

KALYVAS NEKTARIOS

Short CV in English (November 2020)

Personal Information

Birthday 1971

Business Address: University of West Attica, Department of Biomedical Engineering, Campus 1, Agiou Spyridonos 17, 12243 Egaleo

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Professional Experience (Job Positions)

From 14/2/2020 I am an Associate Professor in West Attica University, Department of Biomedical Engineering.

From 24/1/2014 till 13/2/2020 I was an Assistant Professor in West Attica University (ex TEI of Athens), Department of Biomedical Engineering.

From 1/6/2010 till 23/1/2014 I was a Professor of Applications in TEI of Athens, Department of Medical Instruments Technology.

From 6/8/2009 till 31/05/2010 I had a contract with Greek Atomic Energy Commission as a Medical Radiation Physicist.

From 10/7/2009 till 5/8/2009 I was appointed in the Social Insurance Institute of Greece as a Medical Radiation Physicist.

From 1/1/2003 till 9/7/2009 I had a contract with Greek Atomic Energy Commission as a Medical Radiation Physicist.

From 21/11/2001 till 20/12/2002 I had a contract with Intracom, S.A. Division of AXE Software as a physicist-analyst.

Academic Degrees

1995 Bachelor in Physics (4 years-ptyhio), University of Patras Greece

1997 Master (MSc) in Medical Physics, University of Patras, Greece.

2002 Doctorate (PhD) in Medical Physics, University of Patras, Greece

Professional License

Licensed Medical Radiation Physicist

Languages

English (Certificate of Proficiency in English, University of Michigan)

Other

Reviewer in European Radiology Journal

Reviewer in Journal of Alloys and Compounds
Reviewer in IEEE Transactions in Nuclear Science
Reviewer in Nuclear Instruments and Methods in Physics Research A
Reviewer in European Journal of Medical Physics (EJMP-Physica Medica)
Reviewer in EPOS (Electronic Posters for the ECR conferences)

Research and Scientific Activities: (i) Scintillator and phosphor materials evaluation for application in detectors of medical imaging systems (Experimental and theoretical methods).
(ii) Evaluation of medical imaging systems using objective image quality metrics (iii) Dosimetry in Diagnostic Radiology applications.

List of funded projects as member of the research team.

1. Excellence 1(GSRT/NSRF 2007-2013), Project title “Medical Image Science through Luminescence – MISCIRLU”. Project number 1476. duration 2012 - 2015 (36 months). Budget 308000 Euro. (P.I. Kandarakis).
2. ARHIMIDES III – Granted research in TEI of Athens (NSRF 2007-2013) 11.1.1 - MIS 379389 NANOCARLO - Evaluation of nanophosphors for medical imaging applications: monte carlo simulation and experimental evaluation of a nanophosphor-cmos prototype, subproject 25. Budget 83000 Euro. (P.I. Kandarakis).

Member of Scientific Societies

European Society of Radiology (ESR), full allied science member.
European Society of Hybrid Imaging (ESHI), Associate member
Hellenic Association of Medical Physicists (HAMP)
Hellenic Society of Nanotechnology in Health Sciences (HSnanoHS)

Schools

- EUTEMPE-RX module 3 (Monte Carlo simulation of x-ray imaging and dosimetry), held from May 22, 2017 to July 21, 2017 (online) and from June 19 to June 23, 2017 (onsite) at Technical University of Catalonia, Barcelona, Spain.
- ESTRO course for Image Guided Radiation Therapy (IGRT), 29 October-2 November 2017, Athens

