ΒΙΟΓΡΑΦΙΚΟ ΣΗΜΕΙΩΜΑ

ΠΡΟΣΩΠΙΚΕΣ ΠΛΗΡΟΦΟΡΙΕΣ

Ονοματεπώνυμο: Παναγιώτης Λιαπαρίνος
Έτος γεννήσεως: 1980
email: *liapkin@uniwa.gr*

	ΣΗΜΕΡΙΝΗ ΕΠΑΓΓΕΛΜΑΤΙΚΗ ΔΡΑΣΤΗΡΙΟΤΗΤΑ **Βαθμίδα:** Αναπληρωτής Καθηγητής **Τμήμα:** Μηχανικών Βιοϊατρικής, Πανεπιστήμιο Δυτικής Αττικής

1 ΕΚΠΑΙΔΕΥΣΗ

1.1	**ΠΤΥΧΙΟ**	
	Τίτλος Πτυχίου	Μηχανικός Τεχνολογίας Ιατρικών Οργάνων
	Τίτλος Σχολής-	Τεχνολογικό Εκπαιδευτικό Ίδρυμα (ΤΕΙ) Αθήνας, Σχολή
	Ιδρύματος	Τεχνολογικών Εφαρμογών, Τμήμα Τεχνολογίας Ιατρικών Οργάνων
	Ημερομηνία Λήψης	11/10/2002

1.2	**ΜΕΤΑΠΤΥΧΙΑΚΟ**	
	Τίτλος Πτυχίου	Ιατρική Φυσική
	Τίτλος Σχολής-Ιδρύματος	Πανεπιστήμιο Πατρών, Τμήμα Ιατρικής – Τμήμα Φυσικής, Διατμηματικό Μεταπτυχιακό Πρόγραμμα στην Ιατρική Φυσική
	Ημερομηνία Λήψης	14/12/2004

1.3	**ΔΙΔΑΚΤΟΡΙΚΟ**	
	Τίτλος Πτυχίου	Ιατρική Φυσική
	Τίτλος Σχολής-Ιδρύματος	Πανεπιστήμιο Πατρών, Τμήμα Ιατρικής – Τμήμα Φυσικής, Διατμηματικό Μεταπτυχιακό Πρόγραμμα στην Ιατρική Φυσική
	Ημερομηνία Λήψης	06/06/2007

1.4	**ΜΕΤΑΔΙΔΑΚΤΟΡΙΚΗ ΕΡΕΥΝΑ**	
	Ίδρυμα Κρατικών Υποτροφιών (ΙΚΥ)	
	Θέση	Ειδικότητα: Μεταδιδακτορικός ερευνητής Τίτλος ερευνητικής πρότασης: <Εφαρμογή μεθόδων Μόντε Κάρλο για τη μελέτη ανιχνευτικών συστημάτων ιατρικής απεικόνισης βασισμένων σε φθορίζοντα υλικά νέας δομής με πυκνή διάταξη κόκκων και διαστάσεις έως και την περιοχή των νανοσωματιδίων>
	Διάρκεια	01/02/2011- 31/01/2012

2 ΕΠΑΓΓΕΛΜΑΤΙΚΗ ΚΑΙ ΕΚΠΑΙΔΕΥΤΙΚΗ ΔΡΑΣΤΗΡΙΟΤΗΤΑ

2.1	**- ΕΠΑΓΓΕΛΜΑΤΙΚΗ ΔΡΑΣΤΗΡΙΟΤΗΤΑ - ΣΥΜΜΕΤΟΧΗ ΣΕ ΕΡΕΥΝΗΤΙΚΑ ΚΑΙ ΕΚΠΑΙΔΕΥΤΙΚΑ ΠΡΟΓΡΑΜΜΑΤΑ**	
2.1.1	Υπηρεσία-Εργοδότης	Πανεπιστήμιο Πατρών
	Θέση	Ερευνητής – Πρόγραμμα Μεταπτυχιακών Σπουδών Πανεπιστημίου: Ιατρική Φυσική
	Διάρκεια	01/12/2002 – 30/04/2003
2.1.2	Υπηρεσία-Εργοδότης	ΤΕΙ Αθήνας
	Θέση	Εκπαιδευτικό Πρόγραμμα ΕΠΕΑΚ ΙΙ: «Αναμόρφωση προπτυχιακών προγραμμάτων σπουδών του ΤΕΙ Αθήνας»
	Διάρκεια	01/03/2004 – 31/10/2004
2.1.3	Υπηρεσία-Εργοδότης	ΤΕΙ Αθήνας
	Θέση	Ερευνητής – Ερευνητικό Πρόγραμμα ΕΠΕΑΚ ΑΡΧΙΜΗΔΗΣ Ι: «Μελέτη φωσφόρων / σπινθηριστών για χρήση σε ανιχνευτές ακτινοβολίας συστημάτων ιατρικής απεικόνισης»
	Διάρκεια	01/02/2004 – 31/08/2006
2.1.4	Υπηρεσία-Εργοδότης	ΤΕΙ Αθήνας
	Θέση	Ερευνητής – Ερευνητικό Πρόγραμμα ΕΠΕΑΚ ΑΡΧΙΜΗΔΗΣ ΙΙ: «Πειραματική διερεύνηση και προσομοίωση με τεχνικές Monte-Carlo υλικών ανιχνευτών ακτινοβολίας που χρησιμοποιούνται σε συστήματα Ακτινοδιαγνωστικής και Πυρηνικής Ιατρικής»
	Διάρκεια	01/09/2005 – 31/12/2006
2.1.5	Υπηρεσία-Εργοδότης	ΤΕΙ Αθήνας
	Θέση	Ερευνητής – Ερευνητικό Πρόγραμμα ΑΘΗΝΑ 2004: «Προσομοίωση ενός συστήματος υπολογιστικής τομογραφίας μαστού: η επίδραση του υλικού του ανιχνευτή και του αλγορίθμου ανακατασκευής εικόνας»
	Διάρκεια	01/03/2006 – 10/03/2006
2.1.6	Υπηρεσία-Εργοδότης	Technical University of Madrid E.T.S.I.T, Department of Electronic Engineering, Spain
	Θέση	Ερευνητής – Marie Curie Fellowship
	Διάρκεια	01/04/2005-30/11/2005
2.1.7	Εργοδότης	Οδοντίατρος: Ν.Ρούσσος (Οδοντιατρικό μηχάνημα)
	Θέση	Μηχανικός τεχνολογίας ιατρικών οργάνων-Προληπτική, διορθωτική και επισκευαστική συντήρηση με σκοπό την εύρυθμη λειτουργία του οδοντιατρικού μηχανήματος
	Διάρκεια	01/05/2008 – 30/09/2008
2.1.8	Υπηρεσία-Εργοδότης	ΤΕΙ Αθήνας

	Θέση	Ερευνητής – Ευρωπαϊκό Ερευνητικό Πρόγραμμα NANOTHER: «Integration of novel NANOparticle based technology for THERapeutics and diagnosis of different types of cancer – NANOTHER»
	Διάρκεια	01/01/2009 – 30/06/2009
2.1.9	Υπηρεσία-Εργοδότης	Γενικό Επιτελείο Στρατού
	Θέση	Ειδικότητα: Βοηθός ακτινολογικού εργαστηρίου
	Διάρκεια	18/06/2007-07/05/2008
2.1.10	Υπηρεσία-Εργοδότης	Πανεπιστήμιο Πατρών
	Θέση	Ερευνητής – Πρόγραμμα Μονάδα Παροχής Υπηρεσιών (ΜΠΥ) Κωδικός: Β. 583
	Διάρκεια	01/07/2010 – 31/12/2010
2.1.11	Υπηρεσία-Εργοδότης	Ίδρυμα Κρατικών Υποτροφιών (ΙΚΥ)
	Θέση	Ειδικότητα: Μεταδιδακτορικός ερευνητής Τίτλος ερευνητικής πρότασης: <Εφαρμογή μεθόδων Μόντε Κάρλο για τη μελέτη ανιχνευτικών συστημάτων ιατρικής απεικόνισης βασισμένων σε φθορίζοντα υλικά νέας δομής με πυκνή διάταξη κόκκων και διαστάσεις έως και την περιοχή των νανοσωματιδίων>
	Διάρκεια	01/02/2011- 31/01/2012
2.1.12	Υπηρεσία-Εργοδότης	ΤΕΙ Αθήνας
	Θέση	Μέλος ΚΕΟ – Ερευνητικό Πρόγραμμα ΕΠΕΑΚ ΑΡΧΙΜΗΔΗΣ ΙΙΙ: «NANOCARLO – Αξιολόγηση Νανοφοσφόρων για εφαρμογές ιατρικής απεικόνισης: Προσομοίωση Μόντε Κάρλο και πειραματική διερεύνηση»
	Διάρκεια	01/03/2012 – 30/06/2015
2.1.13	Υπηρεσία-Εργοδότης	ΤΕΙ Αθήνας
	Θέση	Ερευνητής-Ερευνητικό Πρόγραμμα ΕΠΕΑΚ ΑΡΧΙΜΗΔΗΣ ΙΙΙ: «ScoDo – Πειραματική αξιολόγηση νέων μονοκρυσταλλικών ανιχνευτών σπινθηρισμού για χρήση σε συνδυαστικά τομογραφικά συστήματα ιατρικής απεικόνισης»
	Διάρκεια	01/03/2012 – 30/06/2015
2.1.14	Υπηρεσία-Εργοδότης	ΤΕΙ Αθήνας
	Θέση	Ερευνητής – Ερευνητικό Πρόγραμμα ΕΠΕΑΚ ΑΡΧΙΜΗΔΗΣ ΙΙΙ: «XDUALGNOSIS – Καινοτόμες εφαρμογές στη τεχνική διπλής ενέργειας ακτίνων-Χ για πρόωρη διάγνωση στην οστεοπόρωση, τη μαστογραφία και την αγγειογραφία»
	Διάρκεια	01/03/2012 – 30/06/2015
2.1.15	Υπηρεσία-Εργοδότης	ΤΕΙ Αθήνας
	Θέση	Μέλος ΚΕΟ – Ερευνητικό Πρόγραμμα ΑΡΙΣΤΕΙΑ Ι: «MISCIRLU (1476) – Medical Image Science through luminescence»
	Διάρκεια	27/09/2012 – 26/09/2015
2.1.16	Υπηρεσία-Εργοδότης	ΤΕΙ Αθήνας

	Θέση	Εκπαιδευτικό Πρόγραμμα ΠΡΑΚΤΙΚΗΣ ΑΣΚΗΣΗΣ
	Διάρκεια	01/04/2012-16/10/2012, 09/07/2012-08/01/2013 10/02/2013-10/08/2013, 08/10/2013-08/04/2014 05/11/2013-22/05/2014, 10/04/2014-01/11/2014 01/04/2015-30/09/2015
2.1.17	Υπηρεσία-Εργοδότης	ΤΕΙ Αθήνας
	Θέση	Επιστημονικός Υπεύθυνος – Πρόγραμμα ΕΠΕΕ – "Special Account for Research Grants" of the TEI of Athens
	Τίτλος	Εφαρμογή τεχνικών Monte Carlo για τη διερεύνηση εφαρμογής νανο-υλικών με υψηλή πυκνότητα κόκκων σε συστήματα ιατρικής απεικόνισης
	Διάρκεια	01/10/2015 – 30/09/2016

2.2	**ΔΙΔΑΚΤΙΚΗ ΔΡΑΣΤΗΡΙΟΤΗΤΑ**	
2.2.1	**ΣΕ ΕΛΛΗΝΙΚΑ ΠΑΝΕΠΙΣΤΗΜΙΑ (ΠΡΟΠΤΥΧΙΑΚΑ)**	
2.2.1.1	Ίδρυμα	**Τεχνολογικό Εκπαιδευτικό Ίδρυμα (ΤΕΙ) Αθήνας Σχολή Τεχνολογικών Εφαρμογών, Τμήμα Τεχνολογίας Ιατρικών Οργάνων**
	Θέση	Εργαστηριακός Συνεργάτης.
	Μαθήματα	**Εργαστήριο**
		1. Τεχνολογία Ιοντιζουσών ακτινοβολιών Ι Συστήματα Ακτινοδιαγνωστικής – Ακτινοθεραπείας
		2. Τεχνολογία Ιοντιζουσών ακτινοβολιών ΙΙ Συστήματα Πυρηνικής Ιατρικής
		3. Τεχνολογία Μη-Ιοντιζουσών ακτινοβολιών ΙΙΙ Συστήματα Μαγνητικού συντονισμού, Υπερηχογραφίας, Οπτικής απεικόνισης
	Διάρκεια	01/10/2008–17/01/2012
2.2.1.2	Ίδρυμα	**Τεχνολογικό Εκπαιδευτικό Ίδρυμα (ΤΕΙ) Αθήνας Σχολή Τεχνολογικών Εφαρμογών, Τμήμα Μηχανικών Βιοϊατρικής τεχνολογίας ΤΕ**
	Θέση	Καθηγητής Εφαρμογών
	Μαθήματα	**Θεωρία**
		Ηλεκτρομηχανολογικές Εγκαταστάσεις Νοσοκομείων
		Εργαστήριο
		1. Τεχνολογία Ιοντιζουσών ακτινοβολιών Ι Συστήματα Ακτινοδιαγνωστικής – Ακτινοθεραπείας
		2. Τεχνολογία Ιοντιζουσών ακτινοβολιών ΙΙ Συστήματα Πυρηνικής Ιατρικής
		3. Τεχνολογία Μη-Ιοντιζουσών ακτινοβολιών ΙΙΙ Συστήματα Μαγνητικού συντονισμού, Υπερηχογραφίας, Οπτικής απεικόνισης
	Διάρκεια	18/01/2012–13/02/2017
2.2.1.3	Ίδρυμα	**Πανεπιστήμιο Δυτικής Αττικής Τμήμα Μηχανικών Βιοϊατρικής**
	Θέση	Επίκουρος Καθηγητής

	Μαθήματα	**Θεωρία**
		1. Φυσικές Αρχές και Συστήματα Ακτινοδιαγνωστικής
		2. Φυσικές Αρχές και Συστήματα Ακτινοθεραπείας
		3. Βιοϊατρική Οπτική
		4. Ηλεκτρομηχανολογικές Εγκαταστάσεις Νοσοκομείων
		Εργαστήριο
		Ακτινοπροστασία – Έλεγχοι ασφάλειας και ποιότητας
	Διάρκεια	12/02/2017– 11/02/2021
2.2.1.4	Ίδρυμα	**Πανεπιστήμιο Δυτικής Αττικής** **Τμήμα Μηχανικών Βιοϊατρικής**
	Θέση	Αναπληρωτής Καθηγητής
	Μαθήματα	1. Φυσικές Αρχές και Συστήματα Ακτινοδιαγνωστικής
		2. Φυσικές Αρχές και Συστήματα Ακτινοθεραπείας
		3. Βιοϊατρική Οπτική
		4. Ηλεκτρομηχανολογικές Εγκαταστάσεις Νοσοκομείων
	Διάρκεια	12/02/2021 – σήμερα
2.2.1.5	**ΠΤΥΧΙΑΚΕΣ ΕΡΓΑΣΙΕΣ**	
	Αρθ. Φοιτητών	**36**
2.2.2	**ΣΕ ΕΛΛΗΝΙΚΑ ΠΑΝΕΠΙΣΤΗΜΙΑ (ΜΕΤΑΠΤΥΧΙΑΚΑ)**	
2.2.2.1	Ίδρυμα	**Πανεπιστήμιο Δυτικής Αττικής** **Τμήμα Μηχανικών Βιοϊατρικής**
	Τίτλος	«Προχωρημένα συστήματα και μέθοδοι στη Βιοϊατρική τεχνολογία»
	Δραστηριότητα	Συντονιστής, Διδάσκων στην ενότητα: «Θέματα Σύγχρονης Φυσικής με εφαρμογές στη Βιοϊατρική Τεχνολογία
	Δραστηριότητα	Διδάσκων στην ενότητα: «Μαθηματικές μέθοδοι και εφαρμογές της σύγχρονες Βιοεπιστήμες»
	Διάρκεια	2014– Σήμερα
2.2.2.2	Ίδρυμα	**Πανεπιστήμιο Πατρών** **Ιατρική Φυσική**
	Δραστηριότητα	Διδάσκων – Διαλέξεις της ενότητες:
		Physics of X-ray Imaging
	Ακαδημαϊκό Έτη	2019-2020, 2020-2021, 2021-202, 2022-2023
2.2.2.3		**ΜΕΤΑΠΤΥΧΙΑΚΕΣ ΔΙΠΛΩΜΑΤΙΚΕΣ**
	Επ. Καθηγητής	**2**
	Τρ. Επιτροπή	**1**
2.2.2.4		**ΔΙΔΑΚΤΟΡΙΚΕΣ ΔΙΑΤΡΙΒΕΣ**
	Επ. Καθηγητής	**1**
	Τρ. Επιτροπή	**2**
2.2.3	**ΣΕ ΠΑΝΕΠΙΣΤΗΜΙΑ ΤΟΥ ΕΞΩΤΕΡΙΚΟΥ**	
2.2.3.1	Ίδρυμα	**Technical University of Madrid E.T.S.I.T, Department of**

		Electronic Engineering, Spain
	Δραστηριότητα	Διδασκαλία – ERASMUS
		Τίτλος: «Indirect digital detectors in medical imaging systems»
	Διάρκεια	26/11/2012–30/11/2012
2.2.3.2	Ίδρυμα	**Technical University of Madrid E.T.S.I.T, Department of Electronic Engineering, Spain**
	Δραστηριότητα	Διδασκαλία – ERASMUS
		Τίτλος: «Current status and future prospects of nanophosphor based detectors for use in medical imaging»
	Διάρκεια	25/11/2013–01/12/2013
2.2.3.3	Ίδρυμα	**Budapest University of Technology and Economics, Department of Mechatronics, Optics and Mechanical Engineering Informatics, Hungary**
	Δραστηριότητα	Διδασκαλία – ERASMUS
		Τίτλος: «Phosphor-based X-ray detectors: Basic principles and future prospects» Τίτλος: «An introduction of Monte Carlo techniques in medical imaging applications»
	Διάρκεια	10/04/2016–16/04/2016
2.2.3.4	Ίδρυμα	**ISEP – Instituto Superior de Engenharia do Porto, Department of Biomedical Engineering, Portugal**
	Δραστηριότητα	Διδασκαλία – ERASMUS
		Τίτλος: « X-ray detectors: Basic principles and applications in medical imaging» Τίτλος: «Introducing the basic components of medical imaging systems»
	Διάρκεια	07/05/2017–13/05/2017
2.2.3.5	Ίδρυμα	**University of Wroclaw, Department of Chemistry, Poland**
	Δραστηριότητα	Διδασκαλία – ERASMUS
		Τίτλος: «Effects of phosphor materials in medical image science» Τίτλος: «Basic principles and systems in radiation therapy»
	Διάρκεια	10/06/2019–14/06/2019
2.2.3.6	Ίδρυμα	**Polytech Lyon, Université de Lyon, France**
		Τίτλος: «Luminescent materials in medical imaging science - an overview» Τίτλος: «Basic principles and applications in Biomedical Optics»
	Δραστηριότητα	Διδασκαλία – ERASMUS
	Διάρκεια	09/05/2022 – 13/05/2022
2.2.3.7	Ίδρυμα	**Department of Automatic Control and Systems Engineering University Politehnica of Bucharest, Romania**
	Δραστηριότητα	Διδασκαλία – ERASMUS
		Τίτλος: «An overview on luminescent materials for medical imaging purposes» Τίτλος: «Basic principles and applications in radiation imaging and therapy»
	Διάρκεια	23/05/2022 – 27/05/2022
2.2.4	**ΣΕ ΣΥΝΕΡΓΑΣΙΑ ΜΕ ΠΑΝΕΠΙΣΤΗΜΙΑ ΤΟΥ ΕΞΩΤΕΡΙΚΟΥ**	
	Ίδρυμα	**University T.C Düzce University /Biomedical Engineering, Turkey**
	Δραστηριότητα	Διδασκαλία – ERASMUS

		Specific topics relative to phosphor material science and medical imaging
	Επισκέπτης Φοιτητής	Hediye Nur Bostanci
	Διάρκεια	16th of September – 15th of November 2019
2.2.5	**ΣΕ ΕΛΛΗΝΙΚΑ ΙΝΣΤΙΤΟΥΤΑ**	
	Ίδρυμα	ΙΕΚ ΔΕΛΤΑ
	Δραστηριότητα	Διδακτική δραστηριότητα εκτός τριτοβάθμιας εκπαίδευσης Τμήμα: Τεχνικός Ιατρικών Οργάνων
	Διάρκεια	02/05/2009 – 17/01/2012 (διάρκεια εξαμήνων κατάρτισης)

3 ΔΗΜΟΣΙΕΥΣΕΙΣ

3.1	**ΔΙΠΛΩΜΑΤΙΚΕΣ ΕΡΓΑΣΙΕΣ (ΠΑΡΑΡΤΗΜΑ Α)**
3.1.1	**Πτυχιακή εργασία:** «Μελέτη της απόδοσης φωτός διαφόρων σπινθηριστών (π.χ. LSO, BGO, YAP κτλ) που χρησιμοποιούνται σε ιατρικά απεικονιστικά συστήματα»
3.1.2	**Διπλωματική Μεταπτυχιακού**: «Monte Carlo simulation on phosphor screens in medical mammographic imaging systems»
3.1.3	**Διδακτορική Διατριβή**: «Ανάπτυξη υπολογιστικού μοντέλου προσομοίωσης φθοριζόντων υλικών ανιχνευτών ιατρικής απεικόνισης με τεχνικές Monte Carlo»

3.2	**ΔΗΜΟΣΙΕΥΣΕΙΣ ΣΕ ΠΕΡΙΟΔΙΚΑ (ΠΑΡΑΡΤΗΜΑ Α)**	
	46 (με Impact Factor)	**Α/ Μονογραφίες:** 10 άρθρα **Β/ Δύο συγγραφείς:** 6 άρθρα **Γ/ Κύριος ερευνητής:** 10 άρθρα **Δ/ Συγγραφέας αλληλογραφίας:** 22 άρθρα
	h-index: 13 (scopus)	
	4 (χωρίς Impact Factor)	**Α/ Μονογραφίες:** 1 άρθρο **Γ/ Συγγραφέας αλληλογραφίας:** 1 άρθρο
	Περιοδικά: Nuclear Instruments and Methods in Physics (Section A): **9** Medical Physics: **7** IEEE Transactions on Nuclear Science: **5** Journal of Luminescence: **4** Sensors: **3** Physics in Medicine and Biology: **2** Applied Physics A: Materials science and Processing: **2** Journal of Instrumentation: **2** Applied Physics B: Lasers and Optics: **2** Optics and Spectroscopy: **2** Optical Materials: **2** Journal of Biomedical Optics: **1** Biomedical Physics & Engineering Express: **1**	

	Crystals: **1** Computers in Biology and Medicine: **1** Nuclear Instruments and Methods in Physics (Section B): **1** Applied Radiation and Isotopes: **1** Biomedical Engineering Education: 1
	Δημιουργία πακέτου προσομοίωσης Μόντε Κάρλο για τη μελέτη διάδοσης του φωτός σε υλικά κοκκώδους μορφή (για ερευνητικό και εκπαιδευτικό σκοπό). ***<u>Το πακέτο προσωμοίωσης παρέχεται δωρεάν σε κάθε ενδιαφερόμενο.</u>*** **LIGHTAWE** – case studies of LIGHT spread in owder materials: a montE carlo simulation tool for research and educational purposes

3.3 ΔΗΜΟΣΙΕΥΣΕΙΣ ΣΕ ΣΥΝΕΔΡΙΑ (ΠΑΡΑΡΤΗΜΑ Α)	**81**
Σε επιστημονικά βιβλία με κριτές	**1**
Σε πρακτικά επιστημονικών συνεδρίων με κριτές	**31**
Σε πρακτικά εκπαυδευτικών συνεδρίων με κριτές	**4**
Σε πρακτικά συνεδρίων (περιλήψεις)	**45**

3.4	**ΑΝΑΦΟΡΕΣ-ΠΑΡΑΠΟΜΠΕΣ (CITATIONS) ΤΗΣ ΑΛΛΟΥΣ ΕΡΕΥΝΗΤΕΣ (ΠΑΡΑΡΤΗΜΑ Β)**	
	Σύνολο	**547**

3.5	**ΕΥΧΑΡΙΣΤΙΕΣ ΤΗΣ ΑΛΛΟΥΣ ΕΡΕΥΝΗΤΕΣ (ΠΑΡΑΡΤΗΜΑ Γ)**	
	Σύνολο	**5**
3.6	**ΤΗΣ ΔΗΜΟΣΙΕΥΜΕΝΗ ΣΥΓΓΡΑΦΙΚΗ ΔΡΑΣΤΗΡΙΟΤΗΤΑ**	
3.6.1	Ίδρυμα – Τμήμα	ΤΕΙ Αθήνας – Τμήμα Μηχανικών Βιοϊατρικής τεχνολογίας ΤΕ
		Μεταπτυχιακό πρόγραμμα: «Προχωρημένα συστήματα και μέθοδοι στη Βιοϊατρική τεχνολογία»
	Δραστηριότητα	Συγγραφέας εκπαιδευτικών σημειώσεων: «Τεχνικές προσομοίωσης Μόντε Κάρλο σε ιατρικές εφαρμογές»
3.6.2	Ίδρυμα – Τμήμα	ΤΕΙ Αθήνας- Τμήμα Μηχανικών Βιοϊατρικής τεχνολογίας ΤΕ
	Δραστηριότητα	Συγγραφέας εκπαιδευτικών σημειώσεων του εργαστηρίου Ιοντίζουσες Ακτινοβολίες Ι. Συγγραφείς: Παναγιώτης Λιαπαρίνος, Στράτος Δαυίδ.
3.6.3	Ίδρυμα - Τμήμα	ΤΕΙ Αθήνας- Τμήμα Μηχανικών Βιοϊατρικής τεχνολογίας ΤΕ
	Δραστηριότητα	Συγγραφέας εκπαιδευτικών σημειώσεων του εργαστηρίου Ιοντίζουσες Ακτινοβολίες ΙΙ. Συγγραφείς: Στράτος Δαυίδ, Παναγιώτης Λιαπαρίνος,
3.6.4	Ίδρυμα - Τμήμα	ΤΕΙ Αθήνας- Τμήμα Μηχανικών Βιοϊατρικής τεχνολογίας ΤΕ
	Δραστηριότητα	Συγγραφέας εκπαιδευτικών σημειώσεων του εργαστηρίου Ιοντίζουσες Ακτινοβολίες ΙΙΙ. Συγγραφείς: Σταύρος Τσαντής, Γιώργος

		Μανουσαρίδης, Νεκτάριος Καλύβας, Παναγιώτης Λιαπαρίνος, Ιωάννης Κανδαράκης.

4 ΥΠΟΤΡΟΦΙΕΣ – ΔΙΑΚΡΙΣΕΙΣ

4.1	Φορέας	ΙΚΥ
	Υποτροφία	Καλύτερης επίδοσης προπτυχιακών φοιτητών του τμήματος Τεχνολογίας Ιατρικών Οργάνων, ΤΕΙ Αθήνας
	Ακαδημαϊκό έτος	1998-1999
4.2	Φορέας	ΙΚΥ
	Υποτροφία	Καλύτερης επίδοσης προπτυχιακών φοιτητών του τμήματος Τεχνολογίας Ιατρικών Οργάνων, ΤΕΙ Αθήνας
	Ακαδημαϊκό έτος	1999-2000
4.3	Φορέας	ΙΚΥ
	Υποτροφία	Για τη διάκριση της σπουδές και το ήθος κατά τη διάρκεια του Ακαδημαϊκού έτους
	Ακαδημαϊκό έτος	1999-2000
4.4	Φορέας	ΙΚΥ
	Υποτροφία	Καλύτερης επίδοσης μεταπτυχιακού φοιτητή του Διατμηματικού Μεταπτυχιακού Προγράμματος Ιατρικής Φυσικής, Τμήμα Ιατρικής του Πανεπιστημίου Πατρών
	Ακαδημαϊκό έτος	2003-2004
4.5	Φορέας	Υπουργείο παιδείας & Θρησκευμάτων, Πολιτισμού και Αθλητισμού
	Διάκριση	Ακαδημαϊκή και ερευνητική Αριστεία με θέμα: «Αξιολόγηση ανιχνευτών Ιατρικής Απεικόνισης. Επίδραση των φθοριζόντων υλικών στην απόδοση του ανιχνευτή» για τη συνεισφορά στην επίτευξη Αριστείας στην ελληνική ανώτατη εκπαίδευση.
	Ακαδημαϊκό έτος	2012
4.6	Περιοδικό	«Virtual Journal of Biological Physics Research», published by the American Physical Society and the American Institute of Physics, Topic: instrumentation development
	Διάκριση	Επιλεγμένο Άρθρο: «P. Liaparinos, I. Kandarakis, D. Cavouras, H. Delis, G. Panayiotakis, 'Modeling granular phosphor screens by Monte Carlo methods', *Medical Physics*, Vol. 33, pp. 4502-4514, 2006.»
	Έτος	2006

5 ΠΡΟΣΚΕΚΛΗΜΕΝΕΣ ΟΜΙΛΙΕΣ – ΚΡΙΤΗΣ ΣΕ ΔΙΕΘΝΗ ΕΠΙΣΤΗΜΟΝΙΚΑ ΠΕΡΙΟΔΙΚΑ ΚΑΙ ΣΥΝΕΔΡΙΑ – ΚΡΙΤΗΣ ΣΕ ΧΡΗΜΑΤΟΔΟΤΟΥΜΕΝΑ ΕΡΕΥΝΗΤΙΚΑ ΠΡΟΓΡΑΜΜΑΤΑ

5.1	**ΠΡΟΣΚΕΚΛΗΜΕΝΟΣ ΟΜΙΛΗΤΗΣ**	
5.1.1	Δραστηριότητα	Προσκεκλημένος ομιλητής (invited speech)

	Διεθνές επιστημονικό συνέδριο	Bio-Medical Instrumentation and related Engineering and Physical Sciences (BIOMEP), Department of Medical Instruments Technology, TEI of Athens, September 13th, 2014
	Τίτλος	Nanophosphors
5.1.2	Δραστηριότητα	Προσκεκλημένος ομιλητής (invited speech)
	Ίδρυμα	Faculty of Chemistry, University of Wroclaw, Poland, 2013
	Τίτλος	Optical diffusion in nanophosphor materials: Physics and requirements in medical image science
5.1.3	Δραστηριότητα	Πρόεδρος συνεδρίου (chairman)
	Διεθνές επιστημονικό συνέδριο	3nd International Conference on Experiments/Process/System Modeling/Simulation & Optimization 3nd IC-EpsMsO.
	Τίτλος	«Monte Carlo simulations in medical imaging (8-11 April, 2009)».
5.1.4	Δραστηριότητα	Προσκεκλημένος ομιλητής (invited speech)
	Διεθνής έκθεση Ιατρικού εξοπλισμού	*MEDICEXPO2007* (15-18 Μαρτίου)
	Τίτλος	Monte Carlo methods in radiographic imaging.
5.1.5	Δραστηριότητα	Προσκεκλημένος ομιλητής (invited speech)
	Διεθνής έκθεση Ιατρικού εξοπλισμού	*MEDICEXPO2009* (3-5 Απριλίου)
	Τίτλος	Monte Carlo techniques in medical applications.
5.1.6	Δραστηριότητα	Προσκεκλημένος ομιλητής (invited speech)
	Διεθνής έκθεση Ιατρικού εξοπλισμού	*MEDICEXPO2011* (25-28 Φεβρουαρίου)
	Τίτλος	Becollari, Liaparinos, «Εφαρμογή τεχνικών Monte Carlo για την προσομοίωση της σκεδαζόμενης ακτινοβολίας σε ανιχνευτές ιατρικής απεικόνισης»
5.1.7	Δραστηριότητα	Προσκεκλημένος ομιλητής (invited speech)
	Ίδρυμα	Πανεπιστήμιο Πατρών Ιατρική Φυσική
	Διαλέξεις της ενότητες	«Ακτινοδιαγνωστική» - «Πυρηνική Ιατρική»
	Διάρκεια	2007-2018
5.1.8	Δραστηριότητα	Προσκεκλημένος ομιλητής (invited speech)
	Ίδρυμα	ΕΚΠΑ, ΤΕΙ Αθήνας, ΙΙΒΕΑΑ, ΕΚΕΦΕ Μεταπτυχιακό πρόγραμμα: «Τεχνολογίες Πληροφορικής στην Ιατρική και τη Βιολογία»
	Διαλέξεις της ενότητες	Μάθημα:«Ιατρικά Απεικονιστικά Συστήματα (ΤΠΙΒ)» Διάλεξη: «Εφαρμογές της Μεθόδου Μόντε Κάρλο στα Συστήματα Ιατρικής Απεικόνισης» Μάθημα: «Φυσικής της Διαγνωστικής» Μάθημα: «Φυσικής της Πυρηνικής Ιατρικής» Διάλεξη: «Αρχή λειτουργίας και υπολογισμοί παραμέτρων ανίχνευσης απεικονιστικών συστημάτων»

	Διάρκεια	Ακαδημαϊκά έτη: 2010-2014
5.1.9	Δραστηριότητα	Invited speech (I. Kandarakis)
	Διεθνές επιστημονικό συνέδριο	BIOMEP 2015 – Conference on Bio-Medical Instrumentation and related Engineering and Physical Sciences
	Τίτλος	Medical Image Science through luminescence (MISCIRLU project) I. Kandarakis, I. Valais, P. Liaparinos, G. Fountos, N. Kalyvas, C. Michail, S. David
5.1.10	Δραστηριότητα	Προσκεκλημένος ομιλητής (invited speech)
	European project	COST – ACTION TD1401 (21 & 22 April 2016)
	Τίτλος	Scintillating materials and optical diffusion mechanisms in medical imaging detectors

5.2	**ΚΡΙΤΗΣ ΣΕ ΕΠΙΣΤΗΜΟΝΙΚΑ ΠΕΡΙΟΔΙΚΑ**	
5.2.1	Επιστημονικό Περιοδικό	Physics in Medicine and Biology
5.2.2	Επιστημονικό Περιοδικό	Nuclear Instruments and Methods in Physics Research A
5.2.3	Επιστημονικό Περιοδικό	Applied Physics B – Lasers and Optics
5.2.4	Επιστημονικό Περιοδικό	European Radiology
5.2.5	Επιστημονικό Περιοδικό	Journal of Alloys and Compounds
5.2.6	Επιστημονικό Περιοδικό	Journal tissue and science engineering
5.2.7	Επιστημονικό Περιοδικό	International Journal of Nanomedicine
5.2.8	Επιστημονικό Περιοδικό	Journal of Radiological Protection
5.2.9	Επιστημονικό Περιοδικό	Results in Physics
5.2.10	Επιστημονικό Περιοδικό	Nuclear Science and Techniques
5.2.11	Επιστημονικό Περιοδικό	Journal of Electromagnetic Waves and Applications
5.2.12	Επιστημονικό Περιοδικό	Mini-Reviews in Medicinal Chemistry
5.2.13	Επιστημονικό Περιοδικό	Journal of Medical Imaging

5.2.14	Επιστημονικό Περιοδικό	Materials
5.2.15	Επιστημονικό Περιοδικό	Optical Materials Express
5.2.16	Επιστημονικό Περιοδικό	Biomedical Research International
5.2.17	Επιστημονικό Περιοδικό	Journal of Rare Earths
5.2.18	Επιστημονικό Περιοδικό	Crystals
5.2.19	Επιστημονικό Περιοδικό	Sensors
5.2.20	Επιστημονικό Περιοδικό	Scientific Reports
5.2.21	Επιστημονικό Περιοδικό	Applied Sciences
5.2.22	Επιστημονικό Περιοδικό	Journal of Spectroscopy
5.2.23	Επιστημονικό Περιοδικό	ACS Applied Nano Materials
5.2.24	Επιστημονικό Περιοδικό	Quantitative Spectroscopy and Radiative Transfer
5.2.25	Επιστημονικό Περιοδικό	Current Medical Imaging
5.2.26	Επιστημονικό Περιοδικό	Nanomaterials
5.2.27	Επιστημονικό Περιοδικό	Information

5.3	**ΚΡΙΤΗΣ ΣΕ ΔΙΕΘΝΗ ΕΠΙΣΤΗΜΟΝΙΚΑ ΣΥΝΕΔΡΙΑ**	
5.3.1	Διεθνές Συνέδριο	BIOMEP 2015 – Conference on Bio-Medical Instrumentation and related Engineering and Physical Sciences, Athens, 2015
5.3.2	Διεθνές Συνέδριο	International Conference *Science in Technology'* ScinTE 2015, Athens, 2015
5.3.3	Διεθνές Συνέδριο	The 5th International Conference on Biomedical Engineering and Biotechnology (ICBEB) Hangzhou, China, 2016
5.3.4	Διεθνές Συνέδριο	The 6th Global Conference on Materials Science and Engineering (CMSE) Beijing, China, 2017.
5.3.5	Διεθνές Συνέδριο	BIOMEP 2017 – Conference on Bio-Medical Instrumentation and related Engineering and Physical Sciences, Athens, 2017
5.3.6	Διεθνές Συνέδριο	International Conference on Physics, Mathematics and Statistics (ICPMS) Shanghai, China, 2018

5.4	**ΚΡΙΤΗΣ ΣΕ ΕΠΙΣΤΗΜΟΝΙΚΑ ΒΙΒΛΙΑ**	
5.4.1	Επιστημονικό Βιβλίο	Τίτλος: "Principles of Medical Instrumentation Engineering" by Inan Gular (ELSEVIER**)**
5.4.2	Επιστημονικό	E-book abstract evaluation, Τίτλος: "Printed Sensors: Theory and Instrumentation" (BENTHAM SCIENCE PUBLISHERS**)**

	Βιβλίο	
5.4.3	Επιστημονικό Βιβλίο	E-book abstract evaluation, Τίτλος: "The Best and the Fittest: Human resource selection in Education" *(*BENTHAM SCIENCE PUBLISHERS*)*
5.4.4	Επιστημονικό Βιβλίο	E-book abstract evaluation, Τίτλος: "Rock Particle Image Processing and Analysis" *(*BENTHAM SCIENCE PUBLISHERS*)*
5.4.5	Επιστημονικό Βιβλίο	First Ed Proposal, Τίτλος: "Introduction to Biomedical Instrumentation and its Applications" (ELSEVIER**)**
5.4.6	Επιστημονικό Βιβλίο	Τίτλος: "Practical Applications of Biomedical Instrumentation" by Uzun Ozsahin, Ilker Ozsahin. (ELSEVIER**)**

5.5	**ΚΡΙΤΗΣ ΣΕ ΕΡΕΥΝΗΤΙΚΑ ΠΡΟΓΡΑΜΜΑΤΑ**	
5.5.1	Επιστημονικό Πρόγραμμα	Project: CONSOLIDER (large scale, budget 6.000.000 €) on behalf of the Spanish Ministry of Science and Innovation (Proposal title: Novel sensors and technologies for medical imaging: application to breast cancer diagnosis)

5.6	**ΚΡΙΤΗΣ ΣΕ ΕΠΙΣΤΗΜΟΝΙΚΕΣ ΕΠΤΡΟΠΕΣ**	
5.6.1	Editorial review board	e- journal "Engineering, Technology & Applied Science Research" (ETASR)
5.6.2	Μέλος της επιστημονικής επιτροπής	Bio-Medical Instrumentation and related Engineering and Physical Sciences (BIOMEP), Department of Medical Instruments Technology, TEI of Athens, June 21-22, 2013
5.6.3	Μέλος της επιστημονικής επιτροπής	Bio-Medical Instrumentation and related Engineering and Physical Sciences (BIOMEP), Department of Medical Instruments Technology, TEI of Athens, June 18-20, 2015

5.7	**ΜΕΛΟΣ ΣΕ ΕΠΙΣΤΗΜΟΝΙΚΕΣ ΕΝΩΣΕΙΣ -ΣΥΛΛΟΓΟΥΣ**	
5.7.1	Δραστηριότητα	Φοιτητικό μέλος της διεθνής ένωσης Ακτινοφυσικών – Student member of radiation physics society (IRPS)
	Διάρκεια	2006-2009

6 ΔΙΟΙΚΗΤΙΚΗ ΕΜΠΕΙΡΙΑ ΣΤΟ ΤΜΗΜΑ ΒΙΟΪΑΤΡΙΚΗΣ ΤΕΧΝΟΛΟΓΙΑΣ ΤΕ (ΠΡΩΗΝ ΤΕΧΝΟΛΟΓΙΑΣ ΙΑΤΡΙΚΩΝ ΟΡΓΑΝΩΝ) ΚΑΙ ΣΤΟ ΤΕΙ ΑΘΗΝΑΣ

6.1	**ΜΕΛΟΣ ΕΠΙΤΡΟΠΩΝ ΚΑΙ ΣΥΜΜΕΤΟΧΗ ΣΕ ΔΡΑΣΤΗΡΙΟΤΗΤΕΣ ΕΠΙΤΡΟΠΩΝ**	
6.1.1	ΤΕΙ Αθήνας	**Υποστηρικτικό έργο σε μέλη της ΜΟΔΙΠ της σχολής ΣΤΕΦ**.
	Χρονικό διάστημα	2013-2014
6.1.2	ΤΕΙ Αθήνας	Μέλος επιτροπής που ορίζεται από το ΤΕΙ Αθήνας για την **αποτύπωση του αριθμού και της χωρητικότητας των αιθουσών της σχολής ΣΤΕΦ**.
	Έτος	2013
6.1.3	ΤΕΙ Αθήνας	Μέλος επιτροπής που ορίζεται από το ΤΕΙ Αθήνας για την αξιολόγηση πρόσληψης προσωπικού με σύμβαση έργου, την αξιολόγηση προσφορών για την προμήθεια αναλωσίμων και λοιπού εξοπλισμού στα πλαίσια του προγράμματος **ΑΡΧΙΜΗΔΗΣ-ΙΙΙ**.

	Έτος	2012 – σήμερα
6.1.4	ΤΕΙ Αθήνας	Μέλος επιτροπής που ορίζεται από το ΤΕΙ Αθήνας για την αξιολόγηση και την προμήθεια αναλωσίμων στα πλαίσια του **προγράμματος ΑΡΙΣΤΕΙΑ Ι**.
	Έτος	2013
6.1.5	ΤΕΙ Αθήνας	Μέλος επιτροπής που ορίζεται από το ΤΕΙ Αθήνας για την αξιολόγηση πρόσληψης προσωπικού με σύμβαση έργου στο πλαίσιο υλοποίησης της πράξης «**Διμερής Ε&Τ Συνεργασία Ελλάδας-Ισραήλ 2013-2015**»
	Έτος	2014
6.1.6	ΤΕΙ Αθήνας	Μέλος επιτροπής που ορίζεται από το ΤΕΙ Αθήνας για την αξιολόγηση πρόσληψης προσωπικού με σύμβαση έργου στο πλαίσιο υλοποίησης του έργου με τίτλο: «**Ανάπτυξη και αξιολόγηση μη επεμβατικής απεικονιστικής τεχνολογίας για τη μελέτη στοχευμένης μεταφοράς φαρμακευτικών ουσιών με νανοσωματίδια, μέσω του αιματικού εγκεφαλικού φραγμού.Εφαρμογές στη θεραπεία εγκεφαλικών όγκων – OncoNanoBBB**»
	Έτος	2013
6.1.7	Πανεπιστήμιο Δυτικής Αττικής	Μέλος επιτροπής **κατακτήριων εξετάσεων** του τμήματος Μηχανικών Βιοϊατρικής
	Έτος	2018-2019 2019-2020
6.1.8	Πανεπιστήμιο Δυτικής Αττικής	Μέλος επιτροπής για την **πρόσληψη νέων ερευνητών μέσω ΕΣΠΑ** του τμήματος Μηχανικών Βιοϊατρικής
	Έτος	2018
6.1.9	Πανεπιστήμιο Δυτικής Αττικής	Μέλος επιτροπής **κατάρτισης Μητρώων ΑΠΕΛΛΑ** του τμήματος Μηχανικών Βιοϊατρικής
	Έτος	2018
6.1.10	Πανεπιστήμιο Δυτικής Αττικής	Μέλος επιτροπής **συνοπτικών διαγωνισμών** του Πανεπιστημίου Δυτικής Αττικής
	Έτος	2019
6.1.11	Πανεπιστήμιο Δυτικής Αττικής	Μέλος επιτροπής που ορίζεται από το Πανεπιστήμιο Δυτικής Αττικής: (α) για την αξιολόγηση πρόσληψης προσωπικού με σύμβαση έργου και (β) παραλαβής εξοπλισμού στο πλαίσιο υλοποίησης του υποέργου: «**Εθνική Κατανομή 2018 – TRIMAGE**»
	Έτος	2019
6.1.12	Πανεπιστήμιο Δυτικής Αττικής	Μέλος επιτροπής που ορίζεται από το Πανεπιστήμιο Δυτικής Αττικής για την Διενέργεια και Αξιολόγηση Διαγωνισμού, ενστάσεων, προσφυγών και παραλαβής εξοπλισμού στο πλαίσιο υλοποίησης του υποέργου: «**Προμήθεια ηλεκτρονικών υπολογιστικών και συστημάτων πολυμέσων για τα εργαστήρια των εκπαιδευτικών Τμημάτων του Πανεπιστημίου Δυτικής**»
	Έτος	2019
6.1.13	Πανεπιστήμιο Δυτικής Αττικής	Μέλος επιτροπής **ενστάσεων επί των αποτελεσμάτων αξιολόγησης Πρακτικής Άσκησης** του τμήματος Μηχανικών Βιοϊατρικής
	Έτος	2020
6.2	**ΑΛΛΕΣ ΔΡΑΣΤΗΡΙΟΤΗΤΕΣ**	
6.2.1	Διοργάνωση επισκέψεων	Διοργάνωση επισκέψεων σε Νοσοκομεία για την ενημέρωση φοιτητών στα πλαίσια εργαστηρίων

7 ΛΟΙΠΑ ΠΡΟΣΟΝΤΑ

7.1	**ΞΕΝΕΣ ΓΛΩΣΣΕΣ**
7.1.1	English, University of Cambridge, First Certificate in English
7.1.2	Spanish, El diploma de espanol, Nivel Intermedio

7.2	**ΠΡΑΚΤΙΚΗ ΑΣΚΗΣΗ**
	Πρακτική άσκηση στο Γενικό Νοσοκομείο Αθηνών Γ.Ν.Α. «Ο Ευαγγελισμός»
	01/04/2002 – 30/09/2002

7.3	**ΕΚΠΑΙΔΕΥΣΗ ΣΤΗΝ ΕΤΑΙΡΕΙΑ «ERGO»**
	Εκπαίδευση στην εταιρεία ιατρικών μηχανημάτων
	25/08/2001 – 25/09/2001

7.4	**ΠΑΡΑΚΟΛΟΥΘΗΣΗ WORKSHOP ΚΑΙ ΣΥΝΕΔΡΙΩΝ**
	International workshop on PENELOPE Monte Carlo package. Διεθνή, ευρωπαϊκά, ελληνικά συνέδρια και σεμινάρια .

7.5	**ΕΚΠΛΗΡΩΣΗ ΣΤΡΑΤΙΩΤΙΚΩΝ ΥΠΟΧΡΕΩΣΕΩΝ**
Στρατός ξηράς	Σώμα υγειονομικού
Ειδικότητα	βοηθός ακτινολόγου
Διάρκεια	07/05/2007 – 06/05/2008

ΠΑΡΑΡΤΗΜΑ Α:
ΔΗΜΟΣΙΕΥΣΕΙΣ

Διπλωματικές Εργασίες:

1. ***Πτυχιακή Εργασία***: «Μελέτη της απόδοσης φωτός διαφόρων σπινθηριστών (π.χ. LSO, BGO, YAP κτλ) που χρησιμοποιούνται σε ιατρικά απεικονιστικά συστήματα», Τμήμα Τεχνολογίας Ιατρικών Οργάνων, ΤΕΙ Αθήνας, Ελλάδα, Σεπτέμβριος 2002. Συστάσεις: Καθηγητής Δρ. Ιωάννης Κανδαράκης (*kandarakis@teiath.gr*)
2. ***Διπλωματική Μεταπτυχιακού***: «Monte Carlo simulation on phosphor screens in medical mammographic imaging systems», Διατμηματικό Πρόγραμμα Μεταπτυχιακών Σπουδών στην Ιατρική Φυσική, Πανεπιστήμιο Πατρών, Ελλάδα, Ιούλιος 2004. Συστάσεις: Καθηγητής Δρ. Ιωάννης Κανδαράκης (*kandarakis@teiath.gr*) και Καθηγητής Δρ. Γεώργιος Παναγιωτάκης (*panayiot@upatras.gr*)
3. ***Διδακτορική Διατριβή***: «Ανάπτυξη υπολογιστικού μοντέλου προσομοίωσης φθοριζόντων υλικών ανιχνευτών ιατρικής απεικόνισης με τεχνικές Monte Carlo», Διατμηματικό Πρόγραμμα Μεταπτυχιακών Σπουδών στην Ιατρική Φυσική, Πανεπιστήμιο Πατρών, Ελλάδα, Μάρτιος 2007. Συστάσεις: Καθηγητής Δρ. Ιωάννης Κανδαράκης (*kandarakis@teiath.gr*) και Καθηγητής Δρ. Γεώργιος Παναγιωτάκης (*panayiot@upatras.gr*)

ΣΕ ΕΠΙΣΤΗΜΟΝΙΚΑ ΠΕΡΙΟΔΙΚΑ ΜΕ ΚΡΙΤΕΣ (ΜΕ IMPACT FACTOR):

ΔΗΜΟΣΙΕΥΣΗ No 1:

P. Liaparinos, I. Kandarakis, D. Cavouras, H. Delis, G. S. Panayiotakis, 'Investigating the effect of K-characteristic radiation on the performance of nuclear medicine scintillators by Monte-Carlo methods', *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment,* Vol. 569, *pp. 364-367,* 2006.

Στόχος: Μελέτη της εκπομπής K-χαρακτηριστικής ακτινοβολίας και την επίδρασή της στην απόδοση υλικών σπινθηρισμού σε κρυσταλλική μορφή σε συνθήκες πυρηνικής ιατρικής. Η μελέτη πραγματοποιήθηκε για τους κρυστάλλους BGO, LSO, GSO που χρησιμοποιούνται ευρύτατα στα συστήματα πυρηνικής ιατρικής.

Συμμετοχή: Στον σχεδιασμό της μελέτης, στην ανάπτυξη κατάλληλου λογισμικού, στην καταχώρηση αριθμητικών δεδομένων, στην εφαρμογή των τεχνικών Μόντε Κάρλο, στην επεξεργασία και αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου. ΔΗΜΟΣΙΕΥΣΗ ΔΙΔΑΚΤΟΡΙΚΟΥ

ΔΗΜΟΣΙΕΥΣΗ No 2:

P. Liaparinos, I. Kandarakis, D. Cavouras, H. Delis, and G. Panayiotakis, 'Evaluating the radiation detection of the RbGd2Br7:Ce scintillator by Monte-Carlo methods', *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment,* Vol. 569, *pp. 355-358,* 2006.

Στόχος: Αξιολόγηση της ανιχνευτικής ικανότητας του φθορίζοντος υλικού RbGd2Br7:Ce με τεχνικές Μόντε Κάρλο για τη χρησιμοποίησή τους σε συστήματα πυρηνικής ιατρικής και συστήματα τομογραφίας εκπομπής ποζιτρονίων.

Συμμετοχή: Στον σχεδιασμό της μελέτης, στην ανάπτυξη κατάλληλου λογισμικού, στην καταχώρηση αριθμητικών δεδομένων, στην εφαρμογή των τεχνικών Μόντε Κάρλο, στην επεξεργασία και αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου. ΔΗΜΟΣΙΕΥΣΗ ΔΙΔΑΚΤΟΡΙΚΟΥ

ΔΗΜΟΣΙΕΥΣΗ No 3:

I. Kandarakis, D. Cavouras, D. Nikolopoulos, A. Episkopakis, N. Kalivas, **P. Liaparinos**, I. Valais, G. Kagadis, K. Kourkoutas, I. Sianoudis, N. Dimitropoulos, C. Nomicos, G. Panayiotakis, 'A theroretical model evaluating the angular distribution of luminescence emission in X-ray scintillating screens' Applied Radiation and Isotopes, Vol. 64, *pp. 508-519,* 2006.

Στόχος: Ανάπτυξη θεωρητικού μοντέλου για την αξιολόγηση της γωνιακής κατανομής του φωτός κατά την εκπομπή του από φθορίζουσες οθόνες διαφορετικού πάχους και διαφορετικού μεγέθους κόκκων. Το μοντέλο βασίστηκε σε πειραματικές μετρήσεις που πάρθηκαν στο ακτινολογικό κέντρο EUROMENICA.

Συμμετοχή: Στην υλοποίηση των πειραματικών μετρήσεων και την υποστήριξη της εργασίας παρουσιάζοντάς την στο διεθνές συνέδριο: 1st International Meeting on Applied Physics Badajoz 2003, Spain.

ΔΗΜΟΣΙΕΥΣΗ No 4:

G. Patatoukas, N. Kalivas, **P. Liaparinos**, A. Konstantinidis, I. Kandarakis, G. Panayiotakis, '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, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment,* Vol. 569, *pp. 260-263,* 2006.

*Στόχος: Μελέτη της επίδρασης της τεχνικής «*energy weighting» στο λόγο σήματος προς θόρυβο. Μελετήθηκαν *ανιχνευτές που χρησιμοποιούνται στη μαστογραφική απεικόνιση κάνοντας χρήση αναλυτικών μοντέλων.*

Συμμετοχή: Στον σχεδιασμό της μελέτης, στην επεξεργασία και αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου.

ΔΗΜΟΣΙΕΥΣΗ No 5:

P. Liaparinos, I. Kandarakis, D. Cavouras, H. Delis, G. Panayiotakis, 'Modeling granular phosphor screens by Monte Carlo methods', *Medical Physics*, Vol. 33, pp. 4502-4514, 2006. Also selected for publication in the ***Virtual Journal of Biological Physics Research*** published by the American Physical Society and the American Institute of Physics, November 15, 2006, Volume 12, Issue 10, Topic: instrumentation development.

Στόχος: Ανάπτυξη πηγαίου κώδικα σε περιβάλλον MATLAB κάνοντας χρήση τεχνικών Μόντε Κάρλο με σκοπό την προσομοίωση και μοντελοποίηση των φυσικών φαινομένων που λαμβάνουν χώρα σε φθορίζοντα υλικά κοκκώδους μορφής για χρήση στην ιατρική απεικόνιση. Εφαρμόστηκε η θεωρία της σκέδασης Mie για την προσομοίωση των οπτικών φωτονίων και η πιστοποίηση του μοντέλου πραγματοποιήθηκε συγκρίνοντας τα αποτελέσματα του μοντέλου με πειραματικά αποτελέσματα.

Συμμετοχή: Στον σχεδιασμό της μελέτης, στην ανάπτυξη κατάλληλου λογισμικού, στην καταχώρηση αριθμητικών δεδομένων, στην εφαρμογή των τεχνικών Μόντε Κάρλο, στην επεξεργασία και αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου. ΔΗΜΟΣΙΕΥΣΗ ΔΙΔΑΚΤΟΡΙΚΟΥ

ΔΗΜΟΣΙΕΥΣΗ No 6:

P. Gonias, N. Bertsekas, N. Karakatsanis, G. Saatsakis, A. Gaitanis, D. Nikolopoulos, G. Loudos, L. Papaspyrou, N. Sakellios, X. Tsantilas, A. Daskalakis, **P. Liaparinos**, K. Nikita, A. Louizi, D. Cavouras, I. Kandarakis, G. S. Panayiotakis, 'Validation of a GATE model for the simulation of the Siemens biograph™ 6 PET scanner', *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment,* Vol. 571, *pp. 263-266,* 2007.

Στόχος: Εφαρμογή του λογισμικού GATE για τη μοντελοπίηση του ιατρικού συστήματος Siemens biograph™ 6 PET scanner.

Συμμετοχή: Στον σχεδιασμό της μελέτης και στην αξιολόγηση των αποτελεσμάτων.

ΔΗΜΟΣΙΕΥΣΗ No 7:

P. Liaparinos, I. Kandarakis, D. Cavouras, N. Kalivas, H. Delis, G. Panayiotakis, 'Evaluation of high packing density powder x-ray screens by Monte Carlo methods', *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment,* Vol. 580, *pp. 427-429,* 2007.

Στόχος: Ανάπτυξη και εφαρμογή λογισμικού βασισμένου σε τεχνικές Μόντε Κάρλο για τη

μελέτη φθοριζόντων υλικών (σπινθηριστών) με υψηλή χωρική κατανομή των κόκκων. Έγινε μελέτη της απόδοσης φωτός και της χωρικής διακριτικής ικανότητας κατά τη χρησιμοποίησή τους σε συνθήκες γενικής ακτινολογίας.

Συμμετοχή: Στον σχεδιασμό της μελέτης, στην ανάπτυξη κατάλληλου λογισμικού, στην καταχώρηση αριθμητικών δεδομένων, στην εφαρμογή των τεχνικών Μόντε Κάρλο, στην επεξεργασία και αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου. ΔΗΜΟΣΙΕΥΣΗ ΔΙΔΑΚΤΟΡΙΚΟΥ

ΔΗΜΟΣΙΕΥΣΗ No 8:

S. David, C. Michail, I. Valais, A. Toutountzis, **P. Liaparinos**, D. Cavouras, I. Kandarakis, snd G. Panayiotakis, 'Investigation of luminescence properties of Lu2SiO5:Ce (LSO) powder scintillator in the x-ray radiography energy range', IEEE Transactions on Nuclear Science, Vol. 46, pp. 474-478, 2007.

Στόχος: Πειραματική αξιολόγηση των απεικονιστικών χαρακτηριστικών του φθορίζοντος υλικού (LSO:Ce) σε συνθήκες ακτινογραφικής απεικόνισης και σύγκριση των αποτελεσμάτων με τεχνικές Μόντε Κάρλο.

Συμμετοχή: Στον σχεδιασμό του πειράματος, στην πειραματική αξιολόγηση των αποτελεσμάτων, στην εφαρμογή των τεχνικών Μόντε Κάρλο, στην επεξεργασία και αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου.

ΔΗΜΟΣΙΕΥΣΗ No 9:

P. Liaparinos, I. Kandarakis, D. Cavouras, H. Delis, G. Panayiotakis, 'Monte Carlo study on the imaging performance of powder Lu_2SiO_5: Ce phosphor screens under x-ray excitation: Comparison with Gd_2O_2S:Tb screens', *Medical Physics*, Vol. 34, pp. 1724-1733, 2007.

Στόχος: Αξιολόγηση της αποδοτικότητας του φθορίζοντος υλικού (Lu_2SiO_5: Ce*) σε κοκκώδη μορφή με σκοπό τη χρησιμοποίηση του σε συστήματα προβολικής απεικόνισης με αρχή λειτουργίας την ολοκλήρωση της ενέργειας. Αποτιμήθηκαν με τη βοήθεια τεχνικών Μόντε Κάρλο τα απεικονιστικά χαρακτηριστικά του υλικού (π.χ. Modulation transfer function (MTF), luminescence efficiency (LE), detective quantum efficiency (DQE) κτλ) και έγινε σύγκριση με το ευρέως χρησιμοποιούμενο σε εμπορικά συστήματα υλικό σπάνιων γαιών (*Gd_2O_2S:Tb).

Συμμετοχή: Στον σχεδιασμό της μελέτης, στην ανάπτυξη κατάλληλου λογισμικού, στην καταχώρηση αριθμητικών δεδομένων, στην εφαρμογή των τεχνικκών Μόντε Κάρλο, στην επεξεργασία και αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου. ΔΗΜΟΣΙΕΥΣΗ ΔΙΔΑΚΤΟΡΙΚΟΥ

ΔΗΜΟΣΙΕΥΣΗ No 10:

S. David, C. Michail, I. Valais, D. Nikolopoulos, **P. Liaparinos**, N. Kalivas, I. Kalatzis, A. Toutountzis, N. Efthimiou, G. Loudos, I. Sianoudis, D. Cavouras, N. Dimitropoulos, C. D. Nomicos, I. Kandarakis, G. S. Panayiotakis, 'Efficiency of Lu2SiO5:Ce (LSO) powder phosphor as X-ray to light converter under mammographic imaging conditions', *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment,* Vol. 571, *pp. 346-349,* 2008.

Στόχος: Πειραματική αξιολόγηση των απεικονιστικών χαρακτηριστικών του φθορίζοντος υλικού (LSO:Ce) σε συνθήκες μαστογραφικής απεικόνισης και σύγκριση των αποτελεσμάτων με

τεχνικές Μόντε Κάρλο.

Συμμετοχή: Στον σχεδιασμό του πειράματος, στην πειραματική αξιολόγηση των αποτελεσμάτων, στην εφαρμογή των τεχνικών Μόντε Κάρλο, στην επεξεργασία και αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου.

ΔΗΜΟΣΙΕΥΣΗ No 11:

I. Valais, S. David, C. Michail, D. Nikolopoulos, **P. Liaparinos**, D. Cavouras, I. Kandarakis and G. S. Panayiotakis, 'Comparative study of luminescence properties of LuYAP:Ce and LYSO:Ce single crystal scintillators for use in medical imaging', *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment,* Vol. 580, *pp. 614-616,* 2007.

Στόχος: Πειραματική αξιολόγηση της εκπομπής φωτός των σπινθηριστών LuYAP:Ce και LYSO:Ce *σε κρυσταλλική μορφή για χρήση στην ιατρική απεικόνιση.*

Συμμετοχή: Στον σχεδιασμό του πειράματος, στην πειραματική αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου.

ΔΗΜΟΣΙΕΥΣΗ No 12:

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, 'Evaluation of the imaging performance of LSO powder scintillator for use in x-ray mammography', *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment,* Vol. 580, *pp. 558-561,* 2007.

Στόχος: Πειραματική αξιολόγηση των απεικονιστικών χαρακτηριστικών του φθορίζοντος υλικού (LSO:Ce) σε συνθήκες μαστογραφικής απεικόνισης.

Συμμετοχή: Στον σχεδιασμό του πειράματος, στην πειραματική αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου.

ΔΗΜΟΣΙΕΥΣΗ No 13:

P. Liaparinos and I. Kandarakis, 'The Monte Carlo evaluation of noise and resolution properties of granular phosphor screens', *Physics in Medicine and Biology,* Vol. 54, *pp. 859-874,* 2009.

Στόχος: Μελέτη και αποτίμηση των ιδιοτήτων θορύβου και χωρικής διακριτικής ικανότητας υλικών σπινθηριστών σε συνθήκες γενικής ακτινολογίας και μαστογραφίας (συμβατική και ψηφιακή).

Συμμετοχή: Στον σχεδιασμό της μελέτης, στην ανάπτυξη κατάλληλου λογισμικού, στην καταχώρηση αριθμητικών δεδομένων, στην εφαρμογή των τεχνικών Μόντε Κάρλο, στην επεξεργασία και αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου.

ΔΗΜΟΣΙΕΥΣΗ No 14:

P. Liaparinos and I. Kandarakis, 'The imaging performance of compact Lu_2O_3:Eu phosphor screens: Monte Carlo simulation for applications in mammography, *Medical Physics,* Vol. 36, *pp. 1985-1997,* 2009.

Στόχος: Αξιολόγηση της απόδοσης ενός νέου φθορίζοντος υλικού (Lu_2O_3:Eu) σε συμπαγή κοκκώδη μορφή. Εξετάστηκε με τη βοήθεια τεχνικών Μόντε Κάρλο η επίδραση του υλικού στα

απεικονιστικά χαρακτηριστικά ενός μαστογραφικού συστήματος κατά τη χρησιμοποίηση του στο ανιχνευτικό σύστημα.

Συμμετοχή: Στον σχεδιασμό της μελέτης, στην ανάπτυξη κατάλληλου λογισμικού, στην καταχώρηση αριθμητικών δεδομένων, στην εφαρμογή των τεχνικών Μόντε Κάρλο, στην επεξεργασία και αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου.

ΔΗΜΟΣΙΕΥΣΗ No 15:

A. Konstantinidis, **P. Liaparinos**, N. Kalivas, G. Panayiotakis, I. Kandarakis, 'Investigation of two heavy element scintillators by Monte Carlo methods', *Journal of Instrumentation*, JINST 4 P05019, 2009.

Στόχος: Μελέτη της απόδοσης απορρόφησης της ακτινοβολίας καθώς και της διασποράς του φωτός σε υλικά ανιχνευτών αποτελούμενα από τουλάχιστον δύο «βαριά» στοιχεία.

Συμμετοχή: Στον σχεδιασμό και στην καθοδήγηση της μελέτης, στην αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου.

ΔΗΜΟΣΙΕΥΣΗ No 16:

I. Valais, C. Michail, S. David, **P. Liaparinos**, G. Fountos, T. Paschalis, I. Kandarakis and G. Panayiotakis., 'Comparative investigation of Ce^{3+} doped scintillators in a wide range of photon energies covering X-ray CT, nuclear medicine and megavoltage radiation therapy portal imaging applications', IEEE Transactions on Nuclear Science, Vol. 57, pp. 3-7, 2010.

Στόχος: Αξιολόγηση της απόδοσης φθοιζόντων υλικών με ενεργοποιητή Ce^{3+} σε εύρος ενεργειών Αξονικής Τομογραφίας, Πυρηνικής Ιατρικής και Ακτινοθεραπείας.

Συμμετοχή: Στον σχεδιασμό του πειράματος, στην πειραματική αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου.

ΔΗΜΟΣΙΕΥΣΗ No 17:

K. Bliznakova, R. Speller, J. Horrocks, **P. Liaparinos**, Z. Kolitsi, N. Pallikarakis., 'Experimental validation of a radiographic simulation code using breast phantom for x-ray imaging', *Computers in Biology and Medicine*, Vol. 40, pp. 208-214, 2010.

Στόχος: Ανάπτυξη λογισμικού προσομοίωσης μαστού και πειραματική πιστοποίηση του μοντέλου με ακτινοβολία συγχρότρου.

Συμμετοχή: Στη μελέτη του ανιχνευτικού συστήματος με τεχνικές Μόντε Κάρλο, στην αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου.

ΔΗΜΟΣΙΕΥΣΗ No 18:

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., 'Evaluation of the luminescence efficiency of YAG:Ce powder scintillating screens for use in digital mammography detectors portal imaging applications', IEEE Transactions on Nuclear Science, Vol. 57, pp. 951-957, 2010.

<u>Στόχος:</u> Πειραματική αξιολόγηση της εκπομπής φωτός του σπινθηριστή YAG:Ce *σε κοκκώδη μορφή για χρήση στη ψηφιακή μαστογραφία.*

<u>Συμμετοχή:</u> Στον σχεδιασμό του πειράματος, στην πειραματική αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου.

<u>ΔΗΜΟΣΙΕΥΣΗ No 19:</u>

C. M. Michail, G. P. Fountos, **<u>P. F. Liaparinos</u>**, N. E. Kalyvas, I. Valais, I. S. Kandarakis, G. S. Panayiotakis., 'Light emission efficiency and imaging performance of $Gd_2O_2S:E_u$ powder scintillator under x-ray radiography conditions', Medical Physics, Vol. 37, pp. 3694-3703, 2010.

<u>Στόχος:</u> Αξιολόγηση της απόδοσης του φθορίζοντος υλικού ($Gd_2O_2S:Eu$*). Εξετάστηκε πειραματικά καθώς και με τεχνικές Μόντε Κάρλο η επίδραση του υλικού στα απεικονιστικά χαρακτηριστικά ενός ακτινογραφικού συστήματος κατά τη χρησιμοποίηση του στο ανιχνευτικό σύστημα.*

<u>Συμμετοχή:</u> Στον σχεδιασμό της μελέτης, στην ανάπτυξη κατάλληλου λογισμικού, στην καταχώρηση αριθμητικών δεδομένων, στην εφαρμογή των τεχνικών Μόντε Κάρλο, στην επεξεργασία και αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου.

<u>ΔΗΜΟΣΙΕΥΣΗ No 20:</u>

C. M. Michail, G. P. Fountos, I. G. Valais, N. E. Kalyvas, **<u>P. F. Liaparinos</u>**, I. S. Kandarakis, G. S. Panayiotakis., 'Evaluation of the red emitting $Gd_2O_2S:Eu$ powder scintillator for use in indirect X-ray digital mammography detectors', IEEE Transactions on Nuclear Science, Vol. 58, pp. 2503-2511, 2011.

<u>Στόχος:</u> Αξιολόγηση της απόδοσης του φθορίζοντος υλικού ($Gd_2O_2S:Eu$*). Εξετάστηκε πειραματικά καθώς και με τεχνικές Μόντε Κάρλο η επίδραση του υλικού στα απεικονιστικά χαρακτηριστικά ενός ακτινογραφικού συστήματος κατά τη χρησιμοποίηση του στο ανιχνευτικό σύστημα.*

<u>Συμμετοχή:</u> Στον σχεδιασμό της μελέτης, στην ανάπτυξη κατάλληλου λογισμικού, στην καταχώρηση αριθμητικών δεδομένων, στην εφαρμογή των τεχνικών Μόντε Κάρλο, στην επεξεργασία και αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου.

<u>ΔΗΜΟΣΙΕΥΣΗ No 21:</u>

<u>P. Liaparinos</u>, I. Kandarakis, 'Overestimations in zero frequency DQE of x-ray imaging converters assessed by Monte Carlo techniques based on the study of energy impartation events', Medical Physics Vol. 38, pp. 4440-4450, 2011.

<u>Στόχος:</u> Υπολογισμός της υπερεκτίμησης της παραμέτρου DQE κάνοντας χρήση τεχνικών Μόντε Κάρλο και μελετώντας τις «ιστορίες φωτονίων» που οδηγούν απορρόφηση ενέργειας μέσα στον ανιχνευτή.

<u>Συμμετοχή:</u> Στον σχεδιασμό της μελέτης, στην ανάπτυξη κατάλληλου λογισμικού, στην καταχώρηση αριθμητικών δεδομένων, στην εφαρμογή των τεχνικών Μόντε Κάρλο, στην επεξεργασία και αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου.

<u>ΔΗΜΟΣΙΕΥΣΗ No 22:</u>

N. Kalyvas, **P. Liaparinos**, C. Michail, S. David, G. Fountos, M. Wójtowicz, E. Zych, I. Kandarakis, "Studying the luminescence efficiency of Lu_2O_3:Eu nanophosphor material for digital X-ray imaging applications", *Applied Physics A*, Vol. 106, pp. 131-136, 2012.

Στόχος: Αξιολόγηση της απόδοσης φωτός του φθορίζοντος νάνο-υλικού (Lu_2O_3:Eu*). Εξετάστηκε πειραματικά η απόδοση φωτός του υλικού για τη χρησιμοποίηση του σε ανιχνευτικό σύστημα ιατρικής απεικόνισης.*

Συμμετοχή: Στον σχεδιασμό της μελέτης, στην επεξεργασία και αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου.

ΔΗΜΟΣΙΕΥΣΗ No 23:

P. Liaparinos and K. Bliznakova, 'Monte Carlo performance on the x-ray converter thickness in digital mammography using software breast models', *Medical Physics*, Vol. 39, pp. 6638-6651, 2012.

Στόχος: Υπολογισμός των απεικονιστικών χαρακτηριστικών ανιχνευτών ιατρικής απεικόνισης και εφαρμογή μοντέλων παρατηρητή για τη μελέτη επίδρασης του πάχους του υλικού και την εύρεση του βέλτιστου πάχους.

Συμμετοχή: Στον σχεδιασμό της μελέτης, στην ανάπτυξη κατάλληλου λογισμικού, στην καταχώρηση αριθμητικών δεδομένων, στην εφαρμογή των τεχνικών Μόντε Κάρλο, στην επεξεργασία και αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου.

ΔΗΜΟΣΙΕΥΣΗ No 24:

P. F. Liaparinos, 'Optical diffusion performance of nanophosphor-based materials for use in medical imaging', *Journal of Biomedical Optics*, Vol. 17, 126013, 2012.

Στόχος: Υπολογισμός της οπτικής διάχυσης νάνο-υλικών μελετώντας τις οπτικές ιδιότητες και τις ιδιότητες δομή τους. Η μελέτη προβλέπει τις βέλτιστες ιδιότητες ενός νάνο-υλικού για ιατρική απεικόνιση.

ΔΗΜΟΣΙΕΥΣΗ No 25:

P. Liaparinos, N. Kalyvas, I. Kandarakis, D. Cavouras, 'Analysis of the imaging performance in indirect digital mammography detectors by linear systems and signal detection models', *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, Vol. 697, *pp. 87-98*, 2013.

Στόχος: Υπολογισμός των απεικονιστικών χαρακτηριστικών ανιχνευτών ιατρικής απεικόνισης και εφαρμογή μοντέλων παρατηρητή για τη μελέτη επίδρασης του πάχους του υλικού και την εύρεση του βέλτιστου πάχους. Ο υπολογισμός πραγματοποιήθηκε σε ψηφιακούς ανιχνευτές τύπου CMOS.

Συμμετοχή: Στον σχεδιασμό της μελέτης, στην ανάπτυξη της μεθοδολογίας, στην επεξεργασία και αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου.

ΔΗΜΟΣΙΕΥΣΗ No 26:

C. Michail, N. Kalyvas, I. Valais, S. David, I. Seferis, A. Toutountzis, A. Karabotsos, **P. Liaparinos**, G. Fountos, I. Kandarakis, 'On the response of $GdAlO_3$:Ce powder scintillators', *Journal of Luminescence*, Vol. 144, *pp. 45-52*, 2013.

Στόχος: Αξιολόγηση της απόδοσης φωτός και υπολογισμός των απεικονιστικών

χαρακτηριστικών του φθορίζοντος υλικού $GdAlO_3$:Ce για χρήση στην *ιατρική απεικόνιση*.

Συμμετοχή: Στην πειραματική αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου.

ΔΗΜΟΣΙΕΥΣΗ No 27:

A. C. Konstantinidis, M. B. Szafraniec, L. Rigon, G. Tromba, D. Dreossi, N. Sodini, **P.F. Liaparinos**, S.Naday, S. Gunn, A. McArthur, R. D. Speller, and A. Olivo, 'X-ray performance evaluation of the Dexela CMOS APS X-ray detector using monochromatic synchrotron radiation in the mammographic energy range', *IEEE Transactions on Nuclear Science*, Vol. 60, pp. 3969-3980, 2013.

Στόχος: Αξιολόγηση του οπτικού ανιχνευτή Dexela CMOS APS με πειραματικές διατάξεις, θεωρητικούς υπολογισμούς και τεχνικές Μόντε Κάρλο.

Συμμετοχή: Στην αξιολόγηση του ανιχνευτή με τεχνικές Μόντε Κάρλο και στην συγγραφή του άρθρου.

ΔΗΜΟΣΙΕΥΣΗ No 28:

P.F. Liaparinos, 'Light wavelength effects in submicrometer phosphor materials using Mie scattering and Monte Carlo simulation', *Medical Physics*, Vol. 40, pp. 101911, 2013.

Στόχος: Μελέτη της επίδρασης του μήκους κύματος σε φθορίζοντα υλικά με μέγεθος κόκκου της τάξης των εκατοντάδων μικρομέτρων. Η μελέτη πραγματοποιήθηκε χρησιμοποιώντας τη σκέδαση Mie και τη μέθοδο Monte Carlo.

ΔΗΜΟΣΙΕΥΣΗ No 29:

N. Kalyvas, I. Valais, S. David, Ch. Michail,, G. Fountos, **P. Liaparinos** and I. Kandarakis, 'Studying the energy dependence of intrinsic conversion efficiency of single crystal scintillators under X-ray excitation', *Optics and Spectroscopy*, Vol. 116, *pp. 743-747*, 2014.

Στόχος: Μελέτη της απόδοσης μετατροπής φωτός κρυστάλλων σπινθηριστών σε ιατρικά συστήματα ακτίνων-Χ.

Συμμετοχή: Στον σχεδιασμό της μελέτης και στην συγγραφή του άρθρου.

ΔΗΜΟΣΙΕΥΣΗ No 30:

I. Seferis, C. Michail, I. Valais, J. Zeler, **P. Liaparinos,** G. Fountos, N. Kalyvas, S. David, F. Stromatia, E. Zych, I. Kandarakis, G. Panayiotakis, 'Light emission efficiency and imaging performance of Lu_2O_3:Eu nanophosphor under X-ray radiography conditions: Comparison with Gd_2O_2S:Eu', *Journal of Luminescence*, Vol. 151, *pp. 229-234*, 2014.

Στόχος: Αξιολόγηση της απόδοσης του φθορίζοντος υλικού (Lu_2O_3:Eu*). Εξετάστηκε πειραματικά καθώς και με αναλυτικές μεθόδους η επίδραση του υλικού στα απεικονιστικά χαρακτηριστικά ενός ακτινογραφικού συστήματος κατά τη χρησιμοποίηση του στο ανιχνευτικό σύστημα.*

Συμμετοχή: Στον σχεδιασμό της μελέτης, στην εύρεση των νάνο-υλικών, στην καταχώρηση αριθμητικών δεδομένων, στην επεξεργασία και αξιολόγηση των αποτελεσμάτων και στη συγγραφή του άρθρου.

ΔΗΜΟΣΙΕΥΣΗ No 31:

P.F. Liaparinos, ‘Strain effects on the optical parameters of quantum dots nanocrystals employed in biomedical applications’, *Journal of Luminescence*, Vol. 146, *pp. 193-198,* 2014.

Στόχος: Μελέτη της επίδρασης μεταβολής του πλέγματος κβαντικών τελειών στις οπτικές τους ιδιότητες για εφαρμογές στη Βιοϊατρική τεχνολογία.

ΔΗΜΟΣΙΕΥΣΗ No 32:

P.F. Liaparinos, ‘Optical absorption characteristics in the assessment of powder phosphor-based x-ray detectors: from nano- to micro-scale’, *Physics in Medicine and Biology*, Vol. 60, *pp. 8885-8899,* 2015.

Στόχος: Μελέτη της επίδρασης των συντελεστών απορρόφησης στην απόδοση και κατανομή του φωτός φθοριζόντων υλικών μικροκλίμακας και νανοκλίμακας για εφαρμογές στη Βιοϊατρική τεχνολογία.

ΔΗΜΟΣΙΕΥΣΗ No 33:

S. David, C. Michail, I. Seferis, I. Valais, G. Fountos, **P. Liaparinos,** I. Kandarakis, N. Kalyvas, ‘Evaluation of Gd_2O_2S:Pr granular phosphor properties for X-ray mammography imaging’, *Journal of Luminescence*, Vol. 169, *pp. 706-710,* 2016.

Στόχος: Αξιολόγηση της απόδοσης του φθορίζοντος υλικού (Gd_2O_2S:Pr*). Πραγματοποιήθηκε πειραματική και θεωρητική αξιολόγηση των απεικονιστικών χαρακτηριστικών του υλικού κατά τη χρησιμοποίηση του σε συνθήκες μαστογραφικής απεικόνισης. .*

Συμμετοχή: Στον σχεδιασμό της μελέτης, αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου.

ΔΗΜΟΣΙΕΥΣΗ No 34:

P.F. Liaparinos, ‘Anisotropic optical distribution of powder phosphor materials applied in medical imaging instrumentation, *Applied Physics A*, Vol. 122:93, 1-9, 2016.

Στόχος: Μελέτη της επίδρασης του συντελεστή ανισοτροπίας στην εξασθένηση και κατανομή του φωτός σε κοκκώδη υλικά για εφαρμογές στην τεχνολογία ιατρικών απεικονιστικών συστημάτων.

ΔΗΜΟΣΙΕΥΣΗ No 35:

P.F. Liaparinos, ‘Examining phosphor material properties for imaging purposes: the role of the complex refractive index in the optical diffusion performance, *Biomed. Phys. Eng. Express*, Vol. 3, 015006, 2017.

Στόχος: Μελέτη της επίδρασης του μιγαδικού συντελεστή διάθλασης των φθοριζόντων υλικών στην εξασθένηση και κατανομή του φωτός σε κοκκώδη υλικά για εφαρμογές σε ιατρικά απεικονιστικά συστήματα.

ΔΗΜΟΣΙΕΥΣΗ No 36:

P. Liaparinos, N. Kalyvas, E. Katsiotis, I. Kandarakis, 'Investigating the particle packing of powder phosphors for imaging instrumentation technology: An examination of Gd_2O_2S:Tb Phosphor', *Journal of Instrumentation*, Vol. 11(10) P10001, 2016.

Στόχος: Μελέτη της επίδρασης διαφορετικής πυκνότητας κόκκων στην εξασθένηση και κατανομή του φωτός στο φθορίζον υλικό Gd_2O_2S:Tb.

Συμμετοχή: Στον σχεδιασμό της μελέτης, στην ανάπτυξη κώδικα, στην αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου.

ΔΗΜΟΣΙΕΥΣΗ No 37:

P. Liaparinos, 'Light beam interactions and emission performance in powder phosphor materials: The role of the binder, Nuclear Instruments and Methods in Physics Research, Section B, Vol. 432, 5-12, 2018.

Στόχος: Μελέτη της επίδρασης του συνδετικού υλικού στην σύνθεση φθοριζόντων υλικών κοκκώδους μορφής ως προς την εξασθένηση και την κατανομή του φωτός.

ΔΗΜΟΣΙΕΥΣΗ No 38:

N. Kalyvas, **P. Liaparinos**, 'Analytical and Monte Carlo comparisons on the optical transport mechanisms of powder phosphors', *Optical Materials*, Vol. 88, 396-405, 2019.

Στόχος: Συγκριτική μελέτη αναλυτικών μοντέλων και τεχνικών Μόντε Κάρλο στη οπτική διάχυση φθοριζόντων υλικών κοκκώδους μορφής.

Συμμετοχή: Στον σχεδιασμό της μελέτης, στην ανάπτυξη κώδικα Μόντε Κάρλο, στην αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου.

ΔΗΜΟΣΙΕΥΣΗ No 39:

P. Liaparinos, 'LIGHTAWE – case studies of LIGHT spreAd in poWder materials: a montE carlo simulation tool for research and educational purposes', *Applied Physics B: Lasers and Optics*, Vol. 125 (2019).

Στόχος: Δημιουργία πακέτου προσομοίωσης Μόντε Κάρλο για τη μελέτη διάδοσης του φωτός σε υλικά κοκκώδους μορφή (για ερευνητικό και εκπαιδευτικό σκοπό). Το πακέτο προσωμοίωσης παρέχεται δωρεάν σε κάθε ενδιαφερόμενο.

ΔΗΜΟΣΙΕΥΣΗ No 40:

P. Liaparinos, S. David,, 'The Surface-Roughness Effects on Light Beam Interactions between the CsI Phosphor and Optical Sensing Materials', *Crystals*, Vol. 10, 174, 2020.

Στόχος: Η μελέτη της επίδρασης της κοκκώδης επιφάνειας του φθορίζοντος υλικού CsI με διάφορους οπτικούς αισθητήρες ως προς την ανάκλαση και διάδοση του φωτός.

Συμμετοχή: Στον σχεδιασμό της μελέτης, στην ανάπτυξη κώδικα, στην αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου.

ΔΗΜΟΣΙΕΥΣΗ No 41:

P. Liaparinos, C. Michail, I. Valais, A. Karabotsos, A. Bakas, I. Kandarakis, 'The effect of the grain size distribution (GSD) on the light emission performance of phosphor-based X-ray detectors', *Optical Materials*, Vol. 11, 111319, 2021.

Στόχος: Η μελέτη της επίδρασης της κατανομής του μεγέθους κόκκων στη διάδοση και εκπομπή φωτός σε φθορίζοντα υλικά ιατρικής απεικόνισης.

Συμμετοχή: Στον σχεδιασμό της μελέτης, στην ανάπτυξη κώδικα, στην αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου.

ΔΗΜΟΣΙΕΥΣΗ No 41:

P. Liaparinos, C. Michail, I. Valais, A. Karabotsos, A. Bakas, I. Kandarakis, 'The effect of the grain size distribution (GSD) on the light emission performance of phosphor-based X-ray detectors', *Optical Materials*, Vol. 11, 111319, 2021.

Στόχος: Η μελέτη της επίδρασης της κατανομής του μεγέθους κόκκων στη διάδοση και εκπομπή φωτός σε φθορίζοντα υλικά ιατρικής απεικόνισης.

Συμμετοχή: Στον σχεδιασμό της μελέτης, στην ανάπτυξη κώδικα, στην αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου.

ΔΗΜΟΣΙΕΥΣΗ No 42:

P. Liaparinos, 'Influence of surface roughness on the light transmission through the boundaries of luminescent materials in radiation detectors', *Optics and Spectroscopy*, Vol. 129, 1257 - 1265, 2021.

Στόχος: Η μελέτη της επίδρασης της κοκκώδης επιφάνειας φθοριζόντων υλικών με διάφορους οπτικούς αισθητήρες ως προς την ανάκλαση και διάδοση του φωτός.

ΔΗΜΟΣΙΕΥΣΗ No 43:

P. Liaparinos, C. Michail, I. Valais, A. Karabotsos, I. Kandarakis, 'Optical emission characteristics of Gd_2O_2S:Tb powder phosphor under X-ray excitation: the influence of different grain size distributions (GSDs)', *Applied Physics B: Lasers and Optics*, Vol. 128, 76, (2022).

Στόχος: Η μελέτη της επίδρασης της κατανομής του μεγέθους κόκκων στο υλικό Gd_2O_2S:Tb ως προς τη διάδοση και εκπομπή φωτός σε φθορίζοντα υλικά ιατρικής απεικόνισης.

Συμμετοχή: Στον σχεδιασμό της μελέτης, στην ανάπτυξη κώδικα, στην αξιολόγηση των αποτελεσμάτων και στην συγγραφή του άρθρου.

ΔΗΜΟΣΙΕΥΣΗ No 44:

P. Liaparinos, ‘Hybrid Detection of Breast Abnormalities Based on Contrast Agents: Introducing a Proof of Concept from a Physics Perspective, *Sensors*, Vol. 22, 7514, (2022).

Στόχος: Η ανάδειξη χρήσης υβριδικών ανιχνευτικών συστημάτων ιατρικής απεικόνισης με τη βοήθεια κατάλληλων παραγόντων αντίθεσης.

ΔΗΜΟΣΙΕΥΣΗ No 45:

P. Liaparinos, C. Michail, I. Valais, G. Fountos, A. Karabotsos, I. Kandarakis, ‘Grain Size Distribution Analysis of Different Activator Doped Gd_2O_2S Powder Phosphors for Use in Medical Image Sensors, *Sensors*, Vol. 22, 8702, (2022).

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ΠΑΡΑΡΤΗΜΑ Β:

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