

Curriculum Vitae

Personal Information:

Name: Dermitzakis Aristeidis

Gender: Male

Date of Birth: 27/01/1983 - Place of Birth: Athens, Greece

Education:

- **PhD (Biomedical Engineering):**

Year: 2014

Institutions: European Postgraduate Course on Biomedical Engineering, Department of Medical Physics, Medical School, University of Patras, Greece, School of Electrical and Computer Engineering, National Technical University of Athens (NTUA), Greece, School of Mechanical Engineering, NTUA, Greece

Supervisor: Prof. N. Pallikarakis

Dissertation Title: **Simulation Studies on X-Ray imaging of Brain Parenchyma and Tumours**

- **M.Sc.: MSc in Biomedical Engineering**

Year: 2010

Institutions: European Postgraduate Course on Biomedical Engineering, Department of Medical Physics, Medical School, University of Patras, Greece, School of Electrical and Computer Engineering, National Technical University of Athens (NTUA), Greece, School of Mechanical Engineering, NTUA, Greece

Supervisor: Dr. Vassilis Sboros

Dissertation Title: **Acoustical Behaviour of Single Ultrasound Contrast Agent Microbubbles Conducted in:** Department of Cardiovascular Science, Faculty of Medical Physics, Edinburgh University, UK

- **Diploma: Electrical and Computer Engineering**

Year: 2007

Institutions: Department of Electrical and Computer Engineering, Polytechnical School, University of Patras, Greece

Supervisor: Prof. N. Pallikarakis and Prof. K. Filos

Dissertation Title: **Fuzzy Logic Controller for Weaning of Conscious Patients from Mechanical Ventilation**

Current Positions:

Duration: 13 years

Institutions: Biomedical Technology Unit – BITU- Department of Medical Physics, Medical School, University of Patras, Greece,

Role in Current Position: Project Co-Coordinator, Post doc researcher

Duration: 12 years

Institutions: Institute of Biomedical Technology (INBIT), Patras Science Park, Rio, Greece

Role in Current Position: **Chief Executive Officer**

Head of the Medical Equipment Management Unit

Duration: 5 years

Institutions: Hellenic Society of Biomedical Technology, Athens, Greece

Role in Current Position: **Secretary General**

Secretary of Clinical Engineering Chapter

Duration: 2 years

Institutions: School of Health Rehabilitation Sciences, University of Patras, Greece

Role in Current Position: Adjunct Lecturer

Previous Positions:

- 2020 - Now, **Program Leader** on the project, "*X-ray Image Processing and Diagnosis Techniques using Machine Learning and Sparse Representations: Application in Breast Imaging*", funded by Hellenic Foundation for Research & Innovation (H.F.R.I.) - 1st call for Researchers/Academic Staff
- 2020 - Now, **Program Leader** on the project, "*Deep learning algorithms for breast cancer early detection via X-ray imaging mammographies trained via big data of «ORMYLIA» Foundation medical center and simulations*", Funded by National Strategic Reference Framework (NSRF) - European Regional Development Fund (ERDF) - Operational Programme Competitiveness, Entrepreneurship and Innovation 2014-2020 (EPAnEK)
- 2015 – Now, **Leading** the design and upgrade of **INBIT's Medical Devices Management System, Web-Praxis**, in order to meet the growing needs concerning, nomenclature, UDI, vigilance and technology assessment of medical devices in modern health care systems
- 2015 – Now, **Supervising** the creation of **Medical Devices Inventories** for Hospitals and Health facilities in a National Level around Greece
- 2018-2019, **Co-Coordinator PostDoc Researcher** at Biomedical Technology Unit, Medical School, University of Patras. "*Phase Contrast Tomosynthesis for the detection of breast abnormalities*", co-financed by the European Union (European Social Fund – ESF) & Greek national
- 2015-2017 - **Post Doc Research fellow**, on the project "*Biomedical Engineering Education Tempus Initiative in Eastern Neighbouring Area*" (BME-ENA), in the framework of Tempus 2013
- 2015 - **Researcher**, on the project "*Complete Informative Infrastructures and Services for the Management and Evaluation of Biomedical Technology*", in the framework of National Strategic Reference Framework (NSRF)
- 2012-2015 - **Researcher**, on the project "*Quantitative inspection of complex composite aeronautic parts using advanced X-ray techniques*" (QUICOM), in the framework of FP7-Transport, FP7-AAT-2012-RTD-1
- 2012-2014 - **Researcher**, on the project "*Phase Contrast Imaging Simulation and Reconstruction Algorithms for Digital Breast Tomosynthesis*" (PISRA4B), implemented under the Act "Excellence" of the Operational Programme "Education and Lifelong Learning", European Social Fund-ESF and national resources.
- 2013-2014 - **PhD Candidate Grant**, in the project "*Medical Devices Vigilance and Patient Safety*" (MEDEVIPAS), under the framework of "Program for Enforcement of Interdisciplinary Research and Innovation" Thales, through the Operational Program "Education and Lifelong Learning" of the National Strategic Reference Framework (NSRF)
- 2012 - **PhD Candidate Grant**, from the Medical Devices Quality and Safety Testing Unit (MEDIP) of University of Patras
- 2008 - **Visiting Researcher Grant (6 months)**, research subject "**Medical Ultrasound Imaging**", Department of Cardiovascular Science, Faculty of Medical Physics, Edinburgh University, UK, within the framework of Erasmus Placement
- 2012-2015 - Elected Member of the Audit Committee of Hellenic Society of Biomedical Technology, Greece

