

CURRICULUM VITAE
Dimitrios Nikolaos Pagonis
Professor
University of West Attica

October 2024

Personal data

Name/Surname : Dimitrios Nikolaos Pagonis,
Professor, Department of Naval Architecture, School of Engineering,
University of West Attica
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Birth date : November 26, 1977
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Education

- 2004 *Ph.D. in the area of Microelectronics*, National and Kapodistrian University of Athens
The thesis was implemented at the Institute of Microelectronics of National Center of Scientific Research E.K.E.F.E. "Demokritos"
- 2001 *M.Sc. in Microelectronics*, National and Kapodistrian University of Athens
The thesis was implemented at the Institute of Microelectronics of National Center of Scientific Research E.K.E.F.E. "Demokritos"
- 1999 Master of Engineering in Electronics & Electrical Engineering , (*M.Eng. First Class*), Loughborough University, United Kingdom

Academic positions

- 05.2019 - today Professor in Sensors and Sensing Systems-Application in Marine Engineering
Dept. of Naval Architecture, School of Engineering, University of West Attica, Greece
- 05.2019 – 10.2024 Associate Professor in Sensors and Sensing Systems-Application in Marine Engineering
Dept. of Naval Architecture, School of Engineering, University of West Attica, Greece
- 03.2018 - 05.2019 Assistant Professor in Sensors and Sensing Systems-Application in Marine Engineering
Dept. of Naval Architecture, School of Engineering, University of West Attica, Greece
- 10.2014 - 03.2018 Assistant Professor in Sensors and Sensing Systems-Application in Marine Engineering
Dept. of Shipbuilding, School of Engineering, Technological and Educational Institution of Athens, Greece
- 03.2010 - 10.2014 Laboratory Professor
Dept. of Shipbuilding, School of Engineering, Technological and Educational Institution of Athens,
- 2004 – 2007 National Center of Scientific Research E.K.E.F.E. "Demokritos", Institute of Microelectronics,
Post-doctoral Scientist
- 2005 – 2006 Technological Educational Institute of Athens (TEI-A), Faculty of Technological Applications,
Department of Electronics, Research Fellow
- 1999 – 2004 National Center of Scientific Research E.K.E.F.E. "Demokritos", Institute of Microelectronics,
Research Associate

Teaching experience

- 2018 - today University of West Attica, Department of Naval Architecture, Greece
Postgraduate courses: *Modern ship measurement systems*, *Introduction to measuring systems-Automation technology (2017-2018)*

	Undergraduate courses: <i>Sensor technology, Introduction to Control systems, Ship electrical systems - Maritime communications and navigation equipment, Fundamentals of Electrical Engineering;</i>
2010 - 2018	Technological Education Institute of Athens, Department of Shipbuilding, Greece <i>Undergraduate courses: Sensor technology, Ship automation systems, Electrotechnology and Ship electrical installation systems, Introduction to Programming</i>
2004 - 2010	Technological Education Institute of Chalkida / Pireus Undergraduate courses: <i>Microprocessors II, Digital Systems I & II</i>

Non-academic positions

06/2013 – 06/2019	Ministry of Mercantile Shipping, Aegean & Islands Policy TKEP of Pireus / Saronikou, Marine Surveyor for small vessels in the area of telecommunications (GMDSS, VMS, etc).
08.2007 – 03.2010	Ministry of Mercantile Shipping, Aegean & Islands Policy Merchant ships inspection general directorate, Flag state Surveyor Responsibilities: plan approval (electrical, mechanical, MARPOL) and performing appropriate flag state surveys in the areas of electromechanical ship installations and MARPOL, according to class requirements and appropriate legislation (Solas, Eurosolas, Greek state legislation etc).

