

CURRICULUM VITAE

PERSONAL DETAILS

NAME : IOANNIS
 SURNAME : VALAIS
 DATE OF BIRTH : 14.08.1967
 NATIONALITY : GREEK
 FAMILY STATUS : Married
 ADDRESS : 44, Ag. Nikolaou str.
 153-51 Pallini, Kantza, Greece
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EDUCATION

- 1986-1991 B.Sc. in Medical Instrumentation, Department of Technology of Medical Instruments of the Technological Educational Institution (T.E.I.) of Athens. Grade: 7.42 "Very Good".
 1987-1989 Scholarship for three consequent years as the second best student in the class.
 B.Sc. Thesis: Renal Dialysis Machines. Comparison of various Dialysis machines and statistical presentation of failures.
 1991-1992 MSc in Biomedical Engineering, Department of Medical Physics and Bio-Engineering, University of Aberdeen, Scotland, UK.
 MSc Thesis: Energy correction in Gamma Cameras.
 2005-2008 PhD in Medical Physics, University of Patras, Department of Medicine, Medical School, Patras.
 PhD Thesis: Systematic Study of the light emission efficiency and the corresponding intrinsic physical characteristics of single crystal scintillators, doped with the trivalent Cerium (Ce^{3+}) activator, in wide energy range (from 20kV-18MV) for medical applications.

EDUCATIONAL EXPERIENCE

- October 1993-December 1993 Lecturer in "Nuclear Tomography" Seminar for unemployed graduates of Technological Educational Institute (T.E.I.) of Athens
 Subject: "Acquisition and processing of Nuclear Images".
 October 1995-July 1996 Laboratory Professor in Technological Educational Institute (T.E.I.), Athens Dept. of Medical Instrument Technology.
 Subject: Instructing in the Laboratory of Readiness And Preventive Maintenance of Medical Instruments.
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October 1999-July 2000	Laboratory Professor in Technological Educational Institute (T.E.I.), Athens Dept. of Medical Instrument Technology. Subject: Instructing in the Laboratory of Readiness And Preventive Maintenance of Medical Instruments.
October 2000-Febr. 2001	Laboratory Professor in Technological Educational Institute (T.E.I.), Athens Dept. of Medical Instrument Technology. Subject: Instructing in the Laboratory of Readiness And Preventive Maintenance of Medical Instrument.
February 2001-Oct. 2009	Laboratory Professor in Technological Educational Institute (T.E.I.), Athens Dept. of Medical Instrument Technology. Subject: Instructing in the Laboratories of Constructions, Readiness and Preventive Maintenance of Medical Instrument.
October 2009-Nov. 2013	Assistant Professor in Technological Educational Institute (T.E.I.), Athens Dept. of Medical Instrument Technology. Subject: Instructing in the Laboratory of Constructions, Preventive Maintenance and Quality Assurance of Medical Instrument.
November 2013-Aug. 2018	Associate Professor in Technological Educational Institute (T.E.I.), Athens Dept. of Biomedical Engineering T.E. Subject: Design and Constructions of Medical Devices, Optoelectronics & Medical LASER, and Preventive Maintenance & Quality Assurance of Medical Instrument.
September 2018-Today	Professor in University of West Attica, Athens Dept. of Biomedical Engineering Subject: Design and Constructions of Medical Devices, Optoelectronics, Medical Laser, Preventive Maintenance & Quality Assurance of Medical Instrument, Jurisprudence and Quality Standards in Medical Devices, Certification Principles of Medical Devices and Management & Economical Science Principles for Engineers.

SCIENTIFIC WORK

I contributed in the following scientific work

- 1) Somatostatin Receptor Detection with 111In-Pentetreotide (evaluation of the obtained results), G.S. Limouris et al. G.S. Limouris, S.K. Shukla, H.I. Biersak (editors), Radionuclides for Receptors, Meditera, 167-176, 1995.