Other Projects or Activities:

World Health Organization's (WHO) member of Clinical Engineering working group "**Medical Devices for COVID**" (2020)

Conduction of report for **World Health Organization (WHO)**, "**Rationalizing Distribution and Utilization of High Value Capital Medical Equipment in Greece**", in the framework of action "Policy Brief #17 - SCUC - Greece/Phase II | November 2017

World Health Organization (WHO), Preparing **specifications and consulting for MDs procurement, for the Bulgarian Ministry of Health and the Greek National Authority of Health Procurements (EKAPY)**

"Simulation and Tomosynthesis technologies regarding X-ray mammography and reconstruction algorithms, including but not limited to any software and relevant documents", **Sony Inc.**

"**Biomedical Engineering Education Tempus Initiative in Eastern Neighbouring Area**" (BME-ENA), in the framework of Tempus 2013, (2015-2016)

Awards:

2008 - 1st Award for the business plan: "**Hazardous Medical Waste Management of Greek Health Units**", Operational Program "Enterprise II", Department of Business Administration, University of Patras, Greece

Supervision Assistant of MSc students:

Number of theses: 6 MSc, Duration: 6months each

Subjects & Host Institutes:

"**Deep learning algorithms for Computer Assisted Diagnosis of breast cancer** ", European Postgraduate Course on Biomedical Engineering, Department of Medical Physics, Medical School, University of Patras, Greece (*Ongoing*)

"**3D Printing Phantoms for Breast X-ray Imaging**", European Postgraduate Course on Biomedical Engineering, Department of Medical Physics, Medical School, University of Patras, Greece (*Ongoing*)

"**Simulation of Ultrasound Brain Cancer Imaging**", European Postgraduate Course on Biomedical Engineering, Department of Medical Physics, Medical School, University of Patras, Greece

"**Super-Resolution Techniques for the Analysis of Ultrasound Signals**", Department of Cardiovascular Science, Faculty of Medical Physics, Edinburgh University, UK

"**Application of Sparse Representations Methodology in X-ray Imaging**", European Postgraduate Course on Biomedical Engineering, Department of Medical Physics, Medical School, University of Patras, Greece

"**Implementation of CUDA in Software for Medical Purpose**", Department of Computer Science and Technologies, Technical University of Varna, Bulgaria

Teaching Activities:

