

CURICULLUM VITAE

Personal information

Given Name: **Giannis**

Surname: **Zacharakis**

Date of Birth: May 3rd 1973

Nationality: Greek

Business Address: Laboratory for Biophotonics and Molecular Imaging, Institute of Electronic Structure and Laser, Foundation for Research and Technology – Hellas, N. Plastira 100, Vassilika Vouton, Heraklion Crete, GR – 70013, Greece

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Researcher ID page: <http://www.researcherid.com/rid/A-2544-2014>

Webpage: <https://www.iesl.forth.gr/en/research/biophotonics>, <http://ivil.iesl.forth.gr>

1. Education

Ph.D., Medical School, University of Crete, Thesis title: “*Time-resolved Studies of Light Propagation in Highly Scattering Media Applications in: Optical Characterization of Tissue (Optical Mammography) and Light Amplification*”, February 2002

B.Sc. in Physics, Department of Physics, University of Crete, 1997, Diploma Thesis: “*Monte Carlo Modeling of Light Transport through Turbid Media*”, Biomedical Applications Group, FORTH-IESL, (Oct. 1994-Oct. 1995)

Language Skills

Greek: Mother language

English: Fluently spoken and written

German: Moderate spoken and written (Zertifikat Deutsch als Fremdsprache- Goethe Intstitut)

2. Professional experience

- **Principal Researcher**, (Research Associated Professor) Optical Biomedical Imaging, FORTH – IESL (Jan 2017 – present)
- **Head**, Laboratory for Biophotonics and Molecular Imaging (LBMI), FORTH – IESL (Jan 2017 – present)
- **Group leader**, In vivo Imaging Lab (IVIL), FORTH – IESL (Jan 2013 – Dec 2016)
- **Research Scientist** (Grade B since December 2013), FORTH – IESL, (Dec 2009 – Dec 2016)
- **Research Associate**, In Vivo Imaging Group, FORTH – IESL (Jul. 2004 – Nov. 2009)
- **Managing Board Member**, European Molecular Imaging Doctorate School (EMIDS), University of Crete (Oct. 2012 – present)
- **Managing Board Member**, European Master in Molecular Imaging (EMMI), University of Crete (Jan. 2007 – Dec. 2011)
- **Visiting Lecturer**, Technical Education Institute of Crete, teaching of undergraduate course “Machine Vision” and “Multimedia Applications in Medicine”, (Oct 2009 – Feb 2011)
- **Visiting Lecturer**, Optics and Vision graduate program, University of Crete, teaching of graduate course “Modern Optics (Oct 2005 – Jan 2009)
- **Research Fellow in Radiology**, Laboratory for Bio-optics and Molecular Imaging, Center for Molecular Imaging Research, Massachusetts General Hospital and Harvard University, Boston USA (Feb. 2003 – Sep. 2004)

- **Post-doctoral Fellow**, Biomedical Applications Group, FORTH-IESL (Feb. 2002 – Jan 2003)
- **Laboratory Assistant**, Biomedical Applications Group, FORTH- IESL (Sept. 1996 – Dec 1996)

3. Awards /Prizes / Distinctions

- **Congress President**, European Molecular Imaging Meeting, 25-28 August 2020
- **President** of the European Society for Molecular Imaging (ESMI) (March 2019 – March 2020)
- **Vice President** of the European Society for Molecular Imaging (ESMI) (March 2018 – March 2019)
- **Elected Member** (2 terms) of the Council of the European Society for Molecular Imaging (ESMI) (Sep. 2014 – March 2018)
- **1st Prize** on Science on Stage Europe Competition, “Optical Projection CT Scanner with Lego and Arduino – Gummy Bear Tomography”, Debrecen, Hungary 2017
- **1st Prize** on the 9th Hellenic Competition on Experiments and Constructions “Optical CT with Lego and Arduino”, Athens, Greece 2016
- **Best poster presentation**, European Society for Molecular Imaging Meeting, Tübingen, Germany (March 2015)
- **Ten best Greek startup ideas**, SFEE Innovation Project 2.0, proposal “WatchAngel”, (Oct 2014)
- **Best poster presentation**, Society for Molecular Imaging Annual Meeting, Cologne, Germany (Sep 2005)
- **Best poster presentation**, Society for Molecular Imaging Annual Meeting, San Francisco, USA (Aug 2003)
- **Post-doctoral Fellowship**, Laboratory for Bio-Optics and Molecular Imaging, Center for Molecular Imaging Research, Massachusetts General Hospital and Harvard Medical School (Feb. 2003 – Sept. 2004)
- **Post-doctoral Fellowship**, Biomedical Applications Group, FORTH – IESL (Feb. 2002 – Jan. 2003)
- **Best poster presentation** in Biomedicine, Fifth International Conference on Optics Within Life Sciences (OWLS V) Heraklion, Crete Greece (Oct 1998)
- **Training Fellowship**, Biomedical Applications Group, FORTH- IESL (1997 – 2001)
- **Erasmus Undergraduate Scholarship**, Atomic Hydrogen Group, Van der Waals – Zeeman Laboratory, University of Amsterdam (Oct. 1995 - Jun.1996)
- **Undergraduate Scholarship**, Hellenic Foundation for Academic Scholarships (1992)

4. Achievements

- **62 articles** in international refereed journals, **1** editorial article, **2** book chapter and **48** articles in peer reviewed conference proceedings.
- **1728 citations**, **h = 19** and **i10 = 42** (data from Google Scholar, April 2021)
- **1 International Patent** (Patent No: WO2005089637) and **1 Utility model certificate** (20150200130)
- **19 Invited Talks** in International conferences, **12 Invited Lectures** in International Summer Schools, **9 Invited Talks** in Academic Institutions
- **Principal and Co-Investigator** in 22 National and International Research Grants
- **Organizer, Scientific Coordinator and Chair** of 8 International Summer Schools, and Workshops

- **Reviewer** at the following journals: Scientific Reports, PLOSOne, Oncotarget, Journal of Biomedical Optics, Physics in Medicine and Biology, Medical Physics, Optics Express, Optics Letters, Biomedical Optics Express, Applied Optics and JOSA A.
- **Reviewer** for Research proposals for the Deutsche Forschungsgemeinschaft (DFG) and the Research Foundation Flanders (FWO)
- **Supervision** of 6 PhD, 8 MSc and 16 BSc theses.

