

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 determinations of photon propagation in highly absorbing and scattering media”, JOSA A **22**, 546 - 551 (2005)
18. G. M. Turner, **G. Zacharakis**, A. Soubret, J. Ripoll, V. Ntziachristos, “Complete-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)
22. E. Papadakis, T. G. Maris, F. Zacharopoulou, E. Pappas, **G. Zacharakis**, and J. Damilakis, “*An evaluation of the dosimetric performance characteristics of N-vinylpyrrolidone based polymer gels*”, Phys. Med. Biol. **52**, 5069 – 5083 (2007)
23. M. Simantiraki, R. Favicchio, S. Psycharakis, **G. Zacharakis** and J. Ripoll, “*Multispectral unmixing of fluorescence molecular tomography data*”, J. of Innovative Optical Health Science **2**, 353 – 364 (2009)
24. A.E. Papadakis, **G. Zacharakis**, J. Ripoll, F. Zacharopoulou, T.G. Maris, J. Damilakis, “*Three-dimensional radiation dosimetry with optical projection tomography*”, Journal of Physics: Conference Series **164**, 012027 (2009)
25. E. Papadakis, **G. Zacharakis**, T. G. Maris, J. Ripoll, and J. Damilakis, “*A new optical-CT apparatus for three-dimensional radiotherapy dosimetry: Is free space scanning feasible?*”, IEEE Transactions of Medical Imaging, **29**, 1204 – 1212 (2010)
26. Sarasa-Renedo, R. Favicchio, **G. Zacharakis**, U. Birk, C. Mamalaki, and J. Ripoll, “*Source intensity profile in noncontact optical tomography*”, Opt. Lett **35**, 34-36 (2010)
27. A.E. Papadakis, T.G. Maris, **G. Zacharakis**, V. Papoutsaki, C. Varveris, J. Ripoll, J. Damilakis, “*Technical Note: A fast laser-based optical-CT scanner for three-dimensional radiation dosimetry*” Med. Phys. **38**, 830 – 835 (2011)
28. **G. Zacharakis**, R. Favicchio, M. Simantiraki, J. Ripoll, “*Spectroscopic detection improves multi-color quantification in fluorescence tomography*”, Biom. Optics Express **2**, 431 – 439 (2011)
29. V. Y. Soloviev, **G. Zacharakis**, G. Spiliopoulos, R. Favicchio, T. Correia, S. R. Arridge, and J. Ripoll, “*Tomographic imaging with polarized light*”, J. Opt. Soc. Am. A, **29**, 980 – 988 (2012)
30. Kokolakis, **G. Zacharakis**, K. Krasagakis, K. Lasithiotakis, R. Favicchio, G. Spiliopoulos, E. Giannikaki, J. Ripoll, A. Tosca, “*Prehistological evaluation of benign and*