- 2) ¹¹¹In-Pentetreotide/^{99m}Tc-DTPA subtraction scan. A technique for improving imaging of pituitary adenomas. G.S. Limouris *et al.* Eur. J. Nucl. Med., Vol. 22, No. 8 Aug. 1995.
- 3) Researcher, in EEC supported program with subject: Pulse Oximeter Calibrator 1996-1998.
- 4) Researcher, in T.E.I. supported program with subject: Development of Hospital Network between Medical Imaging systems, 1997.
- 5) Researcher, in T.E.I. supported program with subject: Development of High Voltage Generator for Medical Equipment, 1997.
- 6) Researcher, in T.E.I. supported program with subject: Development of functionality assessment of thyroid gland by controlling the Achilles hamstring response, 1997.
- 7) Researcher, in Industrial supported program with subject: Software Development in quantification of cardiac systolic function, using gamma camera data, 1999.
- 8) Researcher, in T.E.I. supported program EPEAEK "Archimidis I" with subject: Investigation of scintillators/phosphors, for use as detectors in medical imaging systems, 2004-2006.
- 9) Researcher, in T.E.I. supported program EPEAEK "Archimidis II" with subject: Experimental Investigation and Monte Carlo simulation of scintillators/phosphors, for use as detectors in Radiology and in Nuclear Medicine imaging systems, 2005-2007.
- 10) Researcher, in T.E.I. supported program "Athena 2004" with subject::Simulation of a Breast CT system. Investigation of the effect in image quality of the scintillation material and the reconstruction filter. 2005-2006.
- 11) Researcher, in T.E.I. supported program "Athena 2004" with subject: Characterization of the skin using optical reflection spectroscopy. Development of a diagnostic method. 2005-2006.
- 12) Researcher, in the Greek-Ukraine supported program with subject:: Development, modeling and experimental evaluation of scintillators for the optimization of a high resolution imaging system, for tumor detection. 2004-2006.
- 13) Researcher, in T.E.I. supported program EPEAEK "Archimidis III" with subject: «*Novel applications of x-ray Dual Energy for early diagnosis in Osteoporosis, mammography and angiography*» Acronym: XDualGnosis, Duration:01/09/2011 - 03/04/2014 Research Domain 3.Biological and Medical sciences. Research Area LS7; Diagnostic tools, therapies and public health. Primary Field of Research. LS7_1; Medical engineering and technology.
- 14) Researcher, in T.E.I. supported program EPEAEK "Archimidis III" with subject: «*Experimental evaluation of new co-doped Scintillator materials for use in Combined Tomographic Imaging Systems.*» Acronym: ScoDo, Duration: 01/09/2011 - 31/08/2013 Research Domain 5. Mathematics, Physics, Chemistry. Research Area LS7; Diagnostic tools, therapies and public health. Primary Field of Research. LS7_1;
- 15) Researcher, in T.E.I. supported program EPEAEK "Archimidis III" with subject:«*Development of Monte Carlo simulation tool for evaluation of nano-phosphor based X-ray imaging detectors.*» Acronym: NanoCarlo, 01/09/2011 - 31/08/2013 Research Domain 3.Biological and Medical sciences. Research Area LS7; Diagnostic tools, therapies and public health. Primary Field of Research. LS7_1; Medical engineering and technology.
- 16) Researcher, in T.E.I. supported program «ESPA 2007-2013» «Excellence». Subject: «*Medical Image SCience thRough LUMinescence (MISCIRLU project)*». Acronym: Miscirlu, Research Domain 6 'Medical Sciences', No of Proposal: 1476

EDITOR / GUEST EDITOR IN SCIENTIFIC JOURNALS

1. e-Journal of Science & Technology, e-JST, 2nd Issue, Vol. 5, 2010, URL: http://e-jst.teiath.gr/dekapente_teuxos.htm
2. e-Journal of Science & Technology, e-JST, 3rd Issue, Vol. 7, 2012, URL: http://e-jst.teiath.gr/eikosiexi_teuxos.htm