5. Teaching and supervision experience

- **Course Moderator**, Advanced Microscopy module, Biomedical Engineering MSc Program, University of Crete, Technical University of Crete and FORTH
- **Chair of the Organizing Committee**, “Big data in Imaging – acquisition and extraction of knowledge”, TOPIM-TECH summer school of the European Society for Molecular Imaging (ESMI), Chania Crete (July 9th – 14th 2018)
- **Chair of the Organizing Committee**, “Optical imaging – from molecules to humans”, TOPIM-TECH summer school of the European Society for Molecular Imaging (ESMI), Chania Crete (July 10th – 15th 2017)
- **Chair of the Organizing Committee**, “Multiparametric imaging”, TOPIM-TECH summer school of the European Society for Molecular Imaging (ESMI), Chania Crete (July 10th – 15th 2016)
- **Organizer and Scientific Coordinator**, “Biophotonics and Molecular Imaging” Summer School, University of Crete (July 28th – Aug 1st 2014 and July 27th – 31st 2015)
- **Organizer and Scientific Coordinator**, Life Long Learning Intensive Program on Optical Imaging, European Master in Molecular Imaging (EMMI), University of Crete (Jan. 2007 – 2012)
- **Organizer and Scientific Coordinator**, Erasmus Intensive Program on Optical Imaging, University of Crete (2009 – 2012)
- **Lecturer**, undergraduate course “Machine Vision”, Technical Education Institute of Crete (Oct. 2010 – Feb. 2011)
- **Lecturer**, undergraduate course “Multimedia Applications in Medicine”, Technical Education Institute of Crete (Oct. 2009 – Feb. 2010)
- **Lecturer**, graduate course “Modern Optics” – Optics and Vision graduate program, University of Crete (Oct. 2005 – Jan. 2009)
- **Supervisor**, undergraduate and graduate students, In Vivo Imaging Group, FORTH – IESL (Jul. 2004 – present)
- **Supervisor**, undergraduate and graduate students, Laboratory for Bio-Optics and Molecular Imaging, Center for Molecular Imaging Research, Massachusetts General Hospital and Harvard Medical School (Feb. 2003 – Sept. 2004)
- **Supervisor**, undergraduate students, Biomedical Applications Group, FORTH- IESL (May 1998- Jan. 2003)

2013 – 2020 Three (3) Post Docs, Six (6) PhD, Eight (8) MSc and Sixteen 16 BSc Theses, University of Crete, Greece

Master Thesis: Marsida Bekolari, “Development of an advanced system for in-vivo Mouse Optical Neuro-imaging Applications”, University of Crete February 2015.

Master Thesis: Georgia Giasafaki, “Development and application of phase sensitive algorithms for improving three dimensional imaging through turbid media”, University of Crete July 2016

Master Thesis: Stella Avtzi, “Structural evaluation of animal ocular models by means of Photoacoustic Microscopy”, University of Crete November 2016

Master Thesis: Ilias Kyparisidis-Kokkinidis, “Development, realization and assessment of appropriate algorithms for 3D image fusion in Light Sheet Microscopy”, University of Crete, May 2016

Master Thesis: Krystalia Lemonaki, “Exploitation of non-linear effects for the discrimination of absorbers in optical resolution photoacoustic microscopy using single wavelength excitation”, University of Crete, November 2017

Master Thesis: Margarita Tsagkaraki, “Optical resolution photoacoustic microscopy for the quantitative analysis of contact lenses”, University of Crete, March 2017

Master Thesis: Maria Kefalogianni, “Developing and optimizing light sheet microscopy using opaque lenses and wave front shaping”, University of Crete October 2018

Master Thesis: Maria Tampakaki, “Image guided brain cancer modeling The Role of Promyelocytic Leukemia Protein in Glioblastoma Physiology”, Faculty of Medicine, University of Crete October 2019

PhD Thesis: Diego Di Battista, “Ad hoc control of scattering for adaptive opaque lenses”, Department of Material Science, University of Crete 2016

PhD Thesis: Daniele Ancora, “Light Propagation in Extreme Conditions: The role of Optically Clear Tissues and Scattering Layers in Optical Biomedical Imaging” University of Crete, May 2017

PhD Thesis: Mariam-Eleni Oraiopoulou, “In silico tumor growth validation based on human brain cancer models”, Faculty of Medicine, University of Crete November 2018

Currently supervising five (5) undergraduate students, four (4) graduate at Master level and four (4) graduate students at the doctorate level.

6. Research interests

- Novel key enabling photonic technologies for Medical and Biological Imaging
- Study and active control of light interaction with complex media (e.g. biological tissue)
- New fast multiscale and multiparametric algorithms for light propagation modeling and image reconstruction
- Smart hybrid optical and optoacoustic imaging systems and methods for diagnostic and theranostic applications
- 3D growth and 3D printing of realistic biomimetic live tissue samples (e.g. cancer cell spheroids)
- Holistic, multiscale study of live biological specimens from the molecule to cell, system and organism level

7. Participation in Research Grants

PAVE-94: "Development of a prototype infrared laser based device for optical tomography" 1996-1998

BIOMED II: "Laser Aided Investigations in Cardiology (LAIC)" 1996-1999

YPER '98: “Optical Tomography of human breast by ultrafast laser sources” 1998-2000

PENED 99: "Myocardial tissue identification via LIFS" 1999-2000

Quality of Life: “Thematic network MEDPHOT: Photonics in Medicine” 2001-2003

Quality of Life: “RTD Project OPTIMAMM: Optical mammography” 2001-2003

National Institute of Health Grant: RO1 EB 000750-1

National Institute of Health Grant: R33 CA 91807

E.U. Integrated Project: "Molecular Imaging" LSHG-CT-2003-503259

E.U. STREP: "TRANS-REG" 2004 – 2006

E.U. Small Scale Collaborative Project : “FMT-XCT”, Scientific Coordinator

FP7 E.U. Grant LASERLAB III, Coordination of JRA “BIOPTICAL”.

Interreg Greece-Cyprus Grant, “YPERTHEN, Clinical Research Infrastructure and methodology for personalized tumour diagnosis and therapy”, in collaboration with the Computational Medicine Lab of ICS, Budget for IVIL: 75,000 Euros, Duration June 2011 – Nov 2013.

ESPA, "Supporting Postdoctoral Researchers" Grant, “Neureka!” for Athanasios Zacharopoulos, Scientific Advisor: Jorge Ripoll, Budget: 150,000, Duration: April 2012 – March 2015.

ESPA, Excellence Grant, “Skin-DOCTOR”, Acting Scientific coordinator: Giannis Zacharakis, Budget: 175,000 Euros, Duration: Oct 2012 – Sep 2015.