- malignant pigmented skin lesions with optical computed tomography”, *J. Biom. Opt.* **17**, 066004 (2012)
31. R. Favicchio, **G. Zacharakis**, K. Oikonomaki, A. Zacharopoulos, C. Mamalaki and J. Ripoll, “Kinetics of TCR-dependent Antigen Recognition Determined by Multi-Spectral Normalised Epifluorescence *In vivo* Laser Scanning”, *J. Biom. Opt.* **17**, 076013 (2012)
 32. M. Rieckher, I. Kyparissidis-Kokkinidis, A. Zacharopoulos, G. Kourmoulakis, N. Tavernarakis, J. Ripoll, **G. Zacharakis**, “A customized light sheet microscope to measure spatio-temporal protein dynamics in small model organisms”, *PLOS One*, **10(5)**: e0127869 (2015)
 33. D. Di Battista, **G. Zacharakis**, M. Leonetti “Enhanced adaptive focusing through semi-transparent media”, *Scientific Reports*, **5**, 17406 (2015)
 34. G. J. Tserevelakis, M. Tsagkaraki and **G. Zacharakis**, “Hybrid label-free photoacoustic and optical imaging of pigments in vegetative tissues”, *Journal of Microscopy* 10.1111/jmi.12396 (2016)
 35. R. Favichio, S. Psycharakis, K. Schoenig, D. Bartch, C. Mamalaki, J. Papamatheakis, J. Ripoll and **G. Zacharakis**, “Quantitative performance characterization of three-dimensional noncontact fluorescence molecular tomography”, *J. of Biomed. Opt.* **21**, 026009 (2016)
 36. H. Zhang, D. Di Battista, **G. Zacharakis**, and S. Tzortzakis, “Erratum: “Robust authentication through stochastic femtosecond laser filament induced scattering surfaces” [*Appl. Phys. Lett.* **108**, 211107 (2016)], *Appl. Phys. Lett.* **109**, 039901 (2016)
 37. D. Di Battista, D. Ancora, M. Leonetti, and **G. Zacharakis**, “Tailoring non-diffractive beams from amorphous light speckles”, *App. Phys. Lett.* **109**, 121110 (2016)
 38. D. Di Battista, D. Ancora, H. Zhang, E. Marakis, K. Lemonaki, E. Liapis, S. Tzortzakis, **G. Zacharakis**, “Tailored light-sheets through opaque cylindrical lenses”, *Optica* **3**, 1237-1240 (2016)
 39. 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)
 40. G. J. Tserevelakis, I. Vrouvaki, P. Siozos, K. Melessanaki, K. Hatzigiannakis, C. Fotakis and **G. Zacharakis**, “Photoacoustic imaging reveals hidden underdrawings in paintings”, *Scientific Reports* **7**, 747 (2017)
 41. G. J. Tserevelakis, S. Avtzi, M. K. Tsilimbaris, **G. Zacharakis**, “Delineating the anatomy of the ciliary body using hybrid optical and photoacoustic imaging”, *J. of Biomedical Optics* **22**, 060501 (2017)
 42. 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)
 43. G. J. Tserevelakis, M. Tsagkaraki, M. K. Tsilimbaris, S. Plainis, and **G. Zacharakis**, “Photoacoustic imaging methodology for the optical characterization of contact lenses”, *Opt. Lett.* **42**, 4111 – 4114 (2017)
 44. D. Ancora, D. Di Battista, G. Giasafaki, S. E. Psycharakis, E. Liapis, J. Ripoll and **G. Zacharakis**, “Optical Projection Tomography via Phase Retrieval Algorithms”, *Methods* **136**, 81 – 89 (2018), doi.org/10.1016/j.ymeth.2017.10.009
 45. 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)

46. G.J. Tserevelakis, A. Dal Fovo, K. Melessanaki, R. Fontana, **G. Zacharakis**, “Photoacoustic signal attenuation analysis for the assessment of thin layers thickness in paintings”, *Journal of Applied Physics* **123**, 123102 (2018)
47. G. J. Tserevelakis, M. Tsagkaraki, P. Siozos, **G. Zacharakis**, “Uncovering the hidden content of layered documents by means of photoacoustic imaging”, *Strain* **e12289** (2018)
48. D. Di Battista, D. Ancora, **G. Zacharakis**, G. Ruocco, M. Leonetti, “Hyperuniformity in amorphous speckle patterns”, *Opt. Exp.* **26**, 15594-15608 (2018)
49. D. Ancora, L. Qiu, **G. Zacharakis**, L. Spinelli, A. Torricelli, A. Pifferi, “Noninvasive optical estimation of CSF thickness for brain-atrophy monitoring”, *Biom. Opt. Expr.* **9**, 4094-4112 (2018)
50. M-E Oraiopoulou, E. Tzamali, G. Tzedakis, E. Liapis, **G. Zacharakis**, A. Vakis, J. Papamatheakis, V. Sakkalis, “Integrating in vitro experiments with in silico approaches for Glioblastoma invasion: the role of cell-to-cell adhesion heterogeneity”, *Scientific Reports* **8**, 16200 (2018)
51. G. J. Tserevelakis, J. S. Pozo-Antonio, P. Siozos, T. Rivas, P. Pouli, G. Zacharakis, “On-line photoacoustic monitoring of laser cleaning on stone: Evaluation of cleaning effectiveness and detection of potential damage to the substrate”, *J. Cult. Heritage* **35**, 108-115 (2019)
52. A. Dal Fovo, G. J. Tserevelakis, A. Papanikolaou, **G. Zacharakis**, R. Fontana, “Combined photoacoustic imaging to delineate the internal structure of paintings”, *Opt. Lett.* **44**, 919-922 (2019)
53. G. J. Tserevelakis, 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)
54. G. J. Tserevelakis, M. Tsagkaraki, P. Siozos, G. Zacharakis, “Uncovering the hidden content of layered documents by means of photoacoustic imaging”, *Strain* **55**, e12289 (2019)
55. G. J. Tserevelakis, P. Siozos, A. Papanikolaou, K. Melessanaki, G. Zacharakis, “Non-invasive photoacoustic detection of hidden underdrawings in paintings using air-coupled transducers”, *Ultrasonics* **98**, 94-98 (2019)
56. D. Di Battista, D. Merino, G. Zacharakis, P. Loza-Alvarez, O. E. Olarte, “Enhanced light sheet elastic scattering microscopy by using a supercontinuum laser”, *Methods and protocols* **2**, 57 (2019)
57. M.E Oraiopoulou, M. Tampakaki, E. Tzamali, T. Tamiolakis, V. Makatounakis, A. F. Vakis, **G. Zacharakis**, V. Sakkalis, J. Papamatheakis, “A 3D tumor spheroid model for the T98G Glioblastoma cell line phenotypic characterization”, *Tissue and Cell* **59**, 39-43 (2019)
58. A. Papanikolaou, G. J. Tserevelakis, K. Melessanaki, C. Fotakis, **G. Zacharakis**, P. Pouli, “Development of a hybrid photoacoustic and optical monitoring system for the study of laser ablation processes upon the removal of encrustation from stonework”, *Opto-Electronic Advances* **3**, 190037 (2020)
59. C. Razcha, A. Zacharopoulos, D. Anestis, G. Mikrogeorgis, **G. Zacharakis**, K. Lyroutdia “Micro-Computed Tomographic Evaluation of Canal Transportation and Centering Ability of 4 Heat-Treated Nickel-Titanium Systems”, *Journal of Endodontics* **46**, 675-681 (2020)
60. D. Ancora, D. Di Battista, A. M. Vidal, S. Avtzi, **G. Zacharakis**, A. Bassi, “Hidden phase-retrieved fluorescence tomography”, *Opt Lett* **45**, 2191-2194 (2020)
61. G. J. Tserevelakis, 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)
62. G. J. Tsevelakis, P. Pouli, **G. Zacharakis**, “Listening to laser light interactions with objects of art: a novel photoacoustic approach for diagnosis and monitoring of laser cleaning interventions”, *Heritage Science* **8**, 1-13 (2020)