3. e-Journal of Science & Technology, e-JST, 3rd Issue, Vol. 9, 2014, URL: http://e-jst.teiath.gr/triantaexi_teuxos.htm
4. e-Journal of Science & Technology, e-JST, 4th Issue, Vol. 9, 2014, URL: http://e-jst.teiath.gr/triantaepeta_teuxos.htm

PUBLICATIONS

BOOKS:

J.G. Webster. Medical Instrumentation, Applications and Design. Translation in Greek-Editors: . Valais, . ontodimopoulos, . Loukos. “ ”, 1st edition 2004, pages 751, ISBN: 960-286-824-4.

INTERNATIONAL SCIENTIFIC JOURNALS

1. C. Hornberger, P. Knoop, W. Nahm, H. Matz, E. Konecny, H. Gehring, R. Bonk, H. Frankenberger, G. Meyfroid, J. Gil-Rodriguez, P. Wouters, L. Ponz, K. Benekos, J. **Valais**, J. Avgerinos, A. Karoutis, A. Ikiades and S. Weininger: A Prototype Device for Standardized Calibration of Pulse Oximeters, *Journ. Clin. Monit. and Comp.*; 16: 3: 161-169, 2000.
IF (2000): 0.488
2. C. Hornberger, H. Matz, E. Konecny, H. Frankenberger, R. Bonk, J. Avgerinos, K. Benekos, J. **Valais**, A. Ikiades, J. Gil-Rodriguez, P. Wouters, G. Meyfroid, L. Ponz, H. Gehring: Design and Validation of a Pulse Oximeter Calibrator. *Anesth. Analg.*; 94: S8-S12, 2002.
IF (2002): 2.332
3. P.F. Wouters, H. Gehring, G. Meyfroid, L. Ponz, J. Gil-Rodriguez, C. Hornberger, R. Bonk, H. Frankenberger, K. Benekos, J. **Valais**, J. Avgerinos and E. Konecny: Accuracy of Pulse Oximeters: The European Multi-Center Trial, *Anesth. Analg.*; 94: S13-S16, 2002.
IF (2002): 2.332
4. D. Cavouras, I. Kandarakis, D. Nikolopoulos, I. Kalatzis, A. Episkopakis, G. Kagadis, N. Kalivas, D. Linardatos, M. Roussou, E. Nirgianaki, D. Margetis, **I. Valais**, I. Sianoudis, K. Kourkoutas, N. Dimitropoulos, A. Louizi, C. Nomicos, G. Panayiotakis.: Light emission efficiency and imaging performance of $\text{Y}_2\text{Al}_5\text{O}_{12}$: Ce (YAG: Ce) powder screens under diagnostic radiology conditions. *Applied Physics B (Lasers and Optics)*, 80 pp. 923-933, 2005.
IF (2005): 2.056
5. **I. Valais**, A. Konstantinidis, G. Salemis, D. Nikolopoulos , N. Dimitropoulos, G. Panayiotakis , D. Cavouras, and I. Kandarakis. Evaluation of cerium doped Yttrium Aluminum Oxide (YAG and YAP) powder scintillating screens for use in x-ray imaging. *Biomedizinische Technik*, Vol. 50, (part 1), pp. 11-12, 2005.
IF (2005): 0.889
6. **I. Valais**, I. Kandarakis, D. Nikolopoulos, G. Loudos, N. Giokaris, C. Karagiannis, A. Episkopakis, and G.S. Panayiotakis. Experimental determination of luminescence emission properties of CsI:Tl, Lu₂SiO₅:Ce (LYSO:Ce) and Gd₂SiO₅:Ce (GSO:Ce) single crystal scintillators under x-ray exposure for use in medical imaging. *Biomedizinische Technik*, Vol. 50, (part 2), pp. 1112-1113, 2005
IF (2005): 0.889
7. D. Nikolopoulos, I. Kandarakis, **I. Valais**, A. Gaitanis, D. Cavouras:X-ray absorption and X-ray fluorescence of medical imaging scintillating screens via application of Monte Carlo methods. *Biomedizinische Technik*, Vol. 50, (part 2), pp. 1124-1125, 2005.
IF (2005): 0.889
8. X. Tsantilas, A. Louizi, J. **Valais**, D. Nikolopoulos, N. Sakellios, N. Karakatsanis, G. Loudos, K. Nikita, J. Malamitsi, I. Kandarakis: Simulation of commercial PET scanners with GATE Monte Carlo simulation package. *Biomedizinische Technik*, Vol. 50, (part 1), pp. 114-115, 2005
IF (2005): 0.889
9. **I. Valais**, I. Kandarakis, D. Nikolopoulos, I. Sianoudis, N. Dimitropoulos, D. Cavouras, C. Nomicos, G. Panayiotakis.: Luminescence efficiency of Gd₂SiO₅: Ce scintillator under x-ray excitation. *IEEE Trans Nucl. Sc.* Vol. 52, No 5, pp. 1830-1835, Oct. 2005.
IF (2005): 1.259
10. D. Nikolopoulos, **I. Valais**, I. Kandarakis, D. Cavouras, D. Linardatos, I. Sianoudis, A. Louizi, N. Dimitropoulos, D. Vattis, A. Episkopakis, C. Nomicos and G. Panayiotakis Evaluation of GSO:Ce scintillator in the X-ray energy range from 40 to 140 kV for possible applications in medical X-ray imaging. *Nucl Inst. Meth. Res. A*, 560, pp. 587-583, 2006.