A. List of publications in peer review journals with impact factor

1. Kalivas N., Kandarakis I., Cavouras D., Costaridou L., Nomicos C.D. and Panayiotakis G.: "Modeling quantum noise of phosphors used in medical x-ray imaging detectors". *Nuclear Instruments and Methods in Physics Research A* 430, 559-569, 1999.
2. Kalivas N., Costaridou L., Kandarakis I., Cavouras D., Nomicos C.D. Panayiotakis G.: "Effect of intrinsic gain fluctuations on quantum noise of phosphors used in medical x-ray imaging detectors". *Applied Physics A* 69, 337-341, 1999.
3. Kandarakis I., Cavouras D., Kalivas N., Nomicos C.D., Panayiotakis G.S.: "Estimation of the information content of medical images produced by scintillators interacting with diagnostic X-ray beams". *Nuclear Instruments and Methods in Physics Research B* 155, 199-205, 1999.
4. Kalivas N., Costaridou L., Kandarakis I., Cavouras D., Nomicos C.D. and Panayiotakis G.: "Modeling quantum and structure noise of phosphors used in medical x-ray imaging detectors". *Nuclear Instruments and Methods in Physics Research A* 490, 614-629, 2002.
5. Kalivas N., Costaridou L., Kandarakis L., Kandarakis I., Cavouras D., Nomicos C.D. and Panayiotakis G.: "Optical Gain Signal-to-Noise Ratio Transfer Efficiency as an index for ranking of phosphor-photodetector combinations used in X-ray medical imaging". *Applied Physics A* 78:915-919, 2004.
6. Kandarakis I., Cavouras D., Sianoudis I., Nikolopoulos D., Episkopakis A., Linardatos D., Margetis D., Nirgianaki E., Rousou M., Melissaropoulos P., Kalivas N., Kalatzis I., Kourkoutas K., Dimitropoulos N., Louizi A., Nomicos C. and Panayiotakis G.: "On the response of $Y_3Al_5O_{12}:Ce$ (YAG:Ce) powder scintillating screens to medical imaging X-rays". *Nuclear Instruments and Methods in Physics Research A* 538, 615-630, 2005.
7. Kandarakis I., Cavouras D., Nikolopoulos D., Anastasiou A., Dimitropoulos N., Kalivas N., Ventouras E., Kalatzis I., Nomicos C. and Panayiotakis G.: "Evaluation of ZnS:Cu phosphor as X-ray to light converter under mammographic conditions". *Radiation Measurements* 39, 263-275, 2005.
8. Cavouras D., Kandarakis I., Nikolopoulos D., Kalatzis I., Kagadis G., Kalivas N., Episkopakis A., Linardatos D., Roussou M., Nirgianaki E., Margetis D., Valais I., Sianoudis I., Kourkoutas K., Dimitropoulos N., Louizi A., Nomicos C. and Panayiotakis G.: "Light emission efficiency and imaging performance of $Y_3Al_5O_{12}:Ce$ (YAG:Ce) powder screens under diagnostic radiology conditions". *Applied Physics B*, 80(7), 923-933, 2005.
9. Kandarakis I., Cavouras, D., Nikolopoulos D., Kalivas N., et al.: "Theoretical model for evaluation of the angular distribution of the luminescence efficiency in granular scintillating screens". *Applied Radiation and Isotopes*, 64, 508-519, 2006.
10. Efstathopoulos E.P., Katritsis D.G., Kottou S., Kalivas N., Tzanalaridou E., et al.: "Patient and staff radiation dosimetry during cardiac electrophysiology studies and catheter ablation procedures: a comprehensive analysis". *Europace*, 8, 443-448, 2006.