Articles in peer reviewed conference proceedings

1. O. Panou-Diamanti, N. K. Uzunoglou, A. Vasiliou, **G. Zacharakis**, G. Filippidis, T. G. Papazoglou, D. Koutsouris, “*Use of the polarization vector in modeling tissue fluorescence: theoretical and experimental comparison*”, *Proc. SPIE* **Vol. 3197**, 16-26 (1997)
2. G. Filippidis, **G. Zacharakis**, A. Katsamouris, M. Kouktzela, S. Montan, S. Andersson-Engels, T. G. Papazoglou, “*Effect of liquid nitrogen and formalin -based conservation in the in-vitro measurements of laser-induced fluorescence of peripheral vascular tissue*”, *Proc. SPIE* **Vol. 3197**, 27-31 (1997)
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*” Conference of Lasers and Electro-Optics Europe, OSA Technical Digest paper CtuE4, p. 57 (1998)
4. **G. Zacharakis**, D. Anglos, E. Vazgiouraki, T. G. Papazoglou: *Temporal and spectral effects of scatterers on sub-picosecond laser-induced fluorescence of organic dyes*, Conference of Lasers and Electro-Optics Europe, OSA Technical Digest, paper Ctu199, p. 119 (1998)
5. **G. Zacharakis**, G. Heliotis, G. Filippidis, D. Stambouli, T.G. Papazoglou, “*Fluorescence characteristics of organic dyes hosted in random media*” in *Biomedical Optics OSA 1999 Technical Digest*, (Optical Society of America, Washington DC, 1999), paper PD3
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*” Series of the International Society on Optics Within Life Science (OWLS) **Volume V** Springer - Verlag, Berlin, Heidelberg, 332-335 (2000)
7. **G. Zacharakis**, G. Heliotis, G. Filippidis, T.G. Papazoglou, “*Temporal and spectral narrowing of sub-picosecond laser-induced fluorescence of polymeric gain media*” Series of the International Society on Optics Within Life Science (OWLS) **Volume V** Springer - Verlag, Berlin, Heidelberg, 324-327 (2000)
8. **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*” Series of the International Society on Optics Within Life Science (OWLS) **Volume V** Springer - Verlag, Berlin, Heidelberg, 294-296 (2000)
9. **G. Zacharakis**, N. A. Papadogiannis, G. Filippidis, T. G. Papazoglou, “*Photon statistics of the laserlike emission from polymeric scattering gain media with tissuelike optical properties*”, *Proc. SPIE* **Vol. 4162**, 30-38 (2000)
10. **G. Zacharakis**, G. Filippidis, T. g. Papazoglou, A. B. Pravdin, S. Chernova and V.V. Tuchin, “*Random lasing after two-photon excitation*”, Conference on Lasers and Electro-Optics Europe - Technical Digest, p. 338 (2000)