- IF (2006): 1.185**
11. Valais, I. Kandarakis, D. Nikolopoulos, A. Konstantinidis, I. Sianoudis, D. Cavouras, N. Dimitropoulos, C. Nomicos, G.S. Panayiotakis: Evaluation of light emission efficiency of LYSO: Ce scintillator under x-ray excitation for possible applications in medical imaging, *Nucl. Inst. Meth. Res. A*, 569 (2), pp. 201-204, 2006.
- IF (2006): 1.185**
12. N. Kalivas, **I. Valais**, G. Salemis, C. Karagiannis, A. Konstantinidis, D. Nikolopoulos, G. Loudos, N. Sakelios, N. Karakatsanis, K. Nikita, V.L. Geyshan, A.V. Gektin, I. Sianoudis, N. Giokaris, C.D. Nomicos, N. Dimitropoulos, D. Cavouras, G. Panayiotakis and I. Kandarakis: Imaging properties of cerium doped Yttrium Aluminum Oxide (YAP:Ce) powder scintillating screens under x-ray excitation, *Nucl. Inst. Meth. Res. A*, 569 (2), pp. 210-214, 2006.
- IF (2006): 1.185**
13. D. Nikolopoulos, I Kandarakis, X. Tsantilas, **I. Valais**. D. Kavouras, A. Louizi: Comparative study of the Radiation Detection efficiency of LSO, LuAP, GSO and YAP scintillators for use in positron emission imaging (PET) via Monte-Carlo Methods, *Nucl. Inst. Meth. Res. A*, 569 (2), pp. 350-354, 2006.
- IF (2006): 1.185**
14. N. Karakatsanis, N. Sakelios, X. Tsantilas, N. Dikaios, C. Tsoumpras, K. Nikita, D. Lazaros. G. Loudos, A. Louizi, **I. Valais**, D. Nikolopoulos, J. Malamitsi, I. Kandarakis: A comparative evaluation of two commercial PET scanners using GATE. *Nucl. Inst. Meth. Res. A*, 569 (2), pp. 368-372, 2006.
- IF (2006): 1.185**
15. D. Nikolopoulos, I. Kandarakis, D. Cavouras, **I. Valais**, D. Linardatos, C. Michail, S. David, A. Gaitanis, C. Nomicos, A. Louizi (2006) Investigation of radiation absorption and X-ray fluorescence properties of medical imaging scintillators by Monte Carlo methods *Nucl. Instrum. Meth. Phys. Res. A* 565:821-832. doi:[10.1016/j.nima.2006.05.170](https://doi.org/10.1016/j.nima.2006.05.170).
- IF (2006): 1.185**
16. Kandarakis, D. Cavouras, D. Nikolopoulos, A. Episkopakis, N. Kalivas, P. Liaparinos, **I. Valais**, G. Panayiotakis.: A theoretical model evaluating the angular distribution of luminescence emission in X-ray scintillating screens. *Appl. Rad. Isot.* 64(4), pp. 508-519, 2006.
- IF (2006): 0.924**
17. D. Nikolopoulos, D. Linardatos, **I. Valais**, C. Michail, S. David, P. Gonias, N. Bertsekas, D. Cavouras, A. Louizi, I. Kandarakis: Monte Carlo validation in the diagnostic radiology range. *Nucl Inst. Meth. Res. A*, 571, pp. 267-269, 2007
