

# Κωνσταντίνος Μουτζούρης

Καθηγητής Πανεπιστημίου Δυτικής Αττικής.  
Τμήμα Ηλεκτρολόγων & Ηλεκτρονικών Μηχανικών.

☎ (+30) 210 5381306  
✉ moutzouris@uniwa.gr  
📧 edml.uniwa.gr/optics/  
Ανανεώθηκε: 1 Ιουνίου 2024

## Εκπαίδευση

- 1999–2003 Πανεπιστήμιο του St Andrews, Μ. Βρετανία  
PhD στη Φωτονική και τη Μη-γραμμική Οπτική<sup>1a,2a</sup>
- 1998–1999 Πανεπιστήμιο του St Andrews, Μ. Βρετανία  
MSc στην Οπτικοηλεκτρονική και τις Διατάξεις Λέιζερ<sup>2b</sup>
- 1992–1998 Εθνικό & Καποδιστριακό Πανεπιστήμιο Αθηνών  
Πτυχίο Φυσικής

## Ακαδημαϊκή Προϋπηρεσία

- 2006 Ομοσπονδιακό Πολυτεχνείο της Ζυρίχης (ETH Zür), Ελβετία  
Μεταδιδακτορικός Ερευνητής, Ultrafast Laser Physics Group<sup>1b</sup>
- 2004–2005 Πανεπιστήμιο της Konstanz, Γερμανία  
Μεταδιδακτορικός Ερευνητής, Ultrafast Phenomena & Photonics Group<sup>1c</sup>

## Ερευνητικές Επισκέψεις

- Σεπ–Δεκ 2003 Πολυτεχνείο του Μονάχου (TUM), Γερμανία  
Προσκεκλημένος Επισκέπτης Ερευνητής, Laser & X-ray Physics Group<sup>1d</sup>
- Ιουν–Αυγ 1999 Rutherford Appleton Laboratory, Οξφόρδη, Μ. Βρετανία  
Προσκεκλημένος Επισκέπτης Ερευνητής, Central Laser Facility<sup>1e</sup>

## Τρέχουσα Θέση

- Σεπ 2008–σήμερα Τμήμα Ηλεκτρολόγων & Ηλεκτρονικών Μηχανικών, Παν/μιο Δυτ. Αττικής  
[Πρώην Τμήμα Ηλεκτρονικών Μηχανικών, Τεχνολογικό Εκπαιδευτικό Ίδρυμα Αθήνας]  
Εκλογή στη βαθμίδα του Καθηγητή: 12.05.2020  
Εκλογή στη βαθμίδα του Αναπληρωτή Καθηγητή: 30.03.2015  
Εκλογή στη βαθμίδα του Επίκουρου Καθηγητή: 10.09.2010  
Επιστημονικός Συνεργάτης: 01.10.2008 έως 05.07.2010

## Διοικητικό & Επαγγελματικό Έργο

- Θέσεις Ευθύνης Διευθυντής του Εργαστηρίου Ηλεκτρονικών Διατάξεων & Υλικών.  
[Κατόπιν ομόφωνης εκλογής στις 18.04.2019, έως και σήμερα]  
Διευθυντής του Τομέα Ηλεκτρονικής και Υλικών του οικείου Τμήματος.  
[Κατόπιν ομόφωνης εκλογής στις 24.06.2021, έως και 31.08.2023]  
Αναπλ. Διευθυντής του ΠΜΣ “Ηλεκτρικές & Ηλεκτρονικές Επιστήμες Μέσω Έρευνας”.  
[Κατόπιν ομόφωνης εκλογής στις 12.07.2018, έως και σήμερα]  
Αναπλ. Διευθυντής του Τομέα Ηλεκτρονικής και Υλικών του οικείου Τμήματος.  
[Κατόπιν ορισμού στις 17.07.2018, έως και τις 18.07.2019]
- Επιτροπές Συμμετοχή σε 40<sup>+</sup> ad-hoc τμηματικές/ιδρυματικές επιτροπές και εκλεκτορικά σώματα.  
Μέλος της Επιτροπής Προγράμματος του Συνεδρίου BIOMAGING 2020 (Malta).