11. Patatoukas G., Gaitanis A., Kalivas N., et al.: "The effect of energy weighting on the SNR under the influence of non-ideal detectors in mammographic applications". *Nuclear Instruments and Methods in Physics Research A* 569, 260-263, 2006.
12. Kalivas N., Valais I., Salemis G., et al.: "Imaging properties of cerium doped Yttrium Aluminum Oxide (YAP:Ce) powder scintillating screens under X-ray excitation". *Nuclear Instruments and Methods in Physics Research A* 569, 210-214, 2006.
13. Valais I., Nikolopoulos D., Kalivas N., et al.: "As systematic study of the performance of CsI:Tl single crystal scintillator under X-ray excitation". *Nuclear Instruments and Methods in Physics Research A* 571, 343-345, 2007.
14. Efthimiou N., Kalivas N. et al. : "Investigation of the effect of the scintillator material on the overall X-ray detection system performance by application of analytical models". *Nuclear Instruments and Methods in Physics Research A* 571, 270-273, 2007.
15. David S., Michail C., Valais I., Nikolopoulos D., Liaparinos P., Kalivas N. et al.: "Efficiency of Lu₂SiO₅:Ce (LSO) powder phosphor as X-ray to light converter under mammographic imaging conditions". *Nuclear Instruments and Methods in Physics Research A* 571, 346-349, 2007.
16. Economides S., Hourdakis C.J., Kalivas N., Kalathaki M. et al.: "Performance of medical radiographic X-ray systems in Greece for the time period 1998-2004". *Physica Medica* 23, 107-114, 2007.
17. Kalivas N., Valais I., Nikolopoulos D., Konstantinidis A.: et al.: "Light emission efficiency and imaging properties of YAP:Ce granular phosphor screens" *Appl. Phys. A*, 89, 443-449, 2007.
18. Michail C., David S., Liaparinos P., Valais I., Nikolopoulos D., Kalivas N. et al.: "Evaluation of the imaging performance of LSO powder scintillator for use in X-ray mammography" *Nuclear Instruments and Methods in Physics Research A* 580, 558-561, 2007.
19. Liaparinos P., Kandarakis I., Cavouras D., Kalivas N., Delis H. and Panayiotakis G.: "Evaluation of high packing density powder X-ray screens by Monte Carlo methods" *Nuclear Instruments and Methods in Physics Research A* 580, 427-429, 2007.
20. Economides S., Hourdakis C.J., Kalivas N., Kalathaki M. et al.: "Image quality evaluation and patient dose assessment of medical fluoroscopic X-ray systems: A National study". *Radiation Protection Dosimetry*, 129(4), 419-425, 2008.
21. Michail C., Valais I., Toutountzis A., Kalyvas N. et al.: "Light emission efficiency of Gd₂O₂S:Eu (GOS:Eu) powder screens under X-ray mammography conditions" *IEEE Transactions on Nuclear Science* 55(6), 3703-3709, 2008.
22. Michail C.M., Fountos G.P., David S.L., Valais I.G., Toutountzis A.E., Kalyvas N.E., Kandarakis I.S. and Panayiotakis G.S.: "A comparative investigation of Lu₂SiO₅:Ce and Gd₂O₂S:Eu powder scintillators for use in x-ray mammographic detectors". *Meas. Sci. Technol.* 20 doi:10.1088/0957-0233/20/10/104008, 2009.
23. Michail C., Toutountzis A., David S., Kalyvas N., Valais I., Kandarakis I.S. and Panayiotakis G.S.: "Imaging performance and light emission efficiency of Lu₂SiO₅:Ce (LSO:Ce) powder scintillator under X-ray mammographic conditions". *Appl. Phys. B* 95, 131-139, 2009.