ESPA, Kripis Grant – “BIOSYS”, Budget for IVIL: 25,000 Euros, Duration: ending July 2015

ESPA, Kripis Grant - “Quality of Life”, Budget for IVIL: 35,000 Euros, Duration: ending July 2015.

ESPA, Thalys Grant “Minos”, with Biomedical Sciences Research Centre Alexander Fleming, Scientific coordinator of WP2, Budget for IVIL: 120,000 Euros, Duration: Jan 2013 - Dec 2015.

FP7 E.U. ITN “OILTEBIA”, Scientific Coordinator for FORTH and Training Coordinator for the Consortium: Giannis Zacharakis, Budget: 490,000 Euros, Duration: April 2013 – March 2017.

ESPA, Greek Infrastructure Grant “Bioimaging-GR”, Scientific Coordinator for FORTH, budget 1.3MEuros, Duration: November 2017 – October 2020

ESPA, Operational Programme Competitiveness, Entrepreneurship and Innovation 2014-2020 (EPAnEK) “VITAD”, Scientific Coordinator for IESL, budget 229Keuros, Duration: November 2018 – October 2020

ESPA, Operational Programme Competitiveness, Entrepreneurship and Innovation 2014-2020 (EPAnEK) “INNOVA-PROTECT”, Scientific Coordinator for IESL, budget 175Keuros, Duration: July 2018 – June 2021

H2020-FETOPEN-2018-2019-2020-01, “Dynamic”, Scientific Coordinator for IESL, budget 605KEuros, duration Jan 2020 – Dec 2023

FORTH Synergy, “ANILIMO”, Scientific Coordinator for IESL, budget 40KEuros, duration Jul 2020 – Mar 2023

H2020 FET Innovation Launchpad, “Wavelens”, Scientific Coordinator for IESL, budget 100KEuros, duration May 2021 – Jan 2023

Educational Projects:

European Molecular Imaging Doctorate School (EMIDS), University of Crete. Coordinator: J. Papamatheakis, Scientific coordinator: G. Zacharakis, Budget for UoC: 35,000 Euros, Duration: Oct 2012 – Oct 2014

8. Invited talks and lectures

1. **G. Zacharakis**, “*Multispectral imaging with fluorescence tomography data*”, Invited Oral Presentation, LIMAT Workshop, Gstaad, Switzerland (2008)
2. **G. Zacharakis**, “*Multicolor fluorescence molecular tomography*”, Invited Lecture, Nano2Life Conference Meeting, Heraklion, Greece (2008)
3. **G. Zacharakis**, R. Favicchio, C. Mamalaki, J. Papamatheakis and Jorge Ripoll, “*Integrated technologies for molecular imaging*”, Invited Lecture, LASERLAB Meeting, Heraklion, Greece, (2008)
4. **G. Zacharakis**, G. Spiliopoulos, R. Favicchio, J. Ripoll, A. Kokolakis, K. Lasithiotakis, K. Krasagakis, E. Giannikaki, A. Toska, “*Characterization of biopsy samples with Optical Computed Tomography*”, Invited Lecture, International Workshop on Biophotonics, Parma, Italy (2011)

5. Invited Lecturer, Life Long Learning Intensive Program “Molecular Imaging: industrial context, state of the art, multimodal imaging”, University Paris 11, 2009, 2010 and 2011, Title: “Introduction to Optical Imaging”
6. Invited Lecturer, Life Long Learning Intensive Program “Positron Emission Tomography”, University Paris 11, 2009, 2010 and 2011, Title: “Optical vs. PET Imaging”
7. Invited Lecturer, Life Long Learning Intensive Program “Design and Synthesis of Imaging Probes” University of Turin, 2010, 2011, 2012 and 2013, Title: “Optical Imaging Probes”.
8. **G. Zacharakis**, “*Biophotonics in the era of molecular imaging*”, Invited Talk, BioPhotonics and Imaging Conference (BIOPIC), Dublin, Ireland, March 25 – 27, 2013
9. **G. Zacharakis**, “*Novel photonic methods in molecular imaging*”, Overview Talk (Invited), European Molecular Imaging Meeting (EMIM 2013), Torino Italy, May 26-28, 2013
10. **G. Zacharakis**, “*Novel photonic methods for molecular imaging*”, Invited Talk, Crete Workshop on Biophotonics, Hersonissos Crete, October 3-4, 2013
11. **G. Zacharakis**, “*Novel photonic methods for in vivo molecular imaging*”, Summer school “Waves and disorder”, Ecole thematique du CNRS, The Institute of Scientific Studies of Cargese (Corsica, France), July 2014
12. **G. Zacharakis**, “*Optical Imaging and Microscopy*”, Invited talk, PRIMA IV Educational Workshop, World Molecular Imaging Congress, Seoul Korea, September 14 – 20, 2014
13. **G. Zacharakis**, “*Photonic Technologies for in vivo molecular imaging*”, Invited Talk, 7th Imaging in Drug Discovery Conference, Dublin Ireland, October 7-8, 2014
14. **G. Zacharakis**, “*Biophotonics and Molecular Imaging: Modern tools and Emerging Trends*”, Invited Talk, Bracco Imaging Workshop, Ivrea Italy, October 20, 2014
15. **G. Zacharakis**, “*Biophotonics and Molecular Imaging: looking at biological function and disease from cells to whole organisms*”, Invited Talk, Biophotonics 2015, Florence Italy, May 2015
16. **G. Zacharakis**, “*Biophotonics and Molecular Imaging: looking at biological function and disease from cells to whole organisms*”, Invited Talk, Photonica 2015, Belgrade Serbia, August 2015
17. **G. Zacharakis**, “*Biophotonics and Molecular Imaging: looking at biological function and disease from cells to whole organisms*”, Invited Lecture, Photonics meets Biology 2015, Chersonisos Greece, October 2015
18. **G. Zacharakis**, “*Biophotonics and Molecular Imaging: looking at biological function and disease from cells to whole organisms*”, Invited Seminar in Biophotonics & Bioelectronics, Department of Electronic Engineering, Technical Educational Institute of Crete, Greece April 2016
19. **G. Zacharakis**, “*Novel photonics in biomedical imaging: modern tools, emerging trends and applications*”, Invited Talk, 17th International Conference on Laser Optics, St. Petersburg, Russia, June 2016
20. **G. Zacharakis**, “Highlights and foresight”, Invited Lecture, 1st TOPIM TECH summer school, Chania Crete, July 2016
21. D. Di Battista, D. Ancora, H. Zhang, K. Lemonaki, S. Avtzi, S. Tzortzakakis, M. Leonetti, **G. Zacharakis** (presenter), “*Biophotonics for imaging through complex biological systems: adaptive wavefront shaping technologies and phase retrieval reconstructions*” Invited Talk 10073-7, Adaptive Optics and Wavefront Control for Biological Systems III, Photonics West 2017, San Francisco, USA, January 2017
22. S. Psycharakis, M.E. Oraiopoulou, E. Liapis, A Zacharopoulos, J Papamatheakis, V. Sakkalis and **G. Zacharakis**, “*Imaging cancer development and therapeutic response on patient derived live cell organoids using multi-projection light sheet fluorescence microscopy*”, Invited Talk ESMI Spotlight Session, World Molecular Imaging Congress, Seattle USA September 2018
23. Translational Research in Biomedicine Graduate Program, Democritus University of Thrace, Seminar: Molecular Diagnostics, Biomarkers and targeted therapies, “Tomographic Imaging in Biomedicine: from molecules, to cells, to humans”, December 2019 & 2020, Alexandroupoli, Greece