Academic international recognition, Memberships and Reviewing activities

- Author of 28 international journal papers (peer-reviewed), 31 international (peer-reviewed) conference papers, 3 national conference papers, one National and one PCT patent
- 583 citations on the published research results (h index = 13, Google Scholar - 10/2024)
- Guest editor for the Referred Journal Applied Sciences, MDPI, Section: Marine Science and Engineering, 5-year Impact Factor: 2.921, ISSN 2076-3417. Special Issues titles:
“Sensors and Measurement Systems for Marine Engineering Applications” (2022)
“Additive Manufacturing in Shipbuilding and Marine Industry” (2023)
- Member of editorial board for Nanoscience and Nanotechnology – Asia, Bentham Science Publishers, (2020 RG Journal Impact:0.76) (2017 – 2022)
- Member of editorial board for International Journal of Sensors and Sensor Networks (IJSSN), Science Publishing Group, New York, U.S.A (2017– 2022)
- Member of the *Steering Committee for Marine Education (ΣNE)* of the Ministry of Maritime Affairs and Insular Policy, Greece (2021-2022)
- Scientific committee member of the International Scientific Conference SEA-CONF, Constanta, Romania (2018 – 2021)
- Reviewer for various research journals and international conferences (2017 – 2022). Indicatively:
- Energies, ISSN 1996-1073, MDPI, 5-year Impact Factor: 3.333
- Micromachines, ISSN 2072-666X, MDPI, 5-year Impact Factor: 3.462
- Sensors, ISSN 1424-8220, MDPI, 5-year Impact Factor: 4.050
- Remote sensing, ISSN 2072-4292, MDPI, 5-year Impact Factor: 5.786
- Applied Sciences, ISSN 2076-3417, MDPI, 5-year Impact Factor: 2.921
- J. of Marine Science and Engineering, ISSN 2077-1312, MDPI, 5-year Impact Factor: 2.727
- Member of the *Steering Committee for the Maritime education, Ministry of Maritime Affairs and Insular Policy*, Greece (2021 – today)
- Member of the Greek Technical Chamber, Greece

- Member of Institute of Engineering and Technology, IET, UK

Research interests

- 3D/4D printing
- Measurement systems employing 3D/4D printing
- Measurement systems for marine engineering applications
- Screen-printing
- New microsystems technologies
- Microsystems modeling and simulation
- Sensors interfacing
- Sensors/actuators on flexible substrates
- Silicon micromachining

Participation in research programmes

Research proposals

- **“3D-Printed Cables with Advanced Fault Detection System - (Neuron)”**
Principal Investigator: D.N. Pagonis, Department of Naval Architecture, School of Engineering, University of West Attica, Duration: 36 months
The proposal was submitted to General Secretariat for Research and Innovation (GSRI) under «Ερευνώ-Καινοτομώ» action.
- **“Smart/Multi-component Marine Spare Parts employing 3D/4D Additive Manufacturing – [SmartSpareParts]”**
Principal Investigator: D.N. Pagonis, Department of Naval Architecture, School of Engineering, University of West Attica, Duration: 36 months
The proposal was submitted to Hellenic Foundation for Research and Innovation (H.F.R.I.) under Basic Research Financing Action.

Completed research programs

03/12/2012 - 30/11/2015	“LNG-COMSHIP” (total budget: 1.200.000 Euro), Technological Educational Institute of Athens (TEI-A), Naval Architecture Department
14/11/2011 – 30/12/2013	“Ολοκληρωμένο σύστημα συνεχούς παρακολούθησης εκπομπών ρύπων & βέλτιστης διαχείρισης των ενεργειακών λειτουργικών παραμέτρων πλοίων E-GREENSHIP” (total budget: 300.000 Euro), Technological Educational Institute of Athens (TEI-A), Naval Architecture Department
2005 – 2007	“Silicon based Nanodevices - SINANO” , National Center of Scientific Research E.K.E.F.E. “Demokritos”, Institute of Microelectronics, Post-doctoral scientist
2005 – 2006	“Development of an electromechanical device for physical parameters monitoring, combining Microelectronic and PCB technologies”, Technological Educational Institute of Athens (TEI-A), Faculty of Technological Applications, Department of Electronics, EPEAEK “ARCHIMEDES II”, Research Fellow
2005	“FORUM-FIB”, National Center of Scientific Research E.K.E.F.E. “Demokritos”, Institute of Microelectronics, Post-doctoral scientist
2003 – 2004	“Fabrication, organization and used of memories obtained by FIB” , National Center of Scientific Research E.K.E.F.E. “Demokritos”, Institute of Microelectronics, Research Associate
2002	“Gas flow sensor / THALIS”, National Center of Scientific Research E.K.E.F.E. “Demokritos”, Institute of Microelectronics, Research Associate
2000 – 2001	“Materials for gas sensor applications”, National Center of Scientific Research E.K.E.F.E. “Demokritos”, Institute of Microelectronics, Research Associate
1999	“Silicon Modules for integrated light engineering”, National Center of Scientific Research