11. G. Filippidis, **G. Zacharakis**, A. Katsamouris, G. A. Rovithakis, M. Maniadakis, M. Zervakis, T. G. Papazoglou, “*Artificial neural networks analysis of laser-induced fluorescence spectra for characterization of peripheral vascular tissue*”, Proc. SPIE **Vol. 4158**, 199-208 (2001)
12. **G. Zacharakis**, D. Anglos, T. G. Papazoglou, “*Second harmonic generation and random lasing after two-photon excitation*”, Proc. SPIE **Vol. 4431**, 240-248 (2001)
13. E. P. Giannelis, A. Stassinopoulos, M. Psylaki, **G. Zacharakis**, R., N. Das, D. Anglos, S. H. Anastasiadis and R. A. Vaia, “*Random lasers based on organic-inorganic hybrids*”, Materials Research Society Symposium – Proceedings, **Vol. 726**, 11-19 (2002)
14. **G. Zacharakis** and T. G. Papazoglou, “*Single and double photon excitation of dyes in highly scattering media of biological significance*”, Proc. SPIE **Vol. 4707**, 111-119 (2002)
15. 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*”, Proc. SPIE **Vol. 5068**, 202-209 (2002)
16. T. G. Papazoglou and **G. Zacharakis**, “*LIF after excitation with ultrafast laser irradiation, the response of a single cell and the effect of its scattering environment*”, Proc. SPIE, **Vol. 5149**, 29-38 (2002)
17. A. Garofalakis, **G. Zacharakis**, G. Filippidis, E. Sanidas, D.D. Tsiftsis, E. Stathopoulos, M. Kafousi, T. G. Papazoglou and J. Ripoll, “*Optical Characterization of small biopsy samples*”, Proc. SPIE **Vol. 5141**, 88-94 (2003)
18. **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*”, in Biomedical Optics 2004 Technical Digest (Optical Society of America, Washington DC, 2004) paper SA3
19. A. Garofalakis, H. Meyer, **G. Zacharakis**, E.N. Economou, C. Mamalaki, J. Papamatheakis, V. Ntziachristos, J. Ripoll, “*3D in-vivo imaging of GFP-expressing T-cells in mice with non-contact Fluorescence Molecular Tomography*”, Proceedings of SPIE **Vol. 5771**, 120-129 (2004)
20. H. Meyer, A. Garofalakis, **G. Zacharakis**, E. N. Economou, C. Mamalaki, D. Kiouisis, V. Ntziachristos and J. Ripoll, “*Multi-projection non-contact fluorescence tomography setup for imaging arbitrary geometries*”, Proc. SPIE **Vol. 5693**, 246-254 (2005)
21. H. Meyer, A. Garofalakis, **G. Zacharakis**, E. N. Economou, C. Mamalaki, S. Papamatheakis, V. Ntziachristos and J. Ripoll, “*A multi-projection non-contact Tomography setup for imaging arbitrary geometries*”, Proc. SPIE **Vol. 5771**, 244-251 (2005)
22. A. Garofalakis, H. Meyer, **G. Zacharakis**, C. Mamalaki, S. Papamatheakis, V. Ntziachristos, E. N. Economou and J. Ripoll, “*3D in-vivo imaging of GFP-expressing T-cells in Mice with non-contact Fluorescence Molecular Tomography*”, Proc. SPIE **Vol. 6143-I**, art. no. 61431H (2006)
23. **G. Zacharakis**, A. Garofalakis, S. Psycharakis, H. Meyer, C. Mamalaki, G. Fousteri, J. Papamatheakis, D. Kiouisis, V. Ntziachristos, E. N. Economou and J. Ripoll, “*Autofluorescence removal from fluorescence molecular tomography data*”, in Biomedical Optics 2006 Technical Digest (Optical Society of America, Washington DC, 2006), paper TuG6
24. A. Papadakis, T. G. Maris, E. Papas, **G. Zacharakis**, A. Garofalakis, S. Atrops and J. Ripoll, “*Radiation Therapy Dosimetry With Optical Computed Tomography and MR Scanning*”, in Biomedical Optics 2006 Technical Digest (Optical Society of America, Washington DC, 2006), paper SH7