9. Publications

Author of **62** articles in international refereed journals, **48** articles in peer reviewed conference proceedings and **2** book chapters, cited over **1728** times. Inventor of **1** international patent (WO2005089637) and **1** Utility model certificate (20150200130). Publication indices as given by ISI Web of Science $h = 15$ and Google Scholar: $h = 19$ and $i10 = 42$.

i. Patents

1. Method and system for tomographic imaging using fluorescent proteins, V Ntziachristos, J Ripoll, G Zacharakis, US Patent 7,804,075
2. Multi-layer, tissue-like, three-dimensional phantoms for imaging and calibration with 3D printing, S. Avtzi, A. Zacharopoulos, G. Zacharakis, Greek Patent (Utility model certificate) 20150200130

ii. Book chapters

1. R. Favichio, **G. Zacharakis**, A. Garofalakis, and J. Ripoll, Theory and Application of Multispectral Fluorescence Tomography, *Chapter 31, Optical and Digital Image Processing: Fundamentals and Applications*, First Edition. Edited by Gabriel Cristobal, Peter Schelkens, and Hugo Thienpont, 2011 Wiley-VCH Verlag GmbH & Co.
2. A. B. Pravdin, G. Filippidis, **G. Zacharakis**, T. G. Papazoglou, and V. V. Tuchin, *Chapter 5, Tissue Phantoms*, SPIE Handbook of Optical Biomedical Diagnostics, Second Edition, Volume 1: Light-Tissue Interaction, 2016

iii. Most cited articles

1. **G. Zacharakis**, J. Ripoll, R. Weissleder and V. Ntziachristos, “*Fluorescence protein tomography scanner for small animal imaging*”, IEEE Trans. Med. Imaging 24, 878 - 885 (2005)

Αναφορές: 135

2. **G. Zacharakis**, H. Kambara, J. Ripoll, D. Yessayan, Y. Saeki, R. Weissleder, and V. Ntziachristos, “*In vivo whole-body molecular tomography of fluorescent proteins in small animals*”, Proc. Natl. Acad. of Sci. USA, 102, 18252 – 18257 (2005)

Αναφορές: 135

3. D. Anglos, A. Stassinopoulos, R. N. Das, **G. Zacharakis**, M. Psylaki, R. Jakubiak, R. A. Vaia, E. P. Giannelis, S. H. Anastasiadis, “*Random laser action in organic-inorganic nanocomposites*”, J. Opt. Soc. Am. B 21, 208-213 (2004)

Αναφορές: 128

4. G. M. Turner, **G. Zacharakis**, A. Soubrete J. Ripoll, V. Ntziachristos, “*Coplete-angle projection diffuse optical tomography by use of early photons*”, Opt. Lett. 30, 409-411 (2005)

Αναφορές: 124

5. H. Meyer, A. Garofalakis, **G. Zacharakis**, C. Mamalaki, D. Kioussis, E. N. Economou, V. Ntziachristos and J. Ripoll, “*Non-contact Optical Imaging in Mice with Full Angular Coverage and Automatic Surface Extraction*” Appl. Opt. 46, 3617-3627 (2007)

Αναφορές: 96

6. J. Ripoll, D. Yessayan, **G. Zacharakis**, V. Ntziachristos, “*Experimental determination of photon propagation in highly absorbing and scattering media*”, JOSA A 22 (3), 546-551

Αναφορές: 81

7. **G. Zacharakis**, N. Papadogiannis, G. Filippidis, T.G. Papazoglou, “*Photon statistics of the laser-like emission from polymeric scattering gain media*” Opt. Lett. **25**, 923-925 (2000)
Αναφορές: 78

iv. Selected most recent publications

1. G. J. Tsevelakis, K. G. Mavrakis, D. Pantazopoulou, E. Lagoudaki, E. Detorakis, G. Zacharakis, “Hybrid autofluorescence and photoacoustic label-free microscopy for the investigation and identification of malignancies in ocular biopsies”, Opt. Lett. **45**, 5748-5751 (2020)
2. G. J. Tsevelakis, V. Tsafas, K. Melessanaki, G. Zacharakis, G. Filippidis, “Combined multiphoton fluorescence microscopy and photoacoustic imaging for stratigraphic analysis of paintings”, Opt. Lett. **44**, 1154-1157 (2019)
3. M. Rieckher, S. Psycharakis, D. Ancora, E. Liapis, A. Zacharopoulos, J. Ripoll, N. Tavernarakis, G. Zacharakis, “Demonstrating improved multiple transport-mean-free-path imaging capabilities of light sheet microscopy in the quantification of fluorescence dynamics”, **Biotechnology Journal** **13**, 1700419 (2018)
4. D. Ancora, D. Di Battista, G. Giasafaki, S. E. Psycharakis, E. Liapis, J. Ripoll and G. Zacharakis, “Phase-retrieved tomography enables mesoscopic imaging of opaque tumor spheroids”, **Scientific Reports** **7**, 11854 (2017)
5. D. Ancora, A. Zacharopoulos, J. Ripoll, and G. Zacharakis, “Fluorescence Diffusion in the presence of Optically Clear Tissues in a Mouse Head model”, **IEEE Trans. Med. Imaging** **36**, 1086 – 1093 (2017)