- 2019-2020 – Adjunct Lecturer, “**Health IT**”, Department of Nursing, School of Health Rehabilitation Sciences, University of Patras, Greece
- 2018-2021 - Course Lecturer, “**Ultrasound Medical Imaging**”, European Interuniversity Program of Postgraduate Studies on Biomedical Engineering, Department of Medical Physics, Medical School, University of Patras, Greece
- 2018-2021 - Course Lecturer, “**Biomedical Instrumentation**”, European Interuniversity Program of Postgraduate Studies on Biomedical Engineering, Department of Medical Physics, Medical School, University of Patras, Greece
- 2018-2021 – Invited Course Lecturer, “**Technology and standards of medical devices and data**”, Interuniversity Program of Postgraduate Studies on Medical Informatics, School of Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki
- 2009-2014 - Course Lecturer, “**Ultrasound Medical Imaging**”, European Postgraduate Course on Biomedical Engineering, Department of Medical Physics, Medical School, University of Patras, Greece
- 2010-2014 - Ancillary Assistant, Department of Medical Physics, Medical School, University of Patras, Greece
- 2010-2011 - Scientific and Laboratory Collaborator responsible for the courses: “**Introduction to Informatics**”, Department of Informatics and Means of Mass Communication, “**Data Bases**”, Department of Trade and Advertisement, “**E-Commerce and Data Bases**”, Department of Trade and Advertisement, Technological Educational Institute (T.E.I) of Patras, Greece

Major Collaborations:

- World Health Organization** (WHO), conduction of report “Rationalizing Distribution and Utilization of High Value Capital Medical Equipment in Greece”, in the framework of action “Policy Brief #17 - SCUC - Greece/Phase II | November 2017
- World Health Organization** (WHO), Preparing *specifications and consulting for MDs procurement*, for the *Bulgarian Ministry of Health*
- World Health Organization** (WHO), Preparing *specifications and consulting for MDs procurement*, for the *Greek National Authority of Health Procurements (EKAPY)*
- Sony Inc.**, in the framework of project “Simulation and Tomosynthesis technologies regarding X-ray mammography and reconstruction algorithms, including but not limited to any software and relevant documents”
- Assoc. Prof. Ivan Buliev, Technical University of Varna, in numerous projects e.g. “Quantitative inspection of complex composite aeronautic parts using advanced X-ray techniques” (QUICOM)
- Dr. Kristina Bliznakova, Senior Researcher at Technical University of Varna, in numerous projects e.g. “Phase Contrast Imaging Simulation and Reconstruction Algorithms for Digital Breast Tomosynthesis” (PISRA4B)
- Dr. Ulf Hassler, Head of Resarch Group in Fraunhofer Institute for Integrated Circuits IIS, in the framework the project “Quantitative inspection of complex composite aeronautic parts using advanced X-ray techniques” (QUICOM)
- Dr. Veronique Rebuffel, Atomic Energy and Alternative Energies Commission Gif-sur-Yvette, France, in the framework the project “Quantitative inspection of complex composite aeronautic parts using advanced X-ray techniques” (QUICOM)

Dr. Giuliana Tromba, Sincrotrone Trieste S.C.p.A, in the framework of experimental grant in the Synchrotron Facilities at Elettra, "Phase Contrast Breast Tomosynthesis"

Dr. Sboros, Associate Professor at Heriot Watt University, as visiting research with Erasmus Placements Grant

Organization of Conferences, Workshops, Events:

Member of the Medical Devices for COVID, Clinical Engineering working group of WHO (2020)

Member of the Organizing Committee of the Scientific WHO Seminar / Workshop Health Technology Assessment (HTA) of Medical devices (MDs) (2019).

Member of the Organizing Committee of the Scientific Workshop Breast Tomosynthesis (2015), Palace Hotel, Glyfada, Athens, Greece

Reviewer, Program Committee Member of the 6th Pan-Hellenic Conference on Biomedical Technology (ELEVIT) (2015), President Hotel, Athens, Greece

Member of the Organizing Committee of the Workshop on Medical Device Management and Certification of Clinical Engineering (2014), President Hotel, Athens, Greece

Reviewer, Program Committee Member of the 5th Pan-Hellenic Conference on Biomedical Technology (ELEVIT) (2013), President Hotel, Athens, Greece

Reviewer, Program Committee Member of the Mediterranean Conference on Medical and Biological Engineering and Computing (MEDICON) (2010), Porto Carras Resort, Chalkidiki, Greece

Profile:

Aris Dermitzakis holds a diploma in Electrical and Computer Engineering from the University of Patras, Greece, as well as an MSc Diploma and a PhD Degree in Biomedical Engineering (BME) from the Interdepartmental Postgraduate Programme on BME, co-organized by the Faculty of Medicine of the University of Patras, the Faculty of Mechanical Engineering and the Faculty of Electrical and Computer Engineering of the National Technical University of Athens.