<sup>1</sup>Στις ομάδες των: <sup>a</sup>M. Ebrahim-Zadeh; <sup>b</sup>U. Keller, <sup>c</sup>A. Leitenstorfer. Προσκεκλημένος των: <sup>d</sup>A. Laubereau, <sup>e</sup>I.N Ross.

<sup>2a</sup>Με πλήρη υποτροφία του Πανεπιστημίου του St Andrews και <sup>b</sup>μερική υποτροφία EPSRC για την κάλυψη διδάκτρων.

## Αυτοδύναμο Διδακτικό Έργο

- Προπτυχιακά <sup>3</sup> Τμήμα Ηλεκτρολόγων & Ηλεκτρονικών Μηχανικών, Παν/μιο Δυτ. Αττικής.
- ο Εισαγωγή στην Κβαντική Φυσική<sup>†</sup> (2018/19 έως σήμερα)
  - ο Διατάξεις Κβαντικής Ηλεκτρονικής<sup>†</sup> (2019/20 έως σήμερα)
  - ο Οπτικοηλεκτρονική<sup>‡</sup> (2019/20 έως σήμερα)
  - ο Φωτονική Τεχνολογία<sup>‡</sup> (2018/19)
- <sup>2</sup> Τμήμα Ηλεκτρονικών Μηχανικών ΤΕ, Τεχνολογικό Εκπαιδευτικό Ίδρυμα Αθήνας.
- ο Οπτικοηλεκτρονική<sup>‡</sup> (2011/12 έως 2017/18)
  - ο Ηλεκτρομαγνητισμός<sup>†</sup> (2010/11 έως 2017/18)
  - ο Ηλεκτρικά Κυκλώματα<sup>‡</sup> (2008/09 έως 2010/11)
  - ο Ηλεκτρονικά II<sup>†</sup> (2008/09 και 2009/10)
  - ο Ηλεκτρονική Φυσική<sup>‡</sup> (2008/09 και 2009/10)
- <sup>1</sup> Τμήμα Μηχανικών Βιοϊατρικής ΤΕ, Τεχνολογικό Εκπαιδευτικό Ίδρυμα Αθήνας.
- ο Οπτικοηλεκτρονική και Ιατρικά Laser<sup>†</sup> (2011/12 έως 2017/18)
  - ο Ηλεκτρονικά III<sup>†</sup> (2008/09)
- Μεταπτυχιακά <sup>2</sup> Π.Μ.Σ με τίτλο “Ηλεκτρικές και Ηλεκτρονικές Επιστήμες μέσω Έρευνας”.
- ο Ηλεκτρικός και Οπτικός Χαρακτηρισμός Υλικών και Διατάξεων (2018/19)
- <sup>1</sup> Π.Μ.Σ με τίτλο “Σχεδίαση και Ανάπτυξη Προηγμένων Συστημάτων Ηλεκτρονικής”.
- ο Ειδικά Θέματα Σύγχρονης Φυσικής (2012/13 έως 2016/17)
  - ο Ολοκληρωμένα και Κβαντικά Ηλεκτρονικά (2012/13 έως 2016/17)
  - ο Εργαστηριακές Ασκήσεις 1<sup>ου</sup> Εξαμήνου (2012/13 έως 2016/17)
- Επιβλέψεις Επιβλέπων 20<sup>+</sup> νέων επιστημόνων και ερευνητών.

## Αξιολογήσεις Ερευνητικών Προτάσεων & Κρίσεις Άρθρων

- Horizon 2020 <sup>5</sup> European Commission, Directorate General For Research & Innovation.
- ο Expert evaluator and vice-chair for the Research Executive Agency (2018-2024)
- Restart 2016-2020 <sup>4</sup> Ίδρυμα Προώθησης Έρευνας Κύπρου.
- ο Excellence Hubs (2019)
  - ο DIDACTOR (2019)
  - ο Κυπριακό Βραβείο Έρευνας “Νέος Ερευνητής” (2019)
  - ο Research in Enterprises (2018)
- ΕΣΠΑ 2014-2020 <sup>3</sup> Γενική Γραμματεία Έρευνας & Τεχνολογίας.
- ο Υποστήριξη ερευνητών με έμφαση στους νέους ερευνητές, Κύκλος Β (2019)
  - ο Υποστήριξη ερευνητών με έμφαση στους νέους ερευνητές, Κύκλος Α (2018)
- Prin 2017-2018 <sup>2</sup> Italian Ministry of Education, Universities & Research.
- ο Linea Principale (2018)
- Journal Reviewing <sup>1</sup> Κριτής άρθρων σε Περιοδικά των: OSA, IEEE, ACS, SPIE, Elsevier, Taylor & Francis. Opt. Let., Opt. Express, Appl. Opt., IEEE Photonics J., J. Phys. Chem. B, J. Biomed. Opt., Opt. Comm., Opt. Mat., Mat. Let., Sol. State Electron., J. Phys. Chem. Sol., Phase Trans.