v. Articles in peer reviewed journals

1. G. Filippidis, **G. Zacharakis**, A. Katsamouris, A. Giannoukas, M. Kouktzela, T. G. Papazoglou, “*Effect of liquid nitrogen and formalin -based conservation in the in-vitro measurements of laser-induced fluorescence of peripheral vascular tissue*”, J. of Photochem. and Photobiol., Biol. **47**, 109-114 (1998)
2. Panou-Diamanti, N. K. Uzunoglou, **G. Zacharakis**, G. Filippidis, T. Papazoglou, D. Koutsouris, “*A one layer tissue fluorescence model based on electromagnetic theory*”, J. of Electromagnetic Waves and Applications **12**, 1101-1121, (1998)
3. **G. Zacharakis**, A. Zolindaki, V. Sakkalis, G. Filippidis, E. Koumantakis, and T. G. Papazoglou, “*Nonparametric characterization of human breast tissue by the Laguerre expansion of the kernels technique applied on propagating femtosecond laser pulses through biopsy samples*”, Appl. Phys. Lett. **74**, 771-772 (1999)
4. **G. Zacharakis**, G. Heliotis, G. Filippidis, D. Anglos, T.G. Papazoglou, “*Investigation of the laserlike behavior of polymeric scattering gain media under subpicosecond laser excitation*”, App. Opt. **38**, 6087-6092 (1999)
5. G. Filippidis, **G. Zacharakis**, A. Katsamouris, A. Giannoukas, T. G. Papazoglou, “*Single and double wavelength excitation in laser induced fluorescence of normal and atherosclerotic peripheral vascular tissue*”, J. of Photochem. and Photobiol., B. Biol. **56**, 163-171 (2000)
6. **G. Zacharakis**, N. Papadogiannis, G. Filippidis, T.G. Papazoglou, “*Photon statistics of the laser-like emission from polymeric scattering gain media*” Opt. Lett. **25**, 923-925 (2000)
7. G.A. Rovithakis, M. Maniadakis, M. Zervakis, G. Filippidis, **G. Zacharakis**, A. Katsamouris, T.G. Papazoglou, “*Artificial neural networks for discriminating pathologic from normal peripheral vascular tissue*” IEEE Trans. of Biomed. Eng. **10**, 1088-1097 (2001)

8. G. E. Kochiadakis, S. I. Chrysostomakis, M. D. Kaleubas, G. M. Filippidis, **I. G. Zacharakis**, T. G. Papazoglou, P. E. Vardas, “*The role of laser-induced fluorescence in myocardial characterization: An experimental in vitro study*”, *Chest* **120**, 233-239 (2001)
9. **G. Zacharakis**, A. Zolindaki, V. Sakkalis, G. Filippidis, T.G. Papazoglou, D.D. Tsiftsis, E. Koumantakis, “*In vitro optical characterization and discrimination of female breast tissue during near infrared femtosecond laser pulses propagation*”, *J. of Biomed. Opt.* **6**, 1-4 (2001)
10. **G. Zacharakis**, N. A. Papadogiannis and T. G. Papazoglou, “*Random lasing following two-photon excitation of highly scattering gain media*”, *Appl. Phys. Lett.* **81**, 2511-2513 (2002)
11. G. Filippidis, **G. Zacharakis**, G. E. Kochiadakis, S. I. Chrysostomakis, P. E. Vardas, C. Fotakis and T. G. Papazoglou, “*Ex vivo laser-induced fluorescence measurements of lamb and human heart tissue*, (INVITED) *Laser Physics* **13**, 769-772 (2003)
12. D. Anglos, A. Stassinopoulos, R. N. Das, **G. Zacharakis**, M. Psylaki, R. Jakubiak, R. A. Vaia, E. P. Giannelis, S. H. Anastasiadis, “*Random laser action in organic-inorganic nanocomposites*”, *J. Opt. Soc. Am. B* **21**, 208-213 (2004)
13. Garofalakis, **G. Zacharakis**, G. Filippidis, E. Sanidas, D. D. Tsiftsis, V. Ntziachristos, T. G. Papazoglou and J. Ripoll, “*Characterization of the reduced scattering coefficient of optically thin samples: theory and experiments*”, *Journal of Optics A: Pure Appl. Opt.* **6** 725-735 (2004)
14. Garofalakis, **G. Zacharakis**, G. Filippidis, E. Sanidas, D. D. Tsiftsis, E. Stathopoulos, M. Kafousi, J. Ripoll and T. G. Papazoglou, “*Optical characterization of thin female breast biopsies based on the reduced scattering coefficient*”, *Phys. Med. Biol.* **50**, 1 – 14 (2005)
15. **G. Zacharakis**, Jorge Ripoll, Ralph Weissleder and Vasilis Ntziachristos, “*Fluorescence protein tomography scanner for small animal imaging*”, *IEEE Trans. Med. Imaging* **24**, 878 - 885 (2005)
16. **G. Zacharakis**, Hirokazu Kambara, Jorge Ripoll, Doreen Yessayan, Yoshinaga Saeki, Ralph Weissleder, and Vasilis Ntziachristos, “*In vivo whole-body molecular tomography of fluorescent proteins in small animals*”, *Proc. Natl. Acad. of Sci. USA*, **102**, 18252 – 18257 (2005)
17. J. Ripoll, D. Yessayan, **G. Zacharakis**, V. Ntziachristos, “*Experimental determination of photon propagation in highly absorbing and scattering media*”, *JOSA A* **22**, 546 - 551 (2005)
18. G. M. Turner, **G. Zacharakis**, A. Soubre J. Ripoll, V. Ntziachristos, “*Coplete-angle projection diffuse optical tomography by use of early photons*”, *Opt. Lett.* **30**, 409-411 (2005)
19. **G. Zacharakis**, Helen Shih, Jorge Ripoll, Ralph Weissleder, and Vasilis Ntziachristos, “*Fluorescence normalized transillumination of fluorescent proteins in small animals*”, *Molecular Imaging* **5**, 153 – 159 (2006)
20. H. Meyer, A. Garofalakis, **G. Zacharakis**, C. Mamalaki, D. Kioussis, E. N. Economou, V. Ntziachristos and J. Ripoll, “*Non-contact Optical Imaging in Mice with Full Angular Coverage and Automatic Surface Extraction*” *Appl. Opt.* **46**, 3617-3627 (2007)
21. Garofalakis, **G. Zacharakis**, H. Meyer, E. N. Economou, C. Mamalaki, J. Papamatheakis, D. Kioussis, V. Ntziachristos and J. Ripoll, “*3D in-vivo imaging of GFP-expressing T-cells in Mice with non-contact Fluorescence Molecular Tomography*”, *Molecular Imaging* **6**, 96 - 107 (2007)