List of publications

A. INTERNATIONAL JOURNALS (Peer-reviewed)

- [J-01] **D. Pagonis**, G. Kaltsas and A.G. Nassiopoulou, "Implantation masking technology for selective porous silicon formation", *Phys. Stat. Sol. (a)* 197 / 1 241-245 (2003) (<https://doi.org/10.1002/pssa.200306508>)
- [J-02] G. Kaltsas, **D.N. Pagonis**, A.G. Nassiopoulou, "Planar CMOS compatible process for the fabrication of buried microchannels in silicon, using porous-silicon technology", *IEEE J. of MEMS* 12 6, 863 – 872 (2003) (DOI: 10.1109/JMEMS.2003.820270)
- [J-03] **D.N. Pagonis**, A.G. Nassiopoulou and G. Kaltsas, "Porous silicon membranes over cavity for efficient local thermal isolation in Si thermal sensors", *J. of the Electrochemical Society*, 151, (8), H174 – H179 (2004) (<https://doi.org/10.1149/1.1764571>)
- [J-04] **D.N. Pagonis**, A.G. Nassiopoulou and G. Kaltsas, "Fabrication and testing of an integrated thermal flow sensor employing thermal isolation by a porous silicon membrane over an air cavity", *J. of Micromech. Microeng.* 14,1-5, 793-797 (2004) (<https://doi.org/10.1016/j.mee.2006.01.065>)
- [J-05] **D.N. Pagonis**, A.G. Nassiopoulou, "Free-Standing Macroporous Silicon Membranes Over a large Cavity for filtering and lab-on-chip applications", *Microelectronic Engineering* 83, 1421–1425 (2006) (<https://doi.org/10.1016/j.mee.2006.01.065>)
- [J-06] **D.N. Pagonis** and A. G. Nassiopoulou, "Formation of confined macroporous silicon membranes on pre-defined areas on the Si substrate", *phys. stat. sol. (a)* 204, 5, 1335–1339 (2007) (<https://doi.org/10.1002/pssa.200674328>)
- [J-07] **D.N. Pagonis**, A. Petropoulos, G. Kaltsas, A. G. Nassiopoulou and A. Tserepi, "Novel microfluidic flow sensor based on a microchannel capped by porous silicon", *phys. stat. sol. (a)* 204, 5, 1474–1479 (2007) (<https://doi.org/10.1002/pssa.200674389>)
- [J-08] G. Kaltsas, A. Petropoulos, K. Tsougeni, **D. N. Pagonis**, T. Speliotis, E. Gogolides and A. G. Nassiopoulou, "A novel microfabrication technology on organic substrates - Application to a thermal flow sensor", *J. of Physics : Conference Series* : 92 , 012046 (2007) (<https://iopscience.iop.org/article/10.1088/1742-6596/92/1/012046/pdf>)
- [J-09] H. Contopanagos, **D.N. Pagonis** and A.G. Nassiopoulou, "Broadband electrical characterization of macroporous silicon at microwave frequencies", *phys. stat. sol. (a)* 205, 11, 2548–2551 (2008) (<https://doi.org/10.1002/pssa.200780105>)
- [J-10] M. Theodoropoulou, **D.N. Pagonis**, A.G. Nassiopoulou, C.A. Krontiras and S.N. Georga, "Dielectric characterization of macroporous thick silicon films in the frequency range 1 Hz – 1MHz", *phys. stat. sol. (c)* 5, 12, 3597 – 3600 (2008) (<https://doi.org/10.1002/pssc.20078015>)
- [J-11] A. Petropoulos, **D.N. Pagonis**, G. Kaltsas "A multi-range PCB-MEMS microfluidic flow sensor with adjustable sensitivity", *Procedia Engineering* 25, 799 – 802 (2011) (<https://doi.org/10.1016/j.proeng.2011.12.196>)
- [J-12] **D.N. Pagonis**, A. Petropoulos, G. Kaltsas "A PCB integrated actuator employing water electrolysis for use in microfluidic systems", *Procedia Engineering* 25, 467 – 470 (2011) (<https://doi.org/10.1016/j.proeng.2011.12.116>)
- [J-13] **D.N. Pagonis**, A. Petropoulos, G. Kaltsas "A pumping actuator implemented on a PCB substrate by employing water electrolysis", *Microelectronic Engineering* 95, 65–70 (2012) (<https://doi.org/10.1016/j.mee.2012.02.006>)
- [J-14] A. Petropoulos, **D.N. Pagonis**, G. Kaltsas "Flexible PCB-MEMS flow sensor", *Procedia Engineering* 47, 236 – 239 (2012) (<https://doi.org/10.1016/j.proeng.2012.09.127>)
- [J-15] **D.-N. Pagonis**, G. Theotokatos, and G. Livanos, "Accurate Instantaneous Engine Speed Recording by Employing an Optical Measurement System - Application to a Typical Low Power Industrial Engine", *SAE Technical Paper* 2013-01-0304 (2013) (<https://doi.org/10.4271/2013-01-0304>.)
- [J-16] G. A. Livanos, G. Theotokatos, **D.N. Pagonis** "Techno-economic investigation of alternative propulsion plants for Ferries and RoRo ships", *Energy Conversion and Management* 79, 640–651 (2014) (<https://doi.org/10.1016/j.enconman.2013.12.050>)
- [J-17] C. Diakaki, N. Panagiotidou, A. Pouliezios, G. Kontes, G. Stavrakakis, K. Belibassakis, Th. Gerostathis, G.