- IF (2007): 1.114**
18. **I. Valais**, D. Nikolopoulos, N. Kalivas, A. Gaitanis, G. Loudos, I. Sianoudis, N. Giokaris, D. Cavouras, N. Dimitropoulos, C. D. Nomicos, I. Kandarakis and G. S. Panayiotakis: A systematic study of the performance of the CsI:Tl single crystal scintillator under x-ray excitation. *Nucl Inst. Meth. Res. A*, 571, pp. 343-345, 2007.
- IF (2007): 1.114**
19. N. Kalivas, **I. Valais**, D. Nikolopoulos, A. Konstantinidis, A. Gaitanis, D. Cavouras, C.D. Nomicos, G. Panayiotakis, I. Kandarakis: Light emission efficiency and imaging properties of YAP:Ce granular phosphor screens. *Appl. Phys. A*, 89 (2), p. 443-449, 2007
- IF (2007): 1.857**
20. S. David, C. Michail, **I. Valais**, D. Nikolopoulos, P. Liaparinos, N. Kalivas, I. Kalatzis, N. Efthimiou, A. Toutountzis, G. Loudos, I. Sianoudis, D. Cavouras, C.D. Nomicos, I. Kandarakis: Efficiency of $\text{Lu}_2\text{SiO}_5:\text{Ce}$ (LSO) powder phosphor as X-ray to light converter under mammographic imaging conditions. *Nucl Inst. Meth. Res. A*, 571, pp. 346-349, 2007. doi:[10.1016/j.nima.2006.10.106](https://doi.org/10.1016/j.nima.2006.10.106).
- IF (2007): 1.114**
21. N. Efthimiou, N. Kalivas, G. Patatoukas, A. Konstantinidis, **I. Valais**, D. Nikolopoulos, A. Gaitanis, S. David, C. Michail, G. Loudos, D. Cavouras, G.S. Panayiotakis, I. Kandarakis: Investigation of the effect of the scintillator material on the overall X-ray detection system performance by application of analytical models. *Nucl Inst. Meth. Res. A*, 571, pp. 270-273, 2007. doi:[10.1016/j.nima.2006.10.080](https://doi.org/10.1016/j.nima.2006.10.080).
- IF (2007): 1.114**
22. A. Karatopis, O. Benekos, E. Efstathopoulos, **I. Valais**, I. Kandarakis, N. Kelekis: Molecular imaging through ^1H MRS and MRSI in everyday routine: Improvements in various clinical applications and parameter optimization of spectroscopic imaging sequences. *Nucl Inst. Meth. Res. A*, 571, pp. 502-505, 2007
- IF (2007): 1.114**
23. C. Michail, S. David, P. Liaparinos, **I. Valais**, D. Nikolopoulos, N. Kalivas, A. Toutountzis, I. Sianoudis, D. Cavouras, N. Dimitropoulos, C. D. Nomicos, K. Kourkoutas, I. Kandarakis, G. S. Panayiotakis (**2007**) Evaluation of the imaging performance of LSO powder scintillator for use in x-ray mammography *Nucl. Instrum. Meth. Phys. Res. A* 580:558-561 doi:[10.1016/j.nima.2007.05.234](https://doi.org/10.1016/j.nima.2007.05.234).
- IF (2007): 1.114**

