2012-2016	Member of the main research team
Study, design and fabrication of a wireless transmission system for taxation data of cash machines via short message service (SMS)	Industrial project (funded by iTax)	2011	Member of the main research team
“Measurement of shear stress in the interface between fluid-solid through an innovative flexible thermal microsensor”	PEBE, National project	2010-2012	Member of the main research team
BiolISME: «Speedy system for sampling and detecting Listeria monocytogenes in agro-food and related European industries»	FP7	2009-2011	Member of the main research team
“Study and fabrication of a diphasic micro-cooler (DMC) using thermal integrated sensors (flow, pressure and temperature)”	Greece-France Bilateral Collaboration	2006-2008	Coordinator
“Development of an electromechanical device for controlling of physical parameters by combining microelectronics and PCB technology”	ARCHIMIDES II: National Project	2005-2007	Coordinator
“Integrated hybridic microfluidic multi-sensors devices in meso-scale”	PENED: National Project	2005-2008	Coordinator
“Development of extra sensitive liquid flow sensor”	Industrial project, funded by Unilever UK	2005-2006	Coordinator
“Study of an integrated thermal accelerometer”	Internal TEI-A Project	2005-2007	Coordinator
“Electromagnetic distortions and correlation with earthquakes”	ARCHIMIDES I, National project	2004-2006	Member of the main research team
“Automatic characterization, simulation and theoretical study of nano-structures and electrical devices”	ARCHIMIDES I, National project	2004-2006	Member of the main research team
SAFEGAS: “Sensor array for fast explosion proof gas monitoring”	EU-GROWTH, Contract No G1RD-CT-1999-00167	2000-2001	Research collaborator
PST-sensors: “Integrated gas flow and gas sensors by using porous silicon micromachining”	ESPRIT INCO No 950507	1997-1999	Research collaborator
“Real time study of seismic electric anisotropy and application in earthquakes prediction”	PENED, National project	1996-1998	Member of the main research team

“Development and Applications of High-Tc superconductors”	EPET II, National project	1995-1998	Research collaborator
“Satellite exchange of seismological data”	MEDNET network	1994-1996	Research collaborator
EOLIS: “Emission of Light in silicon”	ESPRIT BRA EOLIS No 7228	1992-1995	Research collaborator

Research Record

Scientific Publications:

Patents:	3	(2 PCTs)
International scientific Journals (ISI index):	79	
International Conference proceedings:	77	
National Conference proceedings:	17	

Citations:

Source: Scopus (<http://www.scopus.com>)

- At least 1.142 citations (h-index: 20), from which the 838 are hetero-citations, where self-citations of all authors have been excluded.

Source: Google Scholar (<https://scholar.google.gr>)

- At least 1.551 citations (h-index: 22, i10-index: 45).