25. 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*”, in *Biomedical Optics 2006 Technical Digest* (Optical Society of America, Washington DC, 2006), paper TuC5
26. **G. Zacharakis**, A. Papadakis, F. Zacharopoulou, A. Garofalakis, T. Maris and J. Ripoll, “*Radiotherapy dosimetry assessment with Optical Projection Tomography*”, Proc. SPIE **Vol. 6629**, art. no. 66291C (2007)
27. S. Psycharakis, **G. Zacharakis**, A. Garofalakis, R. Favicchio and J. Ripoll, “*Autofluorescence removal from fluorescence tomography data using multispectral imaging*”, Proc. SPIE **Vol. 6626**, art. no. 662601 (2007)
28. **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*”, Proc. SPIE **Vol. 6626**, art. no. 662609 (2007)
29. **G. Zacharakis**, S. Psycharakis, A. Garofalakis, H. Meyer, R. Favicchio, C. Mamalaki, and J. Ripoll “*Multi-Spectral Imaging of Tissue-Specific Fluorescence Tomography Data*”, in *Biomedical Optics 2008 Technical Digest* (Optical Society of America, Washington DC, 2008), paper BWE3.
30. 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, in *Biomedical Optics 2008 Technical Digest* (Optical Society of America, Washington DC, 2008), paper BWE4
31. A.E. Papadakis, **G. Zacharakis**, J. Ripoll, F. Zacharopoulou, T.G. Maris, J. Damlakis, “*Three-dimensional radiation dosimetry with optical projection tomography*”, Journal of Physics: Conference Series, **164**, Article number 012027 (2009)
32. A.E. Papadakis, T.G. Maris, **G. Zacharakis**, J. Ripoll, C. Varveris, J. Damlakis, “*Development of a new laser-line and CCD based optical-CT scanner for the readout of 3D radiation dosimeters*”, Journal of Physics: Conference Series, **250**, Article number 012025, (2010)
33. **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*”, International Workshop on Biophotonics, BIOPHOTONICS 2011, Article number 5954796 (2011)
34. Stella Avtzi, Athanasios Zacharopoulos, Stylianos Psycharakis and **Giannis Zacharakis**, “*Fabrication and characterization of a 3-D non-homogeneous tissue-like mouse phantom for optical imaging*”, Proc. SPIE 9032, Biophotonics - Riga, 903206 (2013)
35. E. Tzamali, R. Favicchio, A. Roniotis, G. Tzedakis, G. Grekas, J. Ripoll, K. Marias, **G. Zacharakis**, and V. Sakkalis, “*Employing in-vivo Molecular Imaging in Simulating and Validating Tumor Growth*”, 35th IEEE-EMBS, Engineering in Medicine and Biology Society (EMBC 2013), Osaka, Japan, July 3-7, pp. 388-91, (2013)
36. S. Psycharakis, M. Riekher, A. Zacharopoulos, N. Tavernarakis, J. Ripoll, and **Giannis Zacharakis**, “*Optical Projection Tomography and Light Sheet Microscopy for imaging in biological specimens: a comparison study*”, 2014 IEEE International Conference on Imaging Systems and Techniques (IST), DOI: 10.1109/IST.2014.6958475, pp. 211-215 (2014)
37. E. Tzamali, G. Tzedakis, K. Marias, **G. Zacharakis**, A. Zacharopoulos, V. Sakkalis, “*Simulating cancer behavior based on in silico modeling and in vivo molecular imaging approaches: Prospects and limitations*”, 2014 IEEE International Conference on Imaging Systems and Techniques (IST), DOI: 10.1109/IST.2014.6958475, pp.251 – 256 (2014)