He has been collaborating with the Biomedical Technology Unit since 2008. During this period he has been giving lectures on Medical Imaging and Biomedical Instrumentation and HTA, supervised 7 MSc Thesis (3 of them still ongoing), has gained experimental research grants for X-ray imaging projects and has participated or taken grant in numerous Greek and European research projects as a researcher. Amongst them, one can find a collaborating research program with Sony Inc., the H.F.R.i "X-ray Image Processing and Diagnosis Techniques using Machine Learning and Sparse Representations: Application in Breast Imaging", the NSRF "Deep learning algorithms for breast cancer early detection via X-ray imaging", the Aristeia "Phase Contrast Imaging Simulation and Reconstruction Algorithms for Digital Breast Tomosynthesis (PISRA4B)" project, the FP7 "Quantitative Inspection of Complex Composite Aeronautic Parts Using Advances X-ray techniques (QUICOM)" project, as well as two TEMPUS projects related with studies in the field of BME, the CRH-BME (Curricula Reformation and Harmonisation in the field of Biomedical Engineering) and the BME-ENA (Biomedical Engineering Education Tempus Initiative in Eastern Neighbouring Area). His research results have also been presented in more than 30 papers in peer-reviewed journals and/or in National and International peer reviewed Conferences. Additionally he has been patent holder for a novel X-ray Imaging Technique.

His research interests are related with Biomedical Engineering, Medical Imaging, X-Ray Imaging Simulation, AI & Deep Learning, Computer Assisted Diagnosis, 3D X-ray Image Reconstruction, Dual Energy X-Ray Imaging, X-ray Image Filtering, Image Enhancement, Design of Software and Physical X-ray Imaging Phantoms, 3D Printing using FDM and SLA Techniques, GPU Computing, Sparse Representations and Health Technology Assessment.

Through his research, he has gained research experience, established international collaborations, and developed managerial. Having gained great experience in collaborating with researchers from different fields. Expect for research activities he has participated in in educational international projects (CRE-BME, BME-ENA) aiming to reform and harmonize the curricula of BME studies in under and post graduate level and help in the establishment of new BME post graduate courses in Eastern Europe Neighboring Area.

Additionally, he has been collaborating with the Institute of Biomedical Technology since 2008 where currently is the CEO and Head of the Medical Technology Management Unit. During this period he has been collaborating with WHO in a series of Medical Devices, Health Technology Assessment, Procurement and Nomenclature projects, he has been supervising the creation of Medical Devices Inventories for Hospitals and Health facilities in a National Level around Greece, supervising installation and support of correct usage of INBIT's Medical Devices Management System, Web-Praxis and played a key role in the design and upgrade of the system. He has participated in a series of Electrical Safety tests for Medical Devices and infrastructures of hospitals in Greece, and has been a member of the organizing committee in a series of seminars, workshops and congresses organized by INBIT or Hellenic Society of Biomedical Technology.

Patents:

Title: System and Method of Material Identification and Visualization using Multi Energy X-Ray Imaging, *Inventors:* Dermitzakis Aristeidis, Nicolas Pallikarakis, Kristina Bliznakova, *International Patent Classification (IPC):* INV. A61B6/03 A61B6/00 G01N23/02, *Filing date:* Sep 9, 2014

Experimental Research Grants:

Year: 2015, *Title:* "Phase Contrast Breast Tomosynthesis", *Awarded Grant:* Beam Time in the Synchrotron Facilities at Elettra, 12 operational shifts on the SYRMEP beamline, *Proposer:* Aris Dermitzakis, *Participants:* Aris Dermitzakis, Kristina Bliznakova, Nicolas Pallikarakis, *Proposal Number:* 20145376, *Institution:* Elettra – Sincrotrone, Trieste S.C.p.A., Italy

Citations and Indexing:

Google Scholar: 70 citations, h-index 6
Scopus: 23 citations, h-index 3

Invited Lectures:

Dermitzakis A., "Clinical Engineering & Management of Medical Devices", Post Graduate Course on Extracorporeal Circulation Techniques - Technology of Heart Surgical Devices, Aristotle University of Thessaloniki, since 2018