24. Michail C., Spyropoulou V., Kalyvas N., Valais I., Dimitropoulos N., Fountos G., Kandarakis I and Panayiotakis G.: "The influence of software filtering in digital mammography image quality" JINST P05018, May 2009.
25. Konstantinidis A., Liaparinos P., Kalivas N., Panayiotakis G., and Kandarakis I.: "Investigation of two heavy element scintillators by Monte-Carlo methods" JINST P05019, May 2009.
26. Spyropoulou V., Kalyvas N., Gaitanis A., Michail C., Panayiotakis G. and Kandarakis I. "Modeling the imaging performance and low contrast detectability in digital mammography" JINST P06004, June 2009.
27. Petropoulou A., Kalyvas N., Kandarakis I., Valais I. and Panayiotakis G.S.: "A theoretical model describing the light emission efficiency of single-crystal scintillators in the diagnostic energy range" JINST P06016, June 2009.
28. Kalyvas N., Valais I., Costaridou L., Kandarakis I., Cavouras D., Nomicos C.D., and Panayiotakis G.: "Evaluating optical spectra matching of phosphor-photodetector combinations" JINST P07003, July 2009.
29. Michail C., Fountos G., Liaparinos P., Kalyvas N et al.: "Light emission efficiency and imaging performance of $Gd_2O_2S:Eu$ powder screens under X-ray radiography conditions" *Med. Phys.*, 37(7), 3694-3703, 2010
30. Michail C.M., Spyropoulou V.A., Fountos G.P., Kalyvas N.I., Valais I.G., Kandarakis I.S. and Panayiotakis G.S.: "Experimental and Theoretical Evaluation of a High Resolution CMOS Based Detector under X-ray Imaging Conditions" *IEEE Transactions on Nuclear Science* 58(1), 314-322, 2011.
31. Michail C.M., Fountos G.P., Valais I.G., Kalyvas N.I., Liaparinos P.F, Kandarakis I.S. and Panayiotakis G.S.: "Evaluation of the Red Emitting $Gd_2O_2S:Eu$ Powder Scintillator for use in X-ray Digital Mammography Detectors" *IEEE Transactions on Nuclear Science* 58(5) part 2, 2503-2511, 2011.
32. Kalathaki M., Hourdakis C.J., Economides S., Tritakis P., Kalyvas N., Simantirakis G., Manousaridis G., Kaisas I. and Kamenopoulou V.: "Comparison of full field digital (ffd) and computed radiography (cr) mammography systems in Greece". *Radiation. Protection Dosimetry*, 147(1-2), 202-205, 2011.
33. Kalyvas N., Liaparinos P., Michail C., David S., Fountos G., Wójtowich M, Zych E and Kandarakis I.: "Studying the luminescence efficiency of $Lu_2O_3:Eu$ nanophosphor material for digital X-ray imaging applications" *Applied Physics A*, 106(1), 131-136, 2012.
34. Nikolopoulos D., Kalyvas N., Valais I., Argyriou X., Vlamakis E., Sevvos T. and Kandarakis I.: "A semi-empirical Monte Carlo based model of the Detector Optical Gain of Nuclear Imaging scintillators", *JINST*, 7, P11021, 2012.
35. Liaparinos P., Kalyvas N., Kandarakis I., Cavouras D. "Analysis of the imaging performance in indirect digital mammography detectors by linear systems and signal detection models" *Nuclear Instruments and Methods in Physics Research A* 697, 87-98, 2013.