- Livanos, **D.N. Pagonis**, G. Theotokatos, "A decision support system for the development of voyage and maintenance plans for ships", Int. J. Decision Support Systems, Vol. 1, No. 1, 42-71 (2015) (<http://dx.doi.org/10.1504/IJDSS.2015.067274>)
- [J-18] **D.N. Pagonis**, G. Livanos, G. Theotokatos, S. Peppas, N. Themelis, "Open-type ferry safety system design for using LNG fuel", Journal of Marine Science and Application 15 (4), 405-425 (2016) (<https://doi.org/10.1007/s11804-016-1386-2>)
- [J-19] **D.N. Pagonis**, A. Moschos, G. Kaltsas, "A PCB based engine air intake sensor – Application to a typical low power engine", Procedia Engineering, 168 59 – 62 (2016) (<https://doi.org/10.1016/j.proeng.2016.11.146>)
- [J-20] **D. -N. Pagonis**, G. Kaltsas, T. Koutsis and A. Pagonis, "A Novel Engine Air Intake Sensor based on 3D Printing and PCB technology", 2021 IEEE Sensors, 1-4 (2021) doi: 10.1109/SENSOR47087.2021.9639681 (<https://ieeexplore.ieee.org/document/9639681>)
- [J-21] **D.N. Pagonis**, V. Benaki, G. Kaltsas, A. Pagonis, "Design of a Mass Air Flow Sensor Employing Additive Manufacturing and Standard Airfoil Geometry", Appl. Sci. 11, Marine science and Engineering section, 11579 (2021) (<https://doi.org/10.3390/app112411579>)
- [J-22] A. Apostolakis, D. Barmpakos, A. Pilatis, G. Patsis, **D.N. Pagonis**, V. Belessi, G. Kaltsas, "Resistivity Study of Inkjet-Printed Structures and Electrical Interfacing on Flexible Substrates", Journal of Micro and Nano Engineering 15 100129 (2022) (<https://doi.org/10.1016/j.mne.2022.100129>)
- [J-23] A. Apostolakis, D. Barmpakos, A. Pilatis, V. Belessi, **D.N. Pagonis**, F. Jaber, K. Aidinis, G. Kaltsas, "Study of Single and Multipass f—rGO Inkjet—Printed Structures with Various Concentrations — Electrical and Thermal Evaluation", Sensors 23 2058 (2023) (<https://doi.org/10.3390/s23042058>)
- [J-24] **D.N. Pagonis**, I. Matsoukas, G. Kaltsas, A. Pilatis, "A Flow Sensing Device Formed Exclusively Employing Additive Manufacturing for On-site Fabrication Aboard a Ship", Sensors 23 20 8481 (2023) (<https://www.mdpi.com/1424-8220/23/20/8481>)
- [J-25] D. Barmpakos, A. Apostolakis, A. Pilatis, **D. N. Pagonis** and G. Kaltsas, "A fully printed sensor with optical readout for real-time flow monitoring", Flexible and Printed Electronics Flex. Print. Electron. 8 045011 (2023) (<http://dx.doi.org/10.1088/2058-8585/ad16ed>)
- [J-26] A.N. Pilatis, **D.N. Pagonis**, M. Serris, S. Peppas and G. Kaltsas, "A marine safety investigation - Assessment of ships accidents occurred during 1990-2020", Journal of Marine Science and Engineering 12(1):122 (2024) (<https://doi.org/10.3390/jmse12010122>)
- [J-27] **D.N. Pagonis**, "Sensors and Measurement Systems for Marine Engineering Applications", Appl. Sci. 14, Marine Engineering section, 3761 (2024) (Editorial, <https://www.mdpi.com/books/reprint/9531-sensors-and-measurement-systems-for-marine-engineering-applications>, <https://doi.org/10.3390/app14093761>)
- [J-28] T. Kouvatso, **D.N. Pagonis**, I. Iakovidis, G. Kaltsas, "Towards a 3D Printed Strain Sensor employing Additive Manufacturing Technology for the Marine Industry", Appl. Sci., Marine science and Engineering section, 14 15 6490 (2024) (<https://doi.org/10.3390/app14156490>)