Up to ten (10) representative publications, from the last ten (10) years

- [1] D. Bampakos, V. Belessi, R. Schelwald and Grigoris Kaltsas “Evaluation of Inkjet-Printed Reduced and Functionalized Water-Dispersible Graphene Oxide and Graphene on Polymer Substrate—Application to Printed Temperature Sensors” *Nanomaterials* 2021, 11(8), 2025; <https://doi.org/10.3390/nano11082025>
- [2] D. Bampakos, G. Kaltsas “A review on Humidity, Temperature and Strain Printed Sensors - Current trends and future perspectives” *Sensors*, 2021, 21(3), 739; <https://doi.org/10.3390/s21030739>
- [3] D. Bampakos, A. Moschos, T. Syrovoy, T. Koutsis, L. Syrova and G. Kaltsas “A fully printed flexible multidirectional thermal flow sensor” *Flexible and Printed Electronics*, 5 (2020) 035005; <https://doi.org/10.1088/2058-8585/aba6f4>
- [4] T. Koutsis, P. Pikasis, A. Psyrris, G. Kaltsas “A thermal flow sensor with a 3D printed housing for spirometry applications” *Microelectronic Engineering*, Volume 226, 1 April 2020, 111286; <https://doi.org/10.1016/j.mee.2020.111286>
- [5] D. Bampakos, C. Tsamis, G. Kaltsas “Multi-parameter paper sensor fabricated by inkjet-printed silver nanoparticle ink and PEDOT:PSS” *Microelectronic Engineering*, Volume 225, 15 March 2020, 111266; <https://doi.org/10.1016/j.mee.2020.111266>
- [6] S. M. Crowe, S. Kintzios, G. Kaltsas and C. S. Palmer “A Bioelectronic System to Measure the Glycolytic Metabolism of Activated CD4+ T Cells” *Biosensors* 2019, 9(1), 10; <https://doi.org/10.3390/bios9010010>
- [7] A. Moschos, I. Th. Famelis, D. Bampakos, D. Marinatos and G. Kaltsas “Design and Evaluation of a 2D Thermal Flow Sensor on Flexible Substrate” *Journal of Sensors*, Volume 2019 (2019), Article ID 8476489; <https://doi.org/10.1155/2019/8476489>
- [8] A. Moschos, T. Syrovoy, L. Syrova and G. Kaltsas «A screen-printed flexible flow sensor» *Measurement Science and Technology*, 28 (2017) 055105; <https://doi.org/10.1088/1361-6501/aa5fa0>
- [9] G. P. Patsis, K. Ninos, D. Mathioulakis, and G. Kaltsas, “Gas-mass-flow transfer-rate simulation and experimental evaluation in microchannels” *Microsystem Technologies*: Volume 19, Issue 12 (2013) 1919-1925; <https://doi.org/10.1007/s00542-013-1763-6>
- [10] G. P. Patsis, A. Petropoulos, G. Kaltsas, “Modelling and evaluation of a thermal microfluidic sensor fabricated on plastic substrate” *Microsystem Technologies*, 18 (3), (2012) 359-364; <https://doi.org/10.1007/s00542-011-1409-5>

Granted patents

International Patents

- “Integrated Gas Flow Sensor Based on Porous Silicon Micromachining”
Ref: PCT/GR97/00040, WIPO: 12/11/1998, European submission No 979133469, 7/11/1999
Inventors: A. G. Nassiopoulou, G. Kaltsas
- “Low Power Silicon Thermal Sensors and Microfluidic Devices based on the use of Porous Silicon Sealed Air Cavity technology or Microchannel technology”
Ref: PCT/GR03/00003, Inventors: A. G. Nassiopoulou, G. Kaltsas, D. N. Pagonis

National Patents

- “Flow meter and special designed packaging for use in medical equipment for breath control”
OBI Number: 1004237
Inventors: A. Nassiopoulou, G. Kaltsas

Invited presentations to international conferences and/or advanced schools

- Keynote Speaker – “2nd Global Summit on Nanotechnology and Materials Science – GSNMS-2023”, (to be held) Sept. 13-15, 2023, Rome, Italy
- Keynote Speaker - “Sensors 2022”, (to be held) Oct. 26-28, 2022, Athens, Greece
- “Flexible Electronics, Sensors and Systems”, 4th Scientific conference “Smart Packaging and Marketing”, (invited) Athens, Feb. 24, 2018
- “Sensors integration on Flexible Substrates”, Printing of Functional Applications Summer School, Swansea University, UK, July 11-15, 2016.
- “Flexible Electronics, Sensors and Systems”, Educational seminar on printed electronics and smart packaging, Athens, May 14, 2016
- “Sensors integration on Flexible Substrates”, Early Researcher Summer School “Science and engineering of printable electronics”, Swansea University, UK, July 13-17, 2015.
- “Sensors integration on Flexible Substrates”, Early Researcher Summer School “Science and engineering of printable electronics”, Swansea University, UK, July 9-13, 2014.
- “Flexible Electronics and Systems”, (invited) 1st Workshop on Printed Electronics, Athens, March 8, 2014
- “PCB-MEMS: Towards Flexible Sensors and Systems” within the frame of ERASMUS-IP: “Transparent Electronics: From Materials & Devices to Devices & Systems”, Summer School, Crete, 7-20 July 2013
- “A new technology which allows direct integration on flexible substrates – Application to microfluidics and various thermal sensors” (invited) 2nd REGMINA workshop on MEMS and NEMS technologies, Belgrade, Serbia, Apr 18-20, 2011.
- “Porous Silicon Micromachining”, (invited) 4th Int. Con. on Porous Semiconductors Science and Technology (PSST 2004), Cullera-Valencia, Spain, March 14-19, 2004
- “Gas and Gas Flow Silicon Integrated Sensors”, Series of (3) lectures at NCSR “Demokritos” summer school in the period: 1996-98
- “Microsystems – Integrated silicon sensors with applications in gas and gas flow sensors”, Series of (3) seminars in ICT, NCSR “Demokritos”, 2000-2002