38. D. Di Battista, D. Ancora S. Avtzi, M. Leonetti, G. Zacharakis, “*Spatial frequencies selection for speckle grain reduction through semi-transparent media*”, Proc. SPIE 9541, Optical Coherence Imaging Techniques and Imaging in Scattering Media, 95410E (20 July 2015)
39. D. Ancora, A. Zacharopoulos, J. Ripoll, G. Zacharakis, “*Light propagation through weakly scattering media: a study of Monte Carlo vs. diffusion theory with application to neuroimaging*”, Proc. SPIE 9538, Diffuse Optical Imaging V, 95380G (16 July 2015)
40. D. Ancora, D. Di Battista, G. Giasafaki, S. Psycharakis, E. Liapis, A. Zacharopoulos and **G. Zacharakis**, “*Phase-Retrieved optical projection tomography for 3D imaging through scattering layers*”, Proc. SPIE 9718, Quantitative Phase Imaging II, 97181B (March 9, 2016)
41. D. Ancora, A. Zacharopoulos, J. Ripoll, **G. Zacharakis**, “*The role of Cerebral Spinal Fluid in light propagation through the mouse head. Improving fluorescence tomography with Monte Carlo modeling*”, Proc. SPIE. 9700, Design and Quality for Biomedical Technologies IX, 970015. (March 18, 2016)
42. D. Di Battista, D. Ancora, H. Zhang, K. Lemonaki, S. Avtzi, S. Tzortzakis, M. Leonetti, **G. Zacharakis**, “*Structured adaptive focusing through scattering*”, Proc. SPIE. 9717, Adaptive Optics and Wavefront Control for Biological Systems II, 971719. (March 15, 2016)
43. G. Tzedakis, E. Liapis, E. Tzamali, **G. Zacharakis**, V. Sakkalis, “*A hybrid discrete-continuous model of in vitro spheroid tumor growth and drug response*”, IEEE 38th Annual International Conference of the Engineering in Medicine and Biology Society (EMBC), 6142-6145 (August 16, 2016)
44. D. Ancora, D. Di Battista, G. Giasafaki, S. Psycharakis, E. Liapis, A. Zacharopoulos, **G. Zacharakis**, “*Optical projection tomography via phase retrieval algorithms for hidden three dimensional imaging*”, Proc. of SPIE Vol. 10074, Quantitative Phase Imaging III, 100741E-1 (February 21, 2017)
45. Stylianos E Psycharakis, Evangelos Liapis, Athanasios Zacharopoulos, Mariam-Eleni Oraiopoulou, Joseph Papamatheakis, Vangelis Sakkalis, Giannis Zacharakis, High resolution volumetric imaging of primary and secondary tumor spheroids using multi-angle Light Sheet Fluorescence Microscopy (LSFM), 40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), 866-869 (2018)
46. A Marcos-Vidal, D Ancora, G Zacharakis, JJ Vaquero, J Ripoll, Projection tomography in the NIR-IIa window: challenges, advantages, and comparison with classical optical approach, Medical Imaging 2018: Physics of Medical Imaging, 105732F (2018)
47. S. E. Psycharakis, E. Liapis, A. Zacharopoulos, M. E. Oraiopoulou, C. Aivalioti, V. Sakkalis, J. Papamatheakis, J. Ripoll, **G. Zacharakis**, High resolution 3D imaging of primary and secondary tumor spheroids using multicolor multi-angle Light Sheet Fluorescence Microscopy (LSFM), Proc. of SPIE, Clinical and Preclinical Optical Diagnostics II, 11076_24 (June 23, 2019)
48. G. J. Tserevelakis, K. G. Mavrakis, D. Pantazopoulou, E. Karamouzi, S. Avtzi, M. K. Tsilimbaris, E. Lagoudaki, E. Detorakis, **G. Zacharakis**, Combined photoacoustic and fluorescence label-free microscopy for the ex vivo investigation of ocular tissues, Proc. of SPIE, Clinical and Preclinical Optical Diagnostics II, 11077_48 (June 23, 2019)

Conference participation

1. G. Filippidis, **G. Zacharakis**, A. Katsamouris, M. Kouktzela, S. Montan, S. Andersson-Engels, T.G. Papazoglou, “*Effect of liquid nitrogen and formalin -based conservation in the in-vitro measurements of laser-induced fluorescence of peripheral vascular tissue*”,

- Oral presentation, Optical Biopsies and Microscopic Techniques II, (SPIE September 1997), San Remo, Italy
2. **G. Zacharakis**, D. Anglos, E. Vazgiouraki, T. G. Papazoglou, “*Temporal and spectral effects of scatterers on sub-picosecond laser-induced fluorescence of organic dyes*”, Poster presentation, Conference of Lasers and Electro-Optics (CLEO September 1998), Glasgow, Scotland, UK
 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. Sterenberg 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, Cherssonisos 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. 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
 66. 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