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3. G. Filippidis, **G.Zacharakis**, A. Katsamouris, A. Giannoukas, T.G. Papazoglou, “*Ex-vivo laser-induced fluorescence measurements based on double wavelength laser excitation of peripheral vascular tissue*”, Oral presentation, Conference of Lasers and Electro-Optics (CLEO September 1998), Glasgow, Scotland, UK
4. **G. Zacharakis**, V. Sakkalis, G. Filippidis, A. Zolindaki, E. Koumantakis, T. G. Papazoglou, “*In vitro optical characterization of female breast tissue with near infrared fsec laser pulses*”, Oral presentation, Fifth International Conference on Optics Within Life Sciences (OWLS V October 1998) Heraklion, Crete Greece
5. **G. Zacharakis**, D. Anglos, G. Heliotis, E. Vazgiouraki, G. Filippidis, T. G. Papazoglou, “*Temporal and spectral narrowing of sub-picosecond laser-induced fluorescence of polymeric gain media*”, Poster presentation, Fifth International Conference on Optics Within Life Sciences (OWLS V October 1998) Heraklion, Crete Greece, **First award for the best poster presentation in Biomedicine**
6. G. Filippidis, **G. Zacharakis**, G.E. Kochiadakis , S.I. Chrysostomakis, P.E. Vardas, T.G. Papazoglou, “*In vitro laser-induced fluorescence measurements of human and lamb heart tissue*”, Poster presentation at the Fifth International Conference on Optics Within Life Sciences (OWLS V October 1998) Heraklion, Crete Greece
7. G. Filippidis, **G. Zacharakis**, A. Katsamouris, S. Palsson, S. Montan, K. Svanberg, S. Andersson-Engels, R. Doornbos, R. van Veen, H.J.C.M. Sterenberg, G. Koduri, F. Cross,

- and T.G. Papazoglou, “*In vitro and in vivo laser-induced fluorescence measurements of human and lamb heart tissue*”, Oral presentation, Conference of Lasers and Electro-Optics (CLEO June 1999) Munich, Germany
8. S. Palsson M. Palsson, S. Montan, K. Svanberg, S Andersson-Engels, A. Malmberg, U. Holst, **G. Zacharakis**, G. Filippidis, T.G. Papazoglou, A. Katsamouris, R. Doornbos, R. van Veen, H.J.C.M. Sterenborg G. Koduri, F. Cross, “*NIR Raman spectroscopy for cardiovascular tissue characterisation*”, Oral presentation, Conference of Lasers and Electro-Optics (CLEO June 1999) Munich, Germany
 9. S.P. Chernova, A.B. Pravdin, V.V. Tuchin, **G. Zacharakis**, G. Filippidis, T.G. Papazoglou, “*The fluorescence spectra of multilayer multicomponent tissue phantoms at laser excitation in visible*”, Poster presentation, Saratov Fall Meeting (SFM’99 October 1999), Saratov, Russia
 10. **G. Zacharakis**, G. Filippidis, T.G. Papazoglou, A.B. Pravdin, S.P. Chernova, V.V. Tuchin, “*Random lasing after two-photon excitation*”, Oral presentation, Conference of Lasers and Electro-Optics (CLEO September 2000), Nice, France
 11. G. Filippidis, **G. Zacharakis**, A. Katsamouris, G.A. Rovithakis, M. Maniadakis, M. Zervakis, and T.G. Papazoglou, “*Artificial Neural Network analysis of laser-induced fluorescence spectra for characterization of peripheral vascular tissue*”, Oral presentation, EBIOS 2000 (EOS/SPIE European Biomedical Optics Week July 2000), Amsterdam, The Netherlands
 12. **G. Zacharakis**, N. Papadogiannis, G. Filippidis, D. Stabouli, T.G. Papazoglou, “*Photon statistics of the laser-like emission from polymeric scattering gain media with tissue-like optical properties*”, Oral presentation, EBIOS 2000 (EOS/SPIE European Biomedical Optics Week July 2000), Amsterdam, The Netherlands
 13. **G. Zacharakis**, N. Papadogiannis, G. Filippidis, T.G. Papazoglou, “*Photon statistics of the laser-like emission from polymeric scattering gain media with tissue-like optical properties*”, Poster presentation, (OSA Biomedical Topical Meeting April 2000), Miami, USA
 14. **G. Zacharakis**, G. Filippidis and T. G. Papazoglou, “*Random lasing following two-photon excitation of organic dyes in scattering matrices*”, Poster presentation, Gordon Research Conference (Lasers in Medicine and Biology 2000) Connecticut, USA
 15. **G. Zacharakis**, D. Anglos and T. G. Papazoglou, “*Second harmonic generation and random lasing after two-photon excitation*”, Oral presentation, European Conference on Biomedical Optics (ECBO June 2001), Munich, Germany
 16. **G. Zacharakis** and T. G. Papazoglou, “*Single and double photon excitation of dyes in highly scattering media of biological significance*”, Invited Internet Lecture, Saratov Fall Meeting (SFM’01 October 2001), Saratov, Russia
 17. D. Anglos, A. Stasinopoulos, **G. Zacharakis**, M. Psyllaki, and S.H. Anastasiadis, “*Random laser action in organic/inorganic components*”, Oral presentation, European Materials Research Society Spring Meeting, (EMRS June 2002), Strasbourg, France
 18. T.G. Papazoglou, **G. Zacharakis**, “*LIF after excitation with ultrafast laser irradiation, the response of a single cell and the effect of its scattering environment*”, Invited oral presentation, Conference on Lasers, Applications and Technologies, (LAT June 2002), Moscow, Russia
 19. G. Filippidis, **G. Zacharakis**, G. E. Kochiadakis, S. I. Chrysostomakis, P. E. Vardas, C. Fotakis, T. G. Papazoglou, “*Spectroscopic fluorescence measurements of lamb and human heart tissue in vitro*”, Invited Internet Lecture, Saratov Fall Meeting (SFM’02 October 2002), Saratov, Russia