## Προσκεκλημένα Σεμινάρια & Διαλέξεις

- Colloquia <sup>5</sup> Εθνικό Ίδρυμα Ερευνών [προσκεκλημένος από τον Ε. Καμίτσο (2007)]. <sup>4</sup> Ομοσπονδιακό Πολυτεχνείο της Ζυρίχης [προσκεκλημένος από την U. Keller (2005)]. <sup>3</sup> Πανεπιστήμιο της Βόννης [προσκεκλημένος από τον H. Giessen (2003)]. <sup>2</sup> Πανεπιστήμιο του Paderborn [προσκεκλημένος από τον W. Sohler (2003)]. <sup>1</sup> Πολυτεχνείο του Μονάχου [προσκεκλημένος από τον A. Leitenstorfer (2003)].
- Θερινά Σχολεία “Optoelectronics, Lasers & Applications”, Κρήτη. [Προσκεκλημένος από τον Κ. Πετρίδη (2008)].
- Π.Μ.Σ “Γεωχωρικές Τεχνολογίες”, ΤΕΙ Αθήνας. [Προσκεκλημένος από τον Β. Παγούνη (2016 και 2017)].

<sup>1†</sup>Θεωρία. <sup>‡</sup>Εργαστήριο.

## Ερευνητικά Ενδιαφέροντα

- Οπτικά Ύλικά** Τεχνικές διαθλασιμετρίας σε διάφανα, απορροφητικά και σκεδαστικά μέσα - διορθώσεις σφαλμάτων μέτρησης. Ανάκλαση Fresnel & μετατόπιση Goos-Hänchen. Τεχνικές μέτρησης απωλειών κυματοδότησης. Χαρακτηρισμός οργανικών και ιονικών υγρών για οπτοροϊκές εφαρμογές.
- Διατάξεις NLO** Οπτικοί παραμετρικοί ταλαντωτές σύγχρονης άντλησης. Διατάξεις αθροιστικής, διαφορικής και αρμονικής μίξης. Επίτευξη συμφωνίας φάσης σε ισότροπα μέσα (τεχνητή διπλάθλαστικότητα, ανάμειξη κβαντικών πηγαδιών). Σχεδιασμός πολυλειτουργικών δομών σε φεροηλεκτρικά υλικά.
- Διατάξεις Laser & Εφαρμογές** Τεχνολογίες fs Laser εγκλειδωσης ρυθμού (Ti:Sapphire και οπτικής ίνας). Μέτρηση υπερταχέων παλμών στο πεδίο του χρόνου και της συχνότητας. Ανάπτυξη Laser για εφαρμογές στη μετρολογία και τη φυσική υψηλών ενεργειών. Συστήματα προσαρμοστικής οπτικής.
- Βιο-Οπτική** Ανάκλαση, απορρόφηση και σκέδαση σύμφωνης ακτινοβολίας σε βιολογικούς ιστούς. Νέοι οπτικοί δείκτες παθολογιών του ήπατος, του παχέως εντέρου, του στήθους και των λεμφαδένων. Οπτικοί βιοαισθητήρες ταχείας αξιολόγησης. Διφωτονική & τριφωτονική μικροσκοπία.