Organization of international conferences

- The PI was the head of the organizing committee (Technical Program Chairman) of the international scientific conference “Eurosensors 2011”. The conference took place in September 2011 at the Megaron - The Athens Concert Hall. It was attended by more than 550 participants, coming from the major European and international universities, research centers and companies. The technical program consisted of 434 contributions originated from 46 countries.
- Member of the International Program Committee of the “Global Conference on Nanotechnology, Nanoscience and Nanomaterials (Nanotechmaterials-2023)”
- Member of the International Program Committee of the “Eurosensors” international conference (2012 – 2022)
- Member of the International Program Committee of the “Micro-and Nano-Engineering (MNE)” international conference (2008 – 2022)

- Member of the International Program Committee of the “ALLSENSORS” international conference (2018 – 2022)
- Member of the International Program Committee of the “SENSORCOMM” international conference (2018 – 2022)
- Member of the International Program Committee of the “HORA” international conference (2020)
- Member of the organizing committee of the conference “Porous Semiconductors Science and Technology (PSST 2004)”, Cullera-Valencia, Spain, March 2004
- Member of the organizing committee of the conference “Microelectronics Microsystems Nanotechnology (MMN 2004)”, Athens, Greece, Nov. 14-17, 2004
- Member of the organizing committee of the conference “Microelectronics Microsystems Nanotechnology” (MMN 2000)”, Athens, Greece, Nov. 20-22, 2000

Prizes/Awards/Academy memberships

- In 2004 the PI has been awarded from the minister of development by the General Secretariat for Research and Technology for the patent “Flow meter and special designed packaging for use in medical equipment for breath control”, for the contribution to the technological progress of the country.
- The PI was awarded with the “Tony B. Academic Travel Award for up-and-coming researchers who have demonstrated outstanding achievement in laboratory science and technology” in the SLAS 2012 conference (San Diego, CA, USA, Feb 2012).
- Since 2011 the PI has been nominated (till 2020) as the head of EMBIO Diagnostics Ltd (EMBIO) (<http://www.embiodiagnostics.com/>) Scientific Board, which is the world leader in cell-based biosensors and an expert in the dissemination of biosensor technology at a global scale.
- Member of the Editorial Board of MDPI – Sensors Journal.
- Guest Editor of MDPI Sensors Special Issue: "Advanced Devices and Materials for Printed Flexible Electronics"
- Section editor of MDPI – Micromachines Journal.
- Editor of Sensors and Actuators, A: Physical, Volume 186, Oct. 2012
- Editor of Sensors and Actuators, B: Chemical, 2012
- Editor of Elsevier-Procedia Engineering, Volume 25, 2011
- Editor of ISRN Electronics Journal (till 2020)
- Head of the Department of Electronic Engineering, of TEI of Athens (2013-2018)
- Director of the sector “Computational Systems and Control” of the Department of Electrical and Electronics Engineering of the University of West Attica (2018-2020)
- Director of the MSc program “Internet of Things and Intelligent Environments”, Department of Electrical and Electronics Engineering, University of West Attica (2018-today)
- Erasmus+ Departmental Coordinator [Dept. Electrical and Electronics Engineering, UniWA, (2018-2021), Dept. Electronic Engineering, TEI-A (2015-18)]
- Deputy Dean of the School of Technological Application of TEI-A (2016-17)
- Director of the sector “Computational Systems and Control” of the Department of Electronic Engineering of TEI-A (2010-13)