20. **G. Zacharakis**, Andreas Yulliano, Edward Graves, Ken Ishii, Yoshinaga Saeki, Ralph Weissleder and Vasilis Ntziachristos, “*In vivo imaging of GFP expressing tumor cells in mice using fluorescence molecular tomography*”, Annual Meeting of the Society for Molecular Imaging (SMI 2003, August 2003), San Francisco, USA
21. **G. Zacharakis**, Jorge Ripoll, Ken Ishii, Hirokazu Kambara, Yoshinaga Saeki, Ralph Weissleder and Vasilis Ntziachristos, “*Three-dimensional optical tomography of fluorescent proteins in the visible*”, The Optical Society of America Biomedical Topical Meeting, Miami, (2004)
22. **G. Zacharakis**, A. Garofalakis, H. Meyer, C. Mamalaki, D. Kioussis, E.N. Economou, V. Ntziachristos and J. Ripoll, “*3D mapping of skin autofluorescence in whole animals*”, Society for Molecular Imaging Annual Meeting, Cologne (2005)
23. **G. Zacharakis**, A. Molins, H. Kambara, J. Ripoll, Y. Saeki, R. Weissleder and V. Ntziachristos, “*In-vivo visualization of GFP expressing lung tumors in intact animals using Fluorescence Tomography*”, Society for Molecular Imaging Annual Meeting, Cologne (2005), **First award for the best poster presentation**
24. H. Meyer, A. Garofalakis, **G. Zacharakis**, E.N. Economou, C. Mamalaki, D. Kioussis, V. Ntziachristos and J. Ripoll, “*3D surface reconstruction for in-vivo small animal imaging*”, Society for Molecular Imaging Annual Meeting, Cologne (2005)
25. **A. Garofalakis**, G. Zacharakis, H. Meyer, C. Mamalaki, D. Kioussis, E.N. Economou, V. Ntziachristos and J. Ripoll, “*3D in-vivo imaging of GFP-expressing T-cells in mice with non-contact Fluorescence Molecular Tomography*”, Society for Molecular Imaging Annual Meeting, Cologne (2005)
26. **G. Zacharakis**, A. Garofalakis, S. Psycharakis, H. Meyer, C. Mamalaki, G. Fousteri, J. Papamatheakis, D. Kioussis, V. Ntziachristos, E.N. Economou and J. Ripoll, “*Autofluorescence removal from fluorescence molecular tomography data*”, The Optical Society of America Biomedical Topical Meeting, Fort Lauderdale, (2006)
27. A. Garofalakis, **G. Zacharakis**, H. Meyer, S. Psycharakis, C. Mamalaki, G. Fousteri, J. Papamatheakis, D. Kioussis, V. Ntziachristos, E.N. Economou and J. Ripoll, “*Two-color in-vivo imaging of fluorescent cells in mice*”, The Optical Society of America Biomedical Topical Meeting, Fort Lauderdale, (2006)
28. S. Psycharakis, **G. Zacharakis**, A. Garofalakis, R. Favicchio and J. Ripoll, “*Autofluorescence removal from fluorescence tomography data using multispectral imaging*”, Oral presentation, European Conference on Biomedical Optics (ECBO June 2007), Munich, Germany
29. **G. Zacharakis**, R. Favicchio, A. Garofalakis, S. Psycharakis, C. Mamalaki and J. Ripoll, “*Spectral unmixing of multi-color tissue specific in vivo fluorescence in mice*”, Oral presentation, European Conference on Biomedical Optics (ECBO June 2007), Munich, Germany
30. **G. Zacharakis**, “*Multispectral imaging with fluorescence tomography data*”, Invited Oral Presentation, LIMAT Workshop, Gstaad, Switzerland (2008)
31. **G. Zacharakis**, S. Psycharakis, A. Garofalakis, H. Meyer, R. Favicchio, C. Mamalaki, and J. Ripoll “*Multi-Spectral Imaging of Tissue-Specific Fluorescence Tomography Data*”, The Optical Society of America Biomedical Topical Meeting, St. Petersburg, USA (2008)
32. R. Favicchio, **G. Zacharakis**, J. Papamatheakis, C. Mamalaki and J. Ripoll, “*In Vivo FMT and Oxymetry Measurements for Combined Imaging of Tumour Physiology and Function*” **R. Favicchio**, G. Zacharakis, The Optical Society of America Biomedical Topical Meeting, St. Petersburg, USA (2008)
33. **G. Zacharakis**, “*Multicolor fluorescence molecular tomography*”, Invited Lecture, Nano2Life Conference Meeting, Heraklion, Greece (2008)

34. **G. Zacharakis**, R. Favicchio, K. Oikonomaki, C. Mamalaki and J. Ripoll, “*Multi-color Volumetric Imaging of T cell Responses in Mice*”, World Molecular Imaging Meeting, Nice, France (2008)
35. R. Favicchio, **G. Zacharakis**, J. Papamatheakis, C. Mamalaki, and J. Ripoll “*Imaging Temporal Dynamics of Hypoxic Burden and Its Effect on Tumor Growth*”, World Molecular Imaging Meeting, Nice, France (2008)
36. **G. Zacharakis**, R. Favicchio, C. Mamalaki, J. Papamatheakis and Jorge Ripoll, “*Integrated technologies for molecular imaging*”, Invited Lecture, LASERLAB Meeting, Heraklion, Greece, (2008)
37. **G. Zacharakis**, R. Favicchio, M. Simantiraki, J. Papamatheakis, and J. Ripoll, “*A multi-spectral reconstruction algorithm for Multimodality tomographic imaging*”, Hot Topics in Molecular Imaging Meeting, Ecole de Physique des Houches, Les Houches, France (2009)
38. **G. Zacharakis**, A. Kokolakis, G. Spiliopoulos, R. Favicchio, A. Toska, J. Ripoll, “*Characterization of biopsy samples with optical computed tomography*”, ESMI Meeting, Leiden, The Netherlands (2011)
39. **G. Zacharakis**, G. Spiliopoulos, R. Favicchio, J. Ripoll, A. Kokolakis, K. Lasithiotakis, K. Krasagakis, E. Giannikaki, A. Toska, “*Characterization of biopsy samples with Optical Computed Tomography*”, Invited Lecture, International Workshop on Biophotonics, Parma, Italy (2011)
40. **G. Zacharakis**, V. Y. Soloviev, T. Correia, A. Kokolakis, R. Favicchio, A. Toska, S. R. Arridge, J. Ripoll, “*Polarization sensitive optical computed tomography*”, World Molecular Imaging conference, Dublin, Ireland (2012)
41. **G. Zacharakis**, *Biophotonics in the era of molecular imaging*, Invited talk, BioPhotonics and Imaging Conference (BIOPIC), Dublin, Ireland, March 25 – 27, 2013
42. R. Favicchio, E. Tzamali, V. Sakkalis, K. Marias, C. Mamalaki, J. Papamatheakis, J. Ripoll and **G. Zacharakis**, “*Monitoring tumour growth in vivo with fluorescence molecular tomography; comparison with a predictive in silico model*”, European Molecular Imaging Meeting (EMIM 2013), Torino Italy, May 26-28, 2013
43. **G. Zacharakis**, “*Novel photonic methods in molecular imaging*”, Overview Talk (Invited), European Molecular Imaging Meeting (EMIM 2013), Torino Italy, May 26-28, 2013
44. R. Favicchio, E. Tzamali, V. Sakkalis, K. Marias, C. Mamalaki, J. Papamatheakis, J. Ripoll and **G. Zacharakis**, “*Integration of in vivo imaging with in silico growth models predict the distribution of viable cancer cell populations*”, World Molecular Imaging Conference, Savannah Georgia, September 18 – 21, 2013
45. M. Rieckher, **G. Zacharakis**, A. Zacharopoulos, N. Tavernarakis and J. Ripoll, “*High throughput imaging of C. elegans by combined selective plane illumination microscopy and optical projection tomography in a microfluidics device*”, World Molecular Imaging Conference, Savannah Georgia, September 18 – 21, 2013
46. **G. Zacharakis**, “*Novel photonic methods for molecular imaging*”, Invited Talk, Workshop on Biophotonics, Hersonissos Crete, October 3-4, 2013
47. M. Rieckher, G. Kourmoulakis, A. Zacharopoulos, J. Ripoll, N. Tavernarakis and **G. Zacharakis**, “*A combined optical projection tomography and selective plane illumination microscopy system for in vivo imaging of protein dynamics in C. elegans*”, European Molecular Imaging Meeting (EMIM 2014), Antwerp Belgium, June 4-6, 2014
48. **G. Zacharakis**, “*Optical Imaging and Microscopy*”, Invited talk, PRIMA IV Educational Workshop, World Molecular Imaging Congress, Seoul Korea, September 14 – 20, 2014
49. **G. Zacharakis**, “*Photonic Technologies for in vivo molecular imaging*”, Invited Talk, 7th Imaging in Drug Discovery Conference, Dublin Ireland, October 7-8, 2014