36. Michail C., Kalyvas N., Valais I., David S., Seferis I., Toutountzis A., Karabotsos A., Liaparinos P., Fountos G. and Kandarakis I.: "On the response of GdAlO₃:Ce scintillators", *Journal of Luminescence* 144, 45-52, 2013.
37. Seferis I.E., Michail C.M., Valais I.G., Fountos G.P. Kalyvas N.I., Stromatia F., Oikonomou G., Kandarakis I.S. and Panayiotakis G.S.: "On the response of europium doped phosphor-coated CMOS digital imaging detector", *Nuclear Instruments and Methods in Physics Research A* 729, 307-315, 2013.
38. Seferis I.E., Michail C.M., Valais I.G., Zeler J, Liaparinos P, Fountos G. Kalyvas N., David S., Stromatia F., Zych E., Kandarakis I. and Panayiotakis G.: "Light emission efficiency and imaging performance of Lu₂O₃:Eu nanophosphor under X-ray radiography conditions: Comparison with Gd₂O₂S:Eu", *Journal of Luminescence* 151, 229-234, 2014.
39. Michail C., Kalyvas N., Valais I., Fudos I., Fountos G., Dimitropoulos N., Koulouras G., Kandris D., Samarakou M. and Kandarakis I.: "Figure of Image Quality and Information Capacity in Digital Mammography" *BioMed Research International*, Article ID 634856, <http://www.hindawi.com/journals/bmri/2014/634856/>, 2014.
40. Kalyvas N., Valais I., David S., Michail Ch., Fountos G., Liaparinos P and Kandarakis I.: "Studying the Energy Dependence of Intrinsic Conversion Efficiency of Single Crystal Scintillators Under X-ray Excitation" *Optics and Spectroscopy*, 116(5), 743-747, 2014.
41. Michail C., Valais I., Seferis I., Kalyvas N., David S., Fountos G., Kandarakis I.: "Measurement of the luminescence properties of Gd₂O₂S:Pr,Ce,F powder scintillators under X-ray radiation" *Radiation Measurements* 70, 59-64, 2014.
42. Martini N., Koukou V., Michail C., Sotiropoulou P., Kalyvas N., Kandarakis I., Nikiforidis G. and Fountos G.: "Pencil Beam Spectral Measurements of Ce, Ho, Yb and Ba Powders for Potential Use in Medical Applications" *Journal of Spectroscopy* Article ID 563763, 2015. <http://www.hindawi.com/journals/jspec/2015/563763/>
43. Kalyvas N., Valais I., Michail C., Fountow G., Kandarakis I., Cavouras D.: "A theoretical study of CsI:Tl columnar scintillator image quality parameters by analytical modeling" *Nuclear Instruments and Methods in Physics Research A*, 779, 18-24, 2015.
44. C. Michail, I Valais, I Seferis, N Kalyvas, G Fountos, I Kandarakis "Experimental measurement of a high resolution CMOS detector coupled to CsI scintillators under X-ray radiation" *Radiation Measurements* 74, 39-46, 2015
45. Vlachos I., Tsantilas X., Kalyvas N., Delis H., Kandarakis I. and Panayiotakis G.: "Measuring Scatter Radiation in Diagnostic X-rays for Radiation Protection Purposes" *Radiation Protection Dosimetry*, pp 1-4, 2015, DOI:10.1093/rpd/ncv093
46. Michail C., David S., Bakas A., Kalyvas N., Fountos G., Kandarakis I. and Valais I.: "Luminescence efficiency of (Lu,Gd)₂SiO₅:Ce (LGSO:Ce) crystals under X-ray radiation" *Radiation Measurements*, 80, 1-9, 2015.
47. Koukou V., Martini N., Nichail C., Sotiropoulou P., Fountzoula C., Kalyvas N., Kandarakis I., Nikiforidis G. and Fountos G.: "Dual Energy Method for Breast Imaging: A simulation Study"