B. INTERNATIONAL CONFERENCES (Peer-reviewed)

- [C-01] **D. Pagonis**, C. Tsamis and A.G. Nassiopoulou "Effectiveness of local thermal isolation by porous silicon in a silicon thermal sensor" , 1st conference on Microelectronics, Microsystems and Nanotechnology, N.C.S.R. "Demokritos", Nov. 2000
- [C-02] **D. Pagonis**, G. Kaltsas and A.G. Nassiopoulou "Implantation masking technology for selective porous silicon formation", 4th International conference on Porous Semiconductors, Science and Technology, Tenerife, Spain, Mars 2002
- [C-03] M. Kokonou, S. Lazarouk, A.G. Nassiopoulou, A. Travlos, G. Kaltsas, **D. Pagonis**, "High density of silicon nanocrystals of uniform sizes in porous alumina. Highly efficient photoluminescence". 4th International conference on Porous Semiconductors, Science and Technology, Tenerife, Spain, Mars 2002
- [C-04] **D.N. Pagonis**, G. Kaltsas and A.G. Nassiopoulou, "Local silicon thermal isolation technology based on porous silicon/cavity for applications in thermal sensors", European Materials Research Society, Strasbourg, France, June 2003
- [C-05] G. Kaltsas, **D.N. Pagonis**, A.G. Nassiopoulou, "Fabrication of a microfluidic flow sensor, based on a novel planar porous silicon technology for CMOS compatible microchannel formation", European Materials