Dermitzakis A., "Management of Medical Devices, the use of CMMS in Real Life", Post Graduate Course of Life Sciences Informatics (LSI) of the University of Patras, since 2020

Dermitzakis A, "Introduction to Biomedical Engineering", BEST Thessaloniki, 8 March 2018, Thessaloniki, Greece

Dermitzakis A, Medical Ultrasound Imaging, University of Zagreb Faculty of Electrical Engineering and Computing, May 2017, Zagreb, Croatia

Dermitzakis A, Choosing Equipment CR vs DR, in 17th Panhellenic Radiology Conference, Hellenic Radiological Society, 17-19 December 2010, Athens, Greece

Dermitzakis A, Choosing Equipment CR vs DR, in 4th Conference of Continuous Training in Radiology, Hellenic Professional Radiology Society, April 2009, Athens, Greece

Languages:

Language: English, Level: Proficiency

Language: French, Level: Level of Delf

Language: Spanish, Level: Primary Level

Publications and conferences:

D. Chatzakis, A. Dermitzakis, and N. Pallikarakis, ‘Deep Learning Methods for Tumor Segmentation and Detection in X-Ray Breast Imaging’, 2021, IFMBE Proceedings, vol 87. Springer, Accessed: Dec. 22, 2021. [Online]. Available: <http://repository.utm.md/handle/5014/18067>

S. Zisimopoulos, A. Dermitzakis, and N. Pallikarakis, ‘Distribution and Use of Mammography Units in Greece’, Hellenic Journal of Radiology, vol. 6, no. 4, Art. no. 4, Dec. 2021, doi: <http://dx.doi.org/10.36162/hjr.v6i4.455>

Valchinov E., Rotas K., Antoniou A., Dermitzakis A., Pallikarakis N. (2021) Development of a Reliable Spiroximeter for Covid-19 Patients’ Telemonitoring. In: Badnjevic A., Gurbeta Pokvić L. (eds) CMBEBIH 2021. CMBEBIH 2021. IFMBE Proceedings, vol 84. Springer, Cham. https://doi.org/10.1007/978-3-030-73909-6_9

Zisimopoulos, S., Dermitzakis, A., Roilos, C., Pallikarakis, N. (2022). Implementation of a Medical Equipment Inventory at a Regional Healthcare System in Greece. In: Tiginyanu, I., Sontea, V., Railean, S. (eds) 5th International Conference on Nanotechnologies and Biomedical Engineering. ICNBME 2021. IFMBE Proceedings, vol 87. Springer, Cham. https://doi.org/10.1007/978-3-030-92328-0_91

Dermitzakis A., Alexandropoulos C., Fermani M., Pallikarakis N. (2021) Biomedical Engineering Education in Europe: A 30 Years Review. In: Jarm T., Cvetkoska A., Mahnič-Kalamiza S., Miklavcic D. (eds) 8th European Medical and Biological Engineering Conference. EMBEC 2020. IFMBE Proceedings, vol 80. Springer, Cham. https://doi.org/10.1007/978-3-030-64610-3_24

Malliori A., Daskalaki A., Dermitzakis A. and Pallikarakis N., “Development of Physical Breast Phantoms for X-ray Imaging Employing 3D Printing Techniques”, The Open Medical Imaging Journal 2020, vol.12, pp. 1-10.

Dermitzakis, A. (2019). “Distribution and Utilisation of Radiotherapy Units in Greece”. Global Clinical Engineering Journal, 2(1), 28-35. <https://doi.org/10.31354/global>

Daskalaki A., Malliori A., Dermitzakis A., Pallikarakis N. (2020), “Novel Physical Heterogeneous Breast Phantom for X-Ray Phase Contrast Imaging”. In: Badnjevic A., Škrbić R., Gurbeta Pokvić L. (eds) IFMBE Proc. vol. 73, International Conference on Medical and Biological Engineering, 2019, pp. 105-110

Daskalaki A., Malliori A., Dermitzakis A. and Pallikarakis N., “Phase Contrast Imaging of Physical Complex Breast Phantom”, 8th Conference of the Hellenic Society of Biomedical Engineering (HSBE'19), 2019, Athens, Greece