- Computational and Mathematical Methods in Medicine, Article ID 574238, 2015, <http://dx.doi.org/10.1155/2015/574238>.
48. David S., Michail C., Seferis I., Valais I., Fountos G., Liaparinos P., Kandarakis I., Kalyvas N.: "Evaluation of $Gd_2O_2S:Pr$ granular phosphor properties for X-ray mammography imaging" *Journal of Luminescence*, 169, 706-710, 2016.
 49. I.E. Seferis, J. Zeler, C. Michail, I. Valais, G. Fountos, N. Kalyvas, A. Bakas, I. Kandarakis, E. Zych.: "On the response of semitransparent nanoparticulated films of $LuPO_4:Eu$ in poly-energetic X-ray imaging applications", *Applied Physics A*, 122, 526 (1-10) , 2016.
 50. C. Michail, I. Valais, N. Martini, V. Koukou, N. Kalyvas, A. Bakas, I. Kandarakis, G. Fountos: "Determination of the detective quantum efficiency (DQE) of CMOS/CsI imaging detectors following the novel IEC 62220-1-1:2015 International Standard" *Radiation Measurements* 94, 8-17, 2016 <http://dx.doi.org/10.1016/j.radmeas.2016.04.005>
 51. P. Liaparinos, N. Kalyvas, E. Katsiotis and I. Kandarakis.: "Investigating the particle packing of powder phosphors for imaging instrumentation technology: an examination of $Gd_2O_2S:Tb$ phosphor" *JINST*, 11, P10001, 2016, doi:[10.1088/1748-0221/11/10/P10001](https://doi.org/10.1088/1748-0221/11/10/P10001).
 52. C. Michail, G. Karpetas, G. Fountos, N. Kalyvas, I. Valais, A. Zanglis, I. Kandarakis, G. Panayiotakis: "A novel method for the optimization of positron emission tomography scanners imaging performance" *Hellenic Journal of Nuclear Medicine*, September-October, 231-240, 2016.
 53. V. Koukou, N. Martini, G. Fountos, C. Michail, P. Sotiropoulou, A. Bakas, N. Kalyvas, I. Kandarakis, R. Speller, G. Nikiforodis: "Dual energy subtraction method for breast calcification imaging" *Nuclear Instruments and Methods in Physics Research A*, 848, 31-38, 2017.
 54. K. Psichis, N. Kalyvas, I. Kandarakis, G. Panayiotakis "An analytical approach to the light transport in columnar phosphors. Detector Optical Gain, angular distribution and the CsI:Tl paradigm" *Physica Medica*, 35, 39-49, 2017.
 55. I. Seferis, J. Zeler, C. Michail, S. David, I. Valais, G. Fountos, N. Kalyvas, A. Bakas, I. Kandarakis, E. Zych, G. Panayiotakis "Grain size and shape dependence of luminescence efficiency of $Lu_2O_3:Eu$ thin screens" *Results in Physics*, 7, 980-981, 2017 (*Microarticle*)
 56. G. Karpetas, C. Michail, G. Fountos, N. Kalyvas, I. Valais, I. Kandarakis, G. Panayiotakis "Detective quantum efficiency (DQE) in PET scanners: A simulation study" *Applied Radiation Isotopes*, 125, 154-162, 2017.
 57. C. Michail, I. Valais, G. Fountos, A. Bakas, C. Fountzoula, N. Kalyvas, A. Karabotsos, I. Sianoudis, I. Kandarakis "Luminescence efficiency of calcium tungstate ($CaWO_4$) under X-ray radiation: Comparison with $Gd_2O_2S:Tb$ " *Measurement* 120, 213-220, 2018.
 58. I. Seferis, C. Michail, J. Zeler, N. Kalyvas, I. Valais, G. Fountos, A. Bakas, I. Kandarakis, E. Zych, G.S. Panayiotakis: "Detective quantum efficiency (DQE) of high X-ray absorption $Lu_2O_3:Eu$ thin screens: the role of shape and size of nano- and micro-grains, *Applied Physics A*, 124:604, 2018, <https://doi.org/10.1007/s00339-018-2034-2>.
 59. C. Michail, G. Karpetas, N. Kalyvas, I. Valais, I. Kandarakis, K. Agavanakis, G. Panayiotakis, and G. Fountos.: "Information Capacity of Positron Emission Tomography Scanners" *Crystals*, 8, 2018, doi:[10.3390/cryst8120459](https://doi.org/10.3390/cryst8120459).