Research Society, Strasbourg, France, June 2003

- [C-06] **D.N. Pagonis**, A.G. Nassiopoulou and G. Kaltsas, “A CMOS compatible process based on porous silicon/air cavity for application in thermal sensors and microfluidic devices”, 5th International conference on Porous Semiconductors, Science and Technology, Valencia, Spain, Mars 2004
- [C-07] **D.N. Pagonis**, J. Semai and A.G. Nassiopoulou, “Technology for the formation of Macroporous silicon over Cavity”, 31st International Conference on Micro- and Nano-Engineering, Vienna, Austria, Sept 2005
- [C-08] **D.N. Pagonis**, J. Semai and A.G. Nassiopoulou, “Free-Standing Macroporous Silicon Membranes Over Nanoporous/Cavity by Electrochemical Process”, 3rd International Symposium on Nanomanufacturing 2005, Limassol, Cyprus, November 2005
- [C-09] **D.N. Pagonis** and A.G. Nassiopoulou, “Local formation of suspended macroporous Si layers on a Si substrate”, 6th International conference on Porous Semiconductors, Science and Technology, Barcelona, Spain, Mars 2006
- [C-10] **D.N. Pagonis** and A.G. Nassiopoulou, “Novel microfluidic flow sensor fabricated using porous silicon technology”, 6th International conference on Porous Semiconductors, Science and Technology, Barcelona, Spain, Mars 2006
- [C-11] H. Contopanagos, **D. Pagonis**, A. G. Nassiopoulou, “Broadband Electrical characterization of Porous Silicon at Microwave Frequencies”, 3rd International Conf. "Micro & Nano" 2007 on Micro-Nanoelectronics, Nanotechnology MEMs, NCSR “Demokritos”, 18-21 November 2007
- [C-12] M. Theodoropoulou, **D. N. Pagonis**, A. G. Nassiopoulou, C. A. Krontiras, S. N. Georga, "Dielectric Characterization of Macroporous Silicon Thick Layers For Use As Capacitors In High Voltage Application", 3rd International Conference "Micro & Nano" 2007 on Micro-Nanoelectronics, Nanotechnology and MEMs, NCSR “Demokritos”, 18-21 November 2007
- [C-13] **D.N. Pagonis**, A. Petropoulos, G. Kaltsas, “A PCB integrated actuator employing water electrolysis for use in microfluidic systems”, Eurosensors XXV conference, Athens, Greece 4-7 September 2011
- [C-14] A. Petropoulos, **D.N. Pagonis**, G. Kaltsas, “A multi-range PCB-MEMS microfluidic flow sensor with adjustable sensitivity”, Eurosensors XXV conference, Athens, Greece 4-7 September 2011
- [C-15] **D.N. Pagonis**, G. Theotokatos, G. Livanos, “Determining instantaneous engine speed with high accuracy employing an optical measurement system”, 1st International MARINELIVE Conference on “All Electric Ship”, Athens, Greece June 3-5 2012
- [C-16] G. A. Livanos, G. Theotokatos, **D.N. Pagonis**, “Techno-economical investigation of alternative propulsion concepts of ferries operating in Mediterranean sea – Introduction of LNG as alternative fuel”, 3rd International Conference on Contemporary Problems of Thermal Engineering, Gliwice, Poland, 18-20 September 2012
- [C-17] **D.N. Pagonis**, G. Theotokatos, G. Livanos, “Accurate instantaneous engine speed recording by employing an optical measurement system- Application to a typical low power industrial engine”, SAE 2013 World Congress & Exhibition, Detroit, Michigan, USA, 16-18 April 2013
- [C-18] G. Theotokatos, G.A. Livanos, E. Strantzali, S. Dimitrellou, **D-N. Pagonis**, D. Peirounakis, P. Mizithras, “Computational investigation of LNG storage tank for open type ferries”, International Maritime Association of the Mediterranean, Pula, Croatia, 21-24, September 2015
- [C-19] G. Theotokatos, G.A. Livanos, S. Dimitrellou, E. Strantzali, **D.-N. Pagonis**, K. Politis, A. Theodoulides, D. Peirounakis, P. Mizithras, “Design of LNG storage and feeding system for an open type ferry”, International Maritime Association of the Mediterranean, Pula, Croatia, 21-24, September 2015
- [C-20] **D.N. Pagonis**, A. Moschos, G. Kaltsas, “A PCB based engine air intake sensor – Application to a typical low power engine”, Eurosensors XXX conference, Budapest, Hungary, 4-7 September 2016
- [C-21] S. Ch. Dimitrellou, E. Strantzali, **D. N. Pagonis** and G. A. Livanos, “Retrofit of a Ro-Ro passenger ferry to operate on LNG fuel: A greener and safe solution for short-sea transportation”, Sustainable and Safe Passenger Ships, Athens, Greece, 4th March 2020
- [C-22] **D.N. Pagonis**, G. Kaltsas, S. Peppas, “Low Cost Measurement System for the Precise Monitoring of the Instantaneous Rotational Speed of an Internal Combustion Engine”, ALLSENSORS 2020: The Fifth International Conference on Advances in Sensors, Actuators, Metering and Sensing, Valencia, Spain, 21-25 November, 2020