- Valchinov E., Antoniou A., Rotas K., Dermitzakis A., Pallikarakis N., “*Mobile Individual Clinically Accurate Spirometer*”, 8th Conference of the Hellenic Society of Biomedical Engineering (HSBE'19), 2019, Athens, Greece
- World Health Organization (2018), WHO report “*Rationalizing Distribution and Utilization of High Value Capital Medical Equipment in Greece*”, in the framework of action “Policy Brief #17 - SCUC - Greece/Phase II
- K. Diamantis, A. Dermitzakis, J. R Hopgood, V. Sboros, “*Super-resolved Ultrasound Echo Spectra with Simultaneous Localization using Parametric Statistical Estimation*” in IEEE Access, DOI: 10.1109/ACCESS.2018.2807807
- A. Dermitzakis, N. Pallikarakis, “Material Identification and Visualization using Multi Energy X-Ray Imaging: Initial Results”, World Congress on Medical Physics & Biomedical Engineering, 3-8 June 2018, Prague, Czech Republic
- N. Pallikarakis, R. Magjarevic, L. Pecchia, and A. Dermitzakis, “*Biomedical Engineering Education: Need for Harmonisation*” in EMBEC & NBC 2017, Springer, Singapore, 2017, pp. 888–891, DOI: 10.1007/978-981-10-5122-7_222
- A. Dermitzakis and N. Pallikarakis, “*Line Contrast Figure of Merit for Dual Energy X-ray Image Quality Assessment: Initial Results*,” in EMBEC & NBC 2017, Springer, Singapore, 2017, pp. 591–594.
- N. Pallikarakis, P. Malataras, and A. Dermitzakis, “*Web-Based Medical Equipment Management Systems (MEMS)*” in Third WHO Global Forum on Medical Devices, Geneva, Switzerland, November 10-12 May, 2017
- P Malataras, Z Kamarianakis, A Dermitzakis, N Pallikarakis, “*Nationwide Medical Device inventory. What to focus on*”, IRTUM – Institutional Repository of the Technical University of Moldova, Tehnica UTM, 2016
- Dermitzakis A, Daskalaki A, Bliznakova K & Pallikarakis N. *New Line Contrast Figure of Merit for image quality assessment*, IFMBE Proc, 2015, Vol. 51, pp. 26-28,
- Dermitzakis A, Butler MB, Thomas DH, Sboros V, *The polydisperse acoustic signature of rigid microbubbles*, IEEE Proc Eng Med Biol Soc. 2015;2015:133-6.
- Dermitzakis A, Bliznakova K and Pallikarakis N, “*Brain parenchyma X-Ray Imaging Investigation*”, 6th Pan-Hellenic Conference on Biomedical Technology, ELEVIT 2015, Athens, Greece, 2015
- Dermitzakis A, Bliznakova K, and Pallikarakis N. “*Towards an X-Ray Phase Contrast Tomosynthesis system for Breast Imaging: Initial Simulation Results*”, 1st Global Conference on Biomedical Engineering – GCBME 2014, Tainan, Taiwan, October 9 -12, 2014.
- Dermitzakis A, Gatzounis G, Bliznakova K, *Brain Gray – White Matter Discrimination in Dual Energy CT Imaging: A Simulation Feasibility Study*, IFMBE Proc, 2014, Vol. 41, pp 495-498, DOI: 10.1007/978-3-319-00846-2_123
- Dermitzakis A, Bliznakova K, Kolev N, Enchev Y, Pallikarakis N., “*Brain Soft Tissue Visualization Study using Low Dose Dual Energy CT data: Preliminary Results*”, Medical Physics International Journal, Vol. 2, No. 1, pp. 288, 2014