60. N. Kalyvas, P. Liaparinos: "Analytical and Monte Carlo comparisons on the optical transport mechanisms of powder phosphors" *Optical Materials*, 88, 396-405, 2019.
61. C. Michail, N. Kalyvas, A. Bakas, K. Ninos, I. Sianoudis, G. Fountos, I. Kandarakis, G. Panayiotakis and I. Valais.: "Absolute Luminescence Efficiency of Europium-Doped Calcium Fluoride (CaF₂:Eu) Single Crystals under X-ray Excitation" *Crystals*, 9, 2019, 234 doi:10.3390/cryst9050234.
62. G.Saatsakis, C. Michail, C. Fountzoula, N.Kalyvas, A. Bakas, K. Ninos, G. Fountos, I. Sianoudis, I. Kandarakis, G.S. Panayiotakis and I. Valais.: "Fabrication and Luminescent Properties of Zn-Cu-In-S/ZnS Quantum Dot Films under UV Excitation" *Applied Sciences*, 9, 2367, 2019, doi:10.3390/app9112367
63. G.Saatsakis, N. Kalyvas, C. Michail, K. Ninos, A. Bakas, C. Fountzoula, I. Sianoudis, G.E. Karpetas, G. Fountos, I. Kandarakis, I. Valais and G. Panayiotakis "Optical Characteristics of ZnCuInS/ZnS (Core/Shell) Nanocrystal Flexible Films Under X-ray Excitation" *Crystals*, 9, 2019, 343 doi:10.3390/cryst9070343.
64. A. Anastasiou, F. Papastamati, A. Bakas, C. Michail, V. Koukou, N. Martini, K. Ninos, E. Lavdas, I. Valais, G. Fountos, I. Kandarakis and N. Kalyvas "Spatial frequency domain analysis of a commercially available digital dental detector" *Measurements*, 151, 107171, 2020.
65. C. Michail, K. Ninos, N. Kalyvas, A. Bakas, G. Saatsakis, G. Fountos, I. Sianoudis, G. Panayiotakis, I. Kandarakis, I. Valais "Spectral efficiency of lutetium aluminum garnet (Lu₃Al₅O₁₂:Ce) with microelectronic optical sensors", *Microelectronics Reliability* 109 (2020) 113658.
66. C. Michail, V. Koukou, N. Martini, G. Saatsakis, N. Kalyvas, A. Bakas, I. Kandarakis, G. Fountos, G. Panayiotakis and I. Valais "Luminescence Efficiency of Cadmium Tungstate (CdWO₄) Single Crystal for Medical Imaging Applications" *Crystals*, 10, 2020, 429, doi:10.3390/cryst10060429.
67. K. Psichis, N. Kalyvas, I. Kandarakis, G. Panayiotakis "MTF of columnar phosphors with a homogeneous part: an analytical approach" *Medical & Biological Engineering & Computing*, 58, 2551-2565, 2020.
68. D. Linardatos, A. Konstantinidis, I. Valais, K. Ninos, N. Kalyvas, A. Bakas, I. Kandarakis, G. Fountos and C. Michail "On the optical response of Tellurium Activated Zinc Selenide ZnSe:Te Single Crystal" *Crystals*, 10, 2020, 961, doi:10.3390/cryst10110961.

B. List of publications in peer review journals without impact factor

1. Spyropoulou V., Kalivas N., Gaitanis A., Michail C., Panayiotakis G. and Kandarakis I. "Modeling detector performance in digital mammography using the linear cascaded systems approach". *e-journal of Science and Technology*, 52-57, 2(3), 2008.

2. Liaskos M, Michail C, Kalyvas N., Toutountzis A., tsantis S., Fountos G., Cavouras D. and Kandarakis I. "Implementation of a Software Phantom for the Assessment of Contrast Detail in Digital Radiography". e-journal of Science and Technology, 15-23, 2(5), 2010.
3. Spyropoulou V., Kalyvas N., Gaitanis A., Kandarakis I. and Panayiotakis G.. "Image Quality in Digital Radiography. First Results of an analytical modeling approach". e-journal of Science and Technology, 55-62, 2(5), 2010.
4. Valais I, Michail C., Seferis I., Fountos G., Kalyvas N., Kandarakis I and Panayiotakis G.: "Scintillation Screen Preparation for use in digital medical imaging systems". e-journal of Science and Technology, 1-5, 7(3), 2012.
5. Dalles C., Kynatidis N., Michail C., Seferis I., Valais I., Kalyvas N., Fountos G., and Kandarakis I.: "Image quality assessment in CMOS and CR medical imaging systems". e-journal of Science and Technology, 7-13, 7(3), 2012.
6. Kalyvas N., Dimou A., Tsinoukas K., Fountos G., Michail C., Valais I, and Kandarakis I.: "Effect of film digitization on mammographic image quality". e-journal of Science and Technology, 23-28, 7(3), 2012.
7. Seferis I., Michail C., Valais I., Fountos G., Kalyvas N., Stromatia F., Kandarakis I. and Panayiotakis G.: "X-ray image degradation passing through thin glass substrate". e-journal of Science and Technology, 29-31, 7(3), 2012.
8. Kalyvas N., Liaparinis P., Valais I., Michail C., David S. and Kandarakis I.: "Scintillators in X-ray Imaging: The Miscirlu Project" e-journal of Science and Technology, 1-8, 9(4), 2013