50. S. Psycharakis, M. Rieckher, A. Zacharopoulos, N. Tavernarakis, J. Ripoll, and **Giannis Zacharakis**, “*Optical Projection Tomography and Light Sheet Microscopy for imaging in biological specimens: a comparison study*”, Imaging Systems and Techniques Conference, Santorini Greece, October 14-17, 2014
51. **G. Zacharakis**, “*Biophotonics and Molecular Imaging: Modern tools and Emerging Trends*”, Bracco Imaging Workshop, Ivrea Italy, October 20, 2014
52. I. Kyparissidis-Kokkinidis, A. Zacharopoulos, M. Rieckher, N. Tavernarakis, J. Ripoll and **G. Zacharakis**, “*3D Image Co-Registration of Multi-spectral data from Selective Plane Illumination Microscopy (SPIM) using Mutual Information*”, European Molecular Imaging Meeting, Tübingen Germany, March 18 – 20, 2015
53. E. Liapis, S. Psycharakis, A. Zacharopoulos, J. Ripoll and **G. Zacharakis**, “*High resolution imaging of live tumour spheroids using Single Plane Illumination Microscopy (SPIM)*”, European Molecular Imaging Meeting, Tübingen Germany, March 18 – 20, 2015
54. D. Di Battista, **G. Zacharakis**, M. Leonetti, “*Enhanced focusing through ultra-thin turbid media*”, European Conference on Biomedical Optics, Munich Germany, June 21 – 25, 2015
55. D. Ancora, A. Zacharopoulos, J. Ripoll, and G. Zacharakis, “*Light propagation through weakly scattering media. A study of Monte Carlo vs. Diffusion Theory with application to Neuroimaging*”, European Conference on Biomedical Optics, Munich Germany, June 21 – 25, 2015
56. S. Psycharakis, E. Liapis, I. Kyparissidis-Kokkinidis, A. Zacharopoulos, J. Papamatheakis, J. Ripoll, and **G. Zacharakis**, “*High resolution 3D volumetric imaging of live tumor spheroids using Selective Plane Illumination Microscopy (SPIM)*”, European Conference on Biomedical Optics, Munich Germany, June 21 – 25, 2015
57. S. Psycharakis, E. Liapis, I. Kyparissidis-Kokkinidis, A. Zacharopoulos, J. Papamatheakis, J. Ripoll, and **G. Zacharakis**, “*Volumetric high resolution imaging of live cancer cell spheroids using Light Sheet Fluorescence Microscopy*”, SPIE Photonics West BIOS 2016, San Francisco, USA, February 13-18, 2016
58. **G. Zacharakis**, *Biophotonics and Molecular Imaging: looking at biological function and disease from cells to whole organisms*, Biophotonics 2015, Florence Italy, May 2015
59. **G. Zacharakis**, *Biophotonics and Molecular Imaging: looking at biological function and disease from cells to whole organisms*, Photonica 2015, Belgrade Serbia, August 2015
60. **G. Zacharakis**, *Biophotonics and Molecular Imaging: looking at biological function and disease from cells to whole organisms*, Photonics meets Biology 2015, Cherssonis Greece, October 2015
61. **G. Zacharakis**, “*Novel photonics in biomedical imaging: modern tools, emerging trends and applications*”, Invited Talk, 17th International Conference on Laser Optics, St. Petersburg, Russia, June 2016
62. **G. Zacharakis**, “*Highlights and foresight*”, Invited Lecture, 1st TOPIM TECH summer school, Chania Crete, July 2016
63. D. Di Battista, D. Ancora, H. Zhang, K. Lemonaki, S. Avtzi, S. Tzortzakis, M. Leonetti, **G. Zacharakis** (presenter), “*Biophotonics for imaging through complex biological systems: adaptive wavefront shaping technologies and phase retrieval reconstructions*” Invited Talk Conference 10073, Adaptive Optics and Wavefront Control for Biological Systems III, Photonics West 2017, San Francisco, USA, January 2017
64. G. J. Tserevelakis, S. Avtzi, M. Tsagkaraki, M. E. Oraiopoulou, J. Papamatheakis, and **G. Zacharakis**, “*Hybrid photoacoustic and confocal laser scanning microscopy*”, European Molecular Imaging Meeting, Cologne, Germany, April 2017

65. S. E. Psycharakis, D. Ancora, E. Liapis, A. Zacharopoulos, M. E. Oraiopoulou, J. Papamatheakis, V. Sakkalis and Giannis Zacharakis , “Imaging at multiple transport mean free paths with multi-projection light sheet fluorescence microscopy and phase retrieval tomography in patient derived cancer cell live organoids”, 15th International Conference on Laser Ablation – COLA, September 2019, Maui, USA