- Bliznakova K, Dermitzakis A, Bliznakov Z, Kamarianakis Z, Buliev I, Pallikarakis N. *Modeling of small carbon fiber-reinforced polymers for X-ray imaging simulation*. *Journal of Composite Materials*, published online 7 September 2014, DOI: 10.1177/0021998314550219.
- Bliznakova K, Kamarianakis Z, Dermitzakis A, Bliznakov Z, Buliev I, Pallikarakis N. *Modelling of small CFRP aerostructure parts for X-ray imaging simulation*. *International Journal of Structural Integrity* 5(3):227-240, August 2014, DOI: 10.1108/IJSI-02-2014-0009
- Tigkos K, Bliznakova K, Dermitzakis A et al, *Simulation study for optimization of X-ray inspection setup applied to CFRP aerostructures*, Proceedings 5th Conference on Industrial Computed Tomography, iCT2014
- Butler MB, Dermitzakis A, Looney P, Thomas DH, Pye SD, Sboros V., *A setup for the assessment of the effect of tubular confinement on the acoustic response of microbubbles*, *Conf Proc IEEE Eng Med Biol Soc.* 2014;2014:242-5.
- E. Adamidi, E. Vlachos, A. Dermitzakis, K. Berberidis and N. Pallikarakis, *A scheme for X-ray medical image denoising using sparse representations*, 2013 IEEE 13th Int. Conf. on Bioinformatics and Bioengineering (BIBE), Chania, 2013, pp. 1-4.
- Bliznakova K, Dermitzakis A, Kamarianakis Z, Buliev I, Pallikarakis N, “*Modeling of small CFRP aerostructure parts for X-ray imaging simulation*”, 3rd International EASN Association Workshop on Aerostructures, Milano, Italy, October 9-11, 2013
- Dermitzakis A, Bliznakov Z, Buliev I and Bliznakova K, “*X-Ray Phase Contrast Imaging Simulation*”, 5th Pan-Hellenic Conference on Biomedical Technology – ELEVIT 2013, Athens, Greece, April 4-6, 2013
- Adamidi E, Vlachos E, Dermitzakis A and Berberidis K, “*X-RAY MEDICAL IMAGE DENOISING USING SPARSE REPRESENTATIONS*”, 2013, 5th Pan-Hellenic Conference on Biomedical Technology – ELEVIT 2013, Athens, Greece
- Dermitzakis A, Malliori A, Bliznakova K, Gatzounis G, Pallikarakis N, “*X-ray Brain Imaging: Simulation Study*”, World Congress on Medical Physics and Biomedical Engineering, WC2012, Beijing, China, IFMBE Proceedings Vol. 39, May 26-31, 2012.
- Malliori A, Bliznakova K, Dermitzakis A, Pallikarakis N., *Dual Energy Studies with Synchrotron Radiation: Preliminary Results for Low-Contrast Features*, European Medical Physics and Bioengineering Conference — EMPEC 2012, Sofia, Bulgaria
- Dermitzakis A, Malliori A, Bliznakova K, Gatzounis G, Pallikarakis N, “*Simulation of X-Ray Brain Imaging: Initial Results*”, European Medical Physics and Bioengineering Conference — EMPEC 2012, Sofia, Bulgaria, October 18-20, 2012.
- Malliori A, Bliznakova K, Dermitzakis A, Pallikarakis N, “*Evaluation of the Effect of Acquisition Parameters on Image Quality in Digital Breast Tomosynthesis: Simulation Studies*”, World Congress on Medical Physics and Biomedical Engineering — WC2012, Beijing, China, May 26-31, 2012, IFMBE Proceedings Vol. 39, p. 2211.
- Thomas DH, Butler MB, Dermitzakis A, et al. *The Acoustic Scatter from Single biSphere Microbubbles*. *Ultrasound Med Biol.* 36(11): 1884-1892, 2010.

Mairead B, Dermitzakis A, Thomas D, Looney P, Pye S, Sboros V, “*Single microbubble acoustics in small tubes*”, 20th International Congress on Acoustics, ICA 2010, 23-27 August, 2010, Sydney, Australia

Butler M, Dermitzakis A, Thomas D, Pye SD, Sboros V, “*Survival of Single Microbubbles Insonated in Solution and in Narrow Tubes*”, Ultrasonics Symposium (IUS), Rome, Italy, September 20-23, 2009, IEEE International Ultrasonics Symposium Proceedings, pp. 1259-1261.

Dermitzakis A, Buliev I, Filos K, “*Fuzzy Logic Controller for Weaning of Conscious Patients from Mechanical Ventilation: a Simulation Study*”, 6th European Symposium on Biomedical Engineering ESBME 2008, Chania, Crete Island, Greece, June 19-21, 2008.