## Συμμετοχή σε Ερευνητικά Προγράμματα

- Ευρωπαϊκά Προγράμματα**
- <sup>5</sup> Collective awareness platform for outdoor air pollution, **HackAir**. [Συνεργαζόμενος Ερευνητής. Project ID: 688363. Overall Budget: 2.406M€. Programme: Horizon2020. Action: Industrial Leadership - Information and Communication Technologies. Duration: 01.01.2016 - 31.12.2018.]
- <sup>4</sup> Building the future optical network in Europe, **Bone**. [Συνεργαζόμενος Ερευνητής. Project ID: 216863. Overall Budget: 4.752M€. Programme: FP7. Action: Network of Excellence - Information and Communication Technologies. Duration: 01.01.2008 - 28.02.2011.]
- <sup>3</sup> Agile photonic integrated systems-on-chip enabling WDM terabit networks, **Apache**. [Συνεργαζόμενος Ερευνητής. Project ID: 224326. Overall Budget: 3.943M€. Programme: FP7. Action: Collaborative Project - Information and Communication Technologies. Duration: 01.04.2008 - 30.09.2011.]
- <sup>2</sup> Pan-European photonics task force, **EuroFos**. [Συνεργαζόμενος Ερευνητής. Project ID: 224402. Overall Budget: 5.0593M€. Programme: FP7. Action: Network of Excellence - Information and Communication Technologies. Duration: 01.05.2008 - 30.04.2012.]
- <sup>1</sup> Optical frequency conversion in semiconductor heterostructures II, **OfCorse**. [Συνεργαζόμενος Ερευνητής. Project ID: 028202. Overall Budget: 1.238M€. Programme: FP4. Action: ESPRIT Cost Sharing Contracts. Duration: 01.02.1999 - 31.07.2001.]
- Εθνικά/Εσωτερικά Προγράμματα**
- <sup>6</sup> Prism Coupling Refractometry: Extending Scope & Applicability, **Refract**. [Επιστημονικός Υπεύθυνος. Project Code: 80228. Overall Budget: 5k€. Internal (ELKE) Programme: Reinforcing Researchers of TEI-Athens 2015. Duration: 08.10.2015 - 31.03.2017.]
- <sup>5</sup> Ολοκληρωμένη πλατφόρμα παρακολούθησης ατμοσφαιρικών ρύπων με τη χρήση δικτύου IoT, **Emission**. [Αναπλ. Επιστημονικός Υπεύθυνος. Overall Budget: 0.821M€. Πρόγραμμα: ΕΠΑνΕΚ 2014-2020 "Ερευνώ-Δημιουργώ-Καινοτομώ". Διάρκεια: 31.07.2018 - 31.01.2021.]
- <sup>4</sup> Έρευνα & ανάπτυξη καινοτόμων πολυλειτουργικών νανοσύνθετων υλικών πολυμερικής μήτρας, **MPN**. [Συνεργαζόμενος Ερευνητής. Project MIS: 379346. Overall Budget: 0.6M€. Πρόγραμμα: Θαλής. ΕΣΠΑ-ΕΠΕΔΒΜ & ΕΚΤ. Διάρκεια: 01.01.2012 - 31.12.2015.]
- <sup>3</sup> Ανάπτυξη & αξιολόγηση καινοτόμων πειραματικών τεχνικών για τη μελέτη της μηχανικής συμπεριφοράς φυσικών δομικών λίθων, **Intermonu**. [Συνεργ. Ερευνητής. Project MIS: 380147. Overall Budget: 0.6M€. Πρόγραμμα: Θαλής. ΕΣΠΑ-ΕΠΕΔΒΜ & ΕΚΤ. Διάρκεια: 01.01.2012 - 31.09.2015.]
- <sup>2</sup> Ενίσχυση ερευνητικών ομάδων στο ΤΕΙ Αθήνας - Κεντρική Δράση, **Αρχιμήδης III**. [Συνεργ. Ερευνητής. Project MIS: 379389. Overall Budget: 4.6M€. Επιχειρησιακό Πρόγραμμα: Εκπαίδευση και δια βίου μάθηση. ΕΣΠΑ-ΕΠΕΔΒΜ & ΕΚΤ. Διάρκεια: 01.06.2012 - 31.11.2015.]
- <sup>1</sup> Πρακτική άσκηση ΤΕΙ Αθήνας, **ΠΑ-ΤΕΙΑ** [Συνεργ. Ερευνητής. Project MIS: 299967. Overall Budget: 7.285M€. Επιχειρησιακό Πρόγραμμα: Εκπαίδευση και δια βίου μάθηση. ΕΣΠΑ-ΕΠΕΔΒΜ & ΕΚΤ. Διάρκεια: 12.11.2010 - 30.11.2014.]