- [C-23] **D.N. Pagonis**, G. Kaltsas, T. Koutsis, A. Pagonis, “ A Novel Engine Air Intake Sensor Based on 3D Printing and PCB Technology”, IEEE Sensors Conference 2021, Virtual, 31 October–4 November 2021
- [C-24] A. Apostolakis, A. Pilatis, D. Barmpakos, V. Belessi, **D.N. Pagonis**, G. Kaltsas, “Effect of f-rGO ink concentration on single and multiple pass inkjet–printed structures – Resistance and temperature dependence study”, MNE-EUROSENSORS 2022, Leuven, Belgium, 19-23 September, 2022
- [C-25] **D.N. Pagonis**, I. Matsoukas, A. Pilatis, G. Kaltsas, “Design and Fabrication of a novel monolithic 3D printed air flow sensor”, MNE-EUROSENSORS 2022, Leuven, Belgium, 19-23 September, 2022
- [C-26] A. Pilatis, G. Karnavas, F. Skendaj, **D.N. Pagonis** and G. Kaltsas, “Temperature and Strain evaluation of screen-printed Ag and Carbon-based inks on flexible substrates”, Micro Nano 2022: 9th International Conference on Micro-Nanoelectronics, Nanotechnology and MEMS, Xanthi, Greece, 4-5 November, 2022
- [C-27] A. Apostolakis, D. Barmpakos, A. Pilatis, **D.N. Pagonis**, G. Kaltsas, “Flexible microheaters utilizing a combination of screen printing and inkjet printing technologies”, Micro Nano 2022: 9th International Conference on Micro-Nanoelectronics, Nanotechnology and MEMS, Xanthi, Greece, 4-5 November, 2022)
- [C-28] A. Pilatis, G. Cruz, F. Skendaj, M. Mesiri, D. Barmpakos, A. Apostolakis, D.N. Pagonis, G. Kaltsas, “Optical temperature sensing utilizing thermochromic inks – A fully printed approach”, 16th Int. Symposium on Flexible Organic Electronics (ISFOE23), Thessaloniki, Greece, 3-6 July, 2023
- [C-29] D. Barmpakos, A. Apostolakis, A. Pilatis, D.N. Pagonis, G.Kaltsas, “A Printed Optical Flow Sensor, Utilizing Thermochromic Ink”, 16th Int. Symposium on Flexible Organic Electronics (ISFOE23), Thessaloniki, Greece, 3-6 July, 2023
- [C-30] D.N. Pagonis, T. Kouvatso, I. Iakovidis, E. Strantzali, and G. Kaltsas, “Employing Additive Manufacturing to Promote Sustainability in Shipbuilding - A Paradigm of a 3D Printed Sensing Device”, 1st Int. Conference on Green Innovation and Circular Economy (GRICE), Athens, Greece, 20-23 October, 2024
- [C-31] E. Strantzali, G.A. Livanos, S. Dimitrellou, M. Vavouli, D.N. Pagonis, “Integrating Circular Economy Principles in Ship Recycling: A review of decision-making approaches”, 1st Int. Conference on Green Innovation and Circular Economy (GRICE), Athens, Greece, 20-23 October, 2024

C. NATIONAL CONFERENCES

- [C-32] **D.N. Pagonis**, G. Kaltsas, A.G. Nassiopoulou, “Τεχνολογία τοπικής θερμικής μόνωσης στο πυρίτιο για εφαρμογές σε μικρομηχανικούς αισθητήρες πυριτίου”, XVIII Pan-Hellenic conference on solid state physics – Material science, Heraklion Crete, September 2002
- [C-33] **D.N. Pagonis**, G. Kaltsas, A.G. Nassiopoulou, “Κατασκευή και χαρακτηρισμός ολοκληρωμένου θερμικού αισθητήρα ροής αερίου με βάση την τεχνολογία θερμικής μόνωσης πορώδους πυριτίου άνωθεν διάκενου” , XX Pan-Hellenic conference on solid state physics – Material science, Ioannina, September 2004
- [C-34] **D.N. Pagonis**, J. Semai and A.G. Nassiopoulou, “Macroporous silicon with regular arrays of vertical pores on p-type wafers”, XXI Pan-Hellenic conference on solid state physics – Material science, Leukosia, Cyprus, August 2005

D. PATENTS

- National Patent

[P-1a] “Ολοκληρωμένοι θερμικοί αισθητήρες πυριτίου χαμηλής ισχύος και διατάξεις μικρο-ροής βασισμένοι στη χρήση τεχνολογίας κοιλότητας αέρα σφραγισμένης με μεμβράνη πορώδους πυριτίου ή τεχνολογίας μικροκαναλιών”,

OBI Number: 1004106

Inventors: G. Kaltsas, D. Pagonis, A. Nassiopoulou

- International Patent

[P-1b] “Low Power Silicon Thermal Flow Sensors and Microfluidic Devices Using Porous Silicon Sealed Air Cavity or Microchannels”,

Publication Number: WO03062134 Date: 31-07-2003 Inventors: A. Nassiopoulou, G. Kaltsas, D. Pagonis

The above invention **has been granted in USA** (United States Patent US 20050072926 A1)