24. **I. Valais**, S. David, C. Michail, D. Nikolopoulos, P. Liaparinos, D. Cavouras, I. Kandarakis and G. S. Panayiotakis (2007) Comparative study of luminescence properties of LuYAP:Ce and LYSO:Ce single crystal scintillators for use in medical imaging, *Nucl. Instrum. Methods Phys. Res. A* 580(1):614-616. doi:[10.1016/j.nima.2007.05.023](https://doi.org/10.1016/j.nima.2007.05.023).
IF (2007): 1.114
25. **I. Valais**, S. David, C. Michail, A. Konstantinidis, I. Kandarakis and G. S. Panayiotakis (2007) Investigation of luminescence properties of the LSO:Ce, LYSO:Ce and GSO:Ce crystal scintillators under low-energy X-ray excitation used in nuclear imaging. *Nucl. Instrum. Meth. Phys. Res. A* 581:99-102. doi:[10.1016/j.nima.2007.07.037](https://doi.org/10.1016/j.nima.2007.07.037).
IF (2007): 1.114
26. **I. G. Valais**, I. S. Kandarakis, D. N. Nikolopoulos, C. M. Michail, S. L. David, G. K. Loudos, D. A. Cavouras and G. S. Panayiotakis (2007) [Luminescence properties of \(Lu,Y\)₂SiO₅:Ce and Gd₂SiO₅:Ce single crystal scintillators under x-ray excitation, for use in medical imaging systems](#) *Trans. Nucl. Sci.* 54(1):11-18.
IF (2007): 1.107
27. C. Michail, S. David, **I. Valais**, D. Nikolopoulos, I. Sianoudis, C. Nomicos, N. Dimitropoulos, G. Panayiotakis, D. Cavouras and I. Kandarakis (2007) [Investigation of the radiation absorption and light emission properties of a 25 mg/cm² Lu₂SiO₅:Ce \(LSO\) scintillating screen for use in x-ray digital mammography detectors](#) *e-Journal of Science & Technology (e-JST)* 2(1):72-80
28. C. M. Michail, **I. G. Valais**, A. E. Toutountzis, N. E. Kalyvas, G. P. Fountos, S. L. David, I. S. Kandarakis, G. S. Panayiotakis (2008) [Light emission efficiency of Gd₂O₂S:Eu \(GOS:Eu\) powder screens under X-ray mammography conditions](#), *Trans. Nucl. Sci.* 55(6):3703-3709.
IF (2008): 1.737
29. **I. G. Valais**, C. M. Michail, S. L. David, A. Konstantinidis, D. A. Cavouras, I. S. Kandarakis and G. S. Panayiotakis (2008) [Luminescence emission properties of \(Lu,Y\)₂SiO₅:Ce \(LYSO:Ce\) and \(Lu,Y\)AlO₃:Ce \(LuYAP:Ce\) single crystal scintillators under x-ray medical image conditions](#) *Trans. Nucl. Sci.* 55(2):785-789.
IF (2008): 1.737
30. **I. Valais**, C. Michail, S. David, L. Costaridou, C.D. Nomicos, G.S. Panayiotakis, I. Kandarakis, (2008) [A Comparative Study of the Luminescence Properties of LYSO:Ce, LSO:Ce, GSO:Ce and BGO Single Crystal Scintillators for Use in Medical X-Ray Imaging](#), *Physica Medica* 24:122-125.
IF (2008): 1.045
31. S. David, C. Michail, **I. Valais**, A.Toutountzis, D.Cavouras, I.Kandarakis, G. Panayiotakis (2008) [Investigation of luminescence properties of Lu₂SiO₅:Ce \(LSO\) powder scintillator in the x-ray radiography energy range](#) *Trans. Nucl. Sci.* 55(6):3684-3691.
IF (2008): 1.737
32. Petropoulou A., N. Kalyvas, I. Kandarakis, **I. Valais** and G.S. Panayiotakis: "The influence of software filtering in digital mammography image quality" JINST 4 P06016, 2009, doi:[10.1088/1748-0221/4/06/P06016](https://doi.org/10.1088/1748-0221/4/06/P06016)
IF (2009): 2.102
33. N. Kalyvas, **I. Valais**, L. Costaridou, I. Kandarakis, D. Cavouras, C.D. Nomicos and G. Panayiotakis: "Evaluating optical spectral matching of phosphor-photodetector combinations" JINST 4 P07003, 2009, doi:[10.1088/1748-0221/4/07/P07003](https://doi.org/10.1088/1748-0221/4/07/P07003)
IF (2009): 2.102
34. C. M. Michail, G. P. Fountos, S. L. David, **I. G. Valais**, A. E. Toutountzis, N. E. Kalyvas, I. S. Kandarakis, G. S. Panayiotakis (2009) [A comparative investigation of Lu₂SiO₅:Ce and Gd₂O₂S:Eu powder scintillators for use in x-ray mammography detectors](#) *Meas. Sci. Technol.* 20: 104008.
IF (2009): 1.317
35. C. Michail, A. Toutountzis, S. David, N. Kalivas, **I. Valais**, I. Kandarakis, G. S. Panayiotakis (2009) [Imaging performance and light emission efficiency of Lu₂SiO₅:Ce \(LSO:Ce\) powder scintillator under x-ray mammographic conditions](#) *Appl Phys B* 95:131-139.
IF (2009): 1.992
36. C. Michail, V. Spyropoulou, N. Kalyvas, **I. Valais**, N. Dimitropoulos, G. Fountos, I. Kandarakis and G. Panayiotakis (2009) [The influence of software filtering in digital mammography image quality](#) *J. Inst.* 4:P05018.
IF (2009): 2.102
37. **I. G. Valais**, S. David, C. Michail, C. D. Nomicos, G. S. Panayiotakis and I. S. Kandarakis (2009) [Comparative evaluation of single crystal scintillators under x-ray imaging conditions](#) *J. Inst.* 4:P06013.
IF (2009): 2.102
38. Toutountzis A., C. Michail, **I. Valais**, S. David, G. Nikiforidis and I. Kandarakis (2009) [Light emission efficiency of GdAlO₃:Ce \(GAP:Ce\) powder screens under X-ray radiography conditions](#) *e-Journal of Science & Technology (e-JST)* 4(3):23-29.