### PEER REVIEW JOURNALS

- <sup>39</sup> M. Papadoliopoulou, M. Matiatou, S. Koutsoumpos, F. Mulita, P. Giannios, I. Margaritis, K. Moutzouris, N. Arkadopoulou, N.V. Michalopoulos. *Optical imaging in human lymph node specimens for detecting breast cancer metastases: A review.* [CANCERS](#) 15, 5328 (2023).
- <sup>38</sup> A. Mero, S. Koutsoumpos, P. Giannios, I. Stavrakas, K. Moutzouris, A. Mezzetta, L. Guazzelli. *Comparison of physicochemical and thermal properties of choline chloride and betaine-based deep eutectic solvents: The influence of hydrogen bond acceptor and hydrogen bond donor nature and their molar ratios.* [JOURNAL OF MOLECULAR LIQUIDS](#) 377, 121563 (2023).
- <sup>37</sup> S. Koutsoumpos, M. Chronaki, C. Tsonos, T. Karakasidis, L. Guazzelli, A. Mezzetta, K. Moutzouris. *On the application of the Wildman-Crippen model to ionic liquids.* [RESULTS IN MATERIALS](#) 16, 100350 (2022).
- <sup>36</sup> S. Koutsoumpos, P. Giannios, K. Moutzouris. *Determining the complex refractive index from two discrete angles in the specular reflectance profile of p polarised light.* [MEASUREMENT SCIENCE & TECHNOLOGY ONLINE FIRST](#) (2022).
- <sup>35</sup> S. Koutsoumpos, P. Giannios, K. Moutzouris. *Two prism critical angle refractometry with attenuating media.* [INSTRUMENTS](#) 6, 21 (2022).
- <sup>34</sup> S. Kriptou, G. Tsonos, A. Mezzetta, A. Mero, L. Guazzelli, K. Moutzouris, I. Stavrakas, C. Tsonos. *Dielectric study of tetraalkylammonium and tetraalkylphosphonium levulinate ionic liquids.* [INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES](#) 23, 5642 (2022).
- <sup>33</sup> A. Mero, L. Guglielmo, F. D'Andrea, C.S Pomelli, L. Guazzelli, S. Koutsoumpos, G. Tsonos, I. Stavrakas, K. Moutzouris, A. Mezzetta. *Influence of the cation partner on levulinate ionic liquids properties.* [JOURNAL OF MOLECULAR LIQUIDS](#) 354, 118850 (2022).
- <sup>32</sup> S. Koutsoumpos, P. Giannios, K. Moutzouris. *Critical angle refractometry with optically isotropic attenuating media.* [APPLIED PHYSICS B: LASERS & OPTICS](#) 128, 91 (2022).
- <sup>31</sup> M. Matiatou, P. Giannios, S. Koutsoumpos, N.V Michalopoulos, K.G Toutouzas, G.C Zografos, K. Moutzouris. *Complex refractive index of freshly excised human breast tissue as a marker of disease.* [LASERS IN MEDICAL SCIENCES](#) 1-8 (2022).
- <sup>30</sup> S. Koutsoumpos, P. Giannios, K. Moutzouris. *Critical angle refractometry for lossy media with a priori known extinction coefficient.* [PHYSICS](#) 3, 569 (2021).
- <sup>29</sup> S. Koutsoumpos, P. Giannios, K. Moutzouris. *Extended derivative method of critical-angle refractometry for attenuating media: Error analysis.* [MEASUREMENT SCIENCE & TECHNOLOGY](#) 32, 105007 (2021).
- <sup>28</sup> M. Matiatou, P. Giannios, S. Koutsoumpos, K.G Toutouzas, G.C Zografos, K. Moutzouris. *Data on the refractive index of freshly-excised human tissues in the visible and near-infrared spectral range.* [RESULTS IN PHYSICS](#) 22, 103833 (2021).
- <sup>27</sup> S. Koutsoumpos, P. Giannios, I. Stavrakas, K. Moutzouris. *The derivative method of critical-angle refractometry for attenuating media.* [JOURNAL OF OPTICS](#) 22, 075601 (2020).
- <sup>26</sup> S. Koutsoumpos, P. Giannios, D. Triantis, K. Moutzouris. *Critical-angle differential refractometry of lossy media: a theoretical study and practical design issues.* [INSTRUMENTS](#) 3, 36 (2019).
- <sup>25</sup> J. Oelhafen, T. Mayr, F. Dorner, K. Moutzouris, J. Roths, K. Drechsler. *Fiber optic measurement system for Fresnel reflection sensing: Calibration, uncertainty, and exemplary application in temperature-modulated isothermal polymer curing.* [JOURNAL OF LIGHTWAVE TECHNOLOGY](#) 36, 939 (2018).
- <sup>24</sup> P. Giannios, S. Koutsoumpos, K.G Toutouzas, M. Matiatou, G.C Zografos, K. Moutzouris. *Complex refractive index of normal and malignant human colorectal tissue in the visible and near-infrared.* [JOURNAL OF BIOPHOTONICS](#) 10, 303 (2017).
- <sup>23</sup> C. Chiappe, P. Margari, A. Mezzetta, C.S Pomelli, S. Koutsoumpos, M. Papamichael, P. Giannios, K. Moutzouris. *Temperature effects on the viscosity and the wavelength-dependent refractive index of imidazolium-based ionic liquids with a phosphorus-containing anion.* [PHYS CHEM CHEM PHYS](#) 19, 8201 (2017).
- <sup>22</sup> P. Giannios, K.G Toutouzas, M. Matiatou, K. Stasinou, M.M Konstadoulakis, G.C Zografos, K. Moutzouris. *Visible to near-infrared refractive properties of freshly-excised human-liver tissues: marking hepatic malignancies.* [SCIENTIFIC REPORTS](#) 6, 27910 (2016).