C. List of publications in conference proceedings

1. Kalivas N., Kateris A., Tsoukos S., Cavouras D., Kandarakis I., Nomicos C. and Panayiotakis G, 1997 " Modeling quantum noise in radiographic phosphor screens" Proceedings of the 2nd Regional Mediterranean Congress on Radiation Protection, pg 84-87, Tel-Aviv, Israel, 1997.
2. Tsoukos S., Kateris A., Kalivas N., Kandarakis I., Cavouras D., Spyrou G. and Panayiotakis G.: "A theoretical model predicting the intensity of emitted light per unit of x-ray exposure in radiographic screens". Medicon 1998, Cyprus.
3. David S., Michail C., Valais I., Nikolopoulos D., Kalivas N., et al.: "Luminescence efficiency of Lu₂SiO₅:Ce (LSO) powder scintillator for X-ray medical radiography applications". IEEE Nuclear Science Symposium Conference Record, 2, 1178-1182, 2006
4. Michail C., David S., Toutountzis A., Valais I., Panayiotakis G., Fountos G., Kalyvas N. and Kandarakis I.: "A comparative investigation of Lu₂SiO₅:Ce and Gd₂O₂S:Eu phosphor scintillators for use in a medical imaging detector" Proceedings of the IEEE International Workshop on Imaging Systems and Techniques-IST2008, Chania Greece, September 10-12, 2008.
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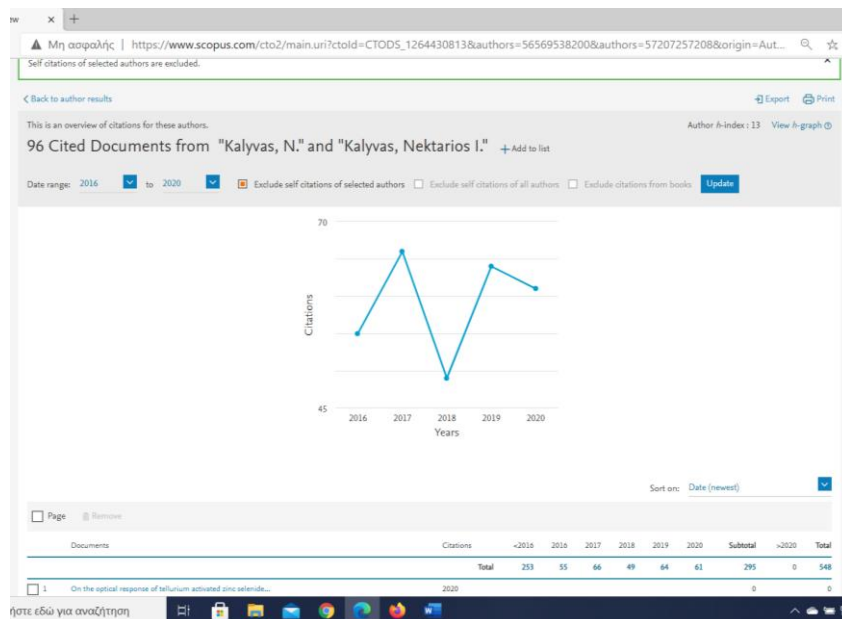
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	Όλα	Από το 2015
Παραβίσεις	1315	889
h-index	22	17
i10-index	39	34

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