39. C. M. Michail, G. P. Fountos, P. F. Liaparinos, N. E. Kalyvas, **I. Valais** and I. S. Kandarakis, G. S. Panayiotakis (2010) [Light emission efficiency and imaging performance of \$\text{Gd}_2\text{O}_3:\text{Eu}\$ powder scintillator under X-ray Radiography conditions](#), *Med. Phys.* 37(7):3694-3703.
IF (2010): 3.070
40. C. M. Michail, A. Toutountzis, **I. G. Valais**, I. Seferis, M. Georgousis, G. Fountos, I. S. Kandarakis and G. S. Panayiotakis (2010) [Luminescence Efficiency of \$\text{Gd}_2\text{O}_3:\text{Eu}\$ Powder Phosphors as X-ray to Light Converter](#) *e-Journal of Science & Technology*, (e-JST) 5(2):25-32.
41. **I. G. Valais**, C. M. Michail, S. L. David, P. F. Liaparinos, G. P. Fountos, T. V. Paschalidis, I. S. Kandarakis and G. S. Panayiotakis (2010) [Comparative Investigation of \$\text{Ce}^{3+}\$ doped Scintillators in a wide Range of Photon Energies covering X-ray CT, Nuclear Medicine and Megavoltage Radiation Therapy Portal Imaging applications](#), *Trans. Nucl. Sci.* 57(1):3-7.
IF (2010): 1.591
42. S. L. David, C. M. Michail, M. Roussou, E. Nirgianaki, A. E. Toutountzis, **I. G. Valais**, G. Fountos, P. F. Liaparinos, I. Kandarakis, G. Panayiotakis (2010) [Evaluation of the luminescence efficiency of YAG:Ce powder scintillating screens for use in digital mammography detector](#) *Trans. Nucl. Sci.* 57(3):951-957.
IF (2010): 1.591
43. S. L. David, C. M. Michail, **I. G. Valais**, I. Seferis, G. Varaboutis, S. Gatsos, A. E. Toutountzis, G. Fountos, I. S. Kandarakis, G. S. Panayiotakis (2010) [Luminescence Efficiency of fast Yttrium Aluminum Garnet Phosphor Screens for use in Digital Breast Tomosynthesis](#) *e-Journal of Science & Technology*, (e-JST) 5(2):63-73. [P043](#)
I. G. Valais, P.C. Xydias (2010) [Detectors for Imaging in Radiation Therapy](#) *e-Journal of Science & Technology*, (e-JST) 5(2):75-86.
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CITATIONS

Google Scholar: 964

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h-index:20

i10-index:29

Scopus : 746

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Excl. Self Citations: 484

RESEARCH INTERESTS

Radiation Detectors, X-ray and Gamma ray Luminescent Materials, X-ray and Gamma ray Instrumentation, Medical Image Processing, Medical Lasers, Quality Assurance, Electrical Safety

WORKING EXPERIENCE

Experience in the technical support and applications of Medical Instruments.

March 1990 - Sept. 1990: Vocational trainee in the Service Dept. of DIOPHAR S.A., 368 Kifissias ave., 152 33 Halandri.
Participation in the testing and repair of:
1) Renal Dialysis,
2) Blood Coagulation Time Measuring,
3) Lithotripsy Systems and
4) Mobile X-ray Units.

Sept. 1990 - Sept. 1991: Medical Instrumentation Engineer in the Service Dept. of DIOPHAR S.A., 368 Kifissias ave., 152 33 Halandri.
In charge of servicing:
1) Renal Dialysis,
2) Blood Coagulation Time Measuring,
3) Mobile X-ray Units.

Sept. 1992 - Sept. 1993: Biomedical Engineer in the Service Dept.
of DIOPHAR S.A., 368 Kifissias ave., 152 33 Halandri.
In charge of service and application of:
1) Nuclear Medicine (camera),
2) Ultrasound (U.L.S.),
3) Computerized Tomography (CT),
4) Renal Dialysis,
5) Radiography units(-R).

March 1993 - Oct. 1994: Military Service. Most of my military service I served as a Medical Device Engineer.

Oct. 1994 - Oct. 1998: Biomedical Engineer in the Service Dept.
of DIOPHAR S.A., 368 Kifissias ave., 152 33 Halandri.
In charge of service and application of:
1) Nuclear Medicine (camera),
2) Ultrasound (U.L.S.),
3) Computerized Tomography (CT),
4) Renal Dialysis,
5) Radiography units(-R)
4) Magnetic Resonance Imaging (MRI),
5) LASER,
6) Peritoneal Dialysis

Oct. 1998 – Feb. 2001: Supervisor in Maintenance and Application of Medical Devices in the Service Dept. of DIOPHAR S.A., 368 Kifissias ave., 152 33 Halandri. In charge of:
1) Nuclear Medicine (camera),
2) LASER,
3) Peritoneal Dialysis

LANGUAGES

Greek	Native
English	Postgraduate Studies
French	Satisfactory.