- <sup>21</sup> K. Moutzouris, M. Papamichael, S.C Betsis, I. Stavrakas, G. Hloupis, D. Triantis. *Refractive, dispersive and thermo-optic properties of twelve organic solvents in the visible and near-infrared*. [APPLIED PHYSICS B: LASERS & OPTICS](#) 116, 617 (2014).
- <sup>20</sup> I. Stavrakas, D. Triantis, G. Hloupis, K. Moutzouris. *Electrical characterization of polymer matrix-TiO<sub>2</sub> filler composites through isothermal polarization/depolarization currents & I-V tests*. [OPEN PHYSICS](#) 12, 286 (2014).
- <sup>19</sup> E. Stoubou, I. Stavrakas, G. Hloupis, A. Alexandridis, D. Triantis, K. Moutzouris. *A comparative study on the use of the extended-Cauchy dispersion equation for fitting refractive index data in crystals*. [OPTICAL & QUANTUM ELECTRONICS](#) 45, 837 (2013).
- <sup>18</sup> A. Alexandridis, E. Chondrodima, K. Moutzouris, D. Triantis. *A neural network approach for the prediction of the refractive index based on experimental data*. [JOURNAL OF MATERIALS SCIENCE](#) 47, 883 (2012).
- <sup>17</sup> K. Moutzouris, G. Hloupis, I. Stavrakas, D. Triantis, M.H Chou. *Temperature-dependent visible to near-infrared optical properties of 8 mol% Mg-doped lithium tantalate*. [OPTICAL MATERIALS EXPRESS](#) 1, 458 (2011).
- <sup>16</sup> K. Moutzouris, I. Stavrakas, D. Triantis, M. Enculescu. *Temperature-dependent refractive index of potassium acid phthalate (KAP) in the visible and near-infrared*. [OPTICAL MATERIALS](#) 33, 812 (2011).
- <sup>15</sup> A. Esteban-Martin, O. Kokabee, K. Moutzouris, M. Ebrahim-Zadeh. *High-harmonic-repetition-rate, 1 GHz femtosecond optical parametric oscillator pumped by a 76 MHz Ti:sapphire laser*. [OPTICS LETTERS](#) 34, 428 (2009).
- <sup>14</sup> D. Träutlein, F. Adler, K. Moutzouris, A. Jeromin, A. Leitenstorfer, E. Ferrando-May. *Highly versatile confocal microscopy system based on a tunable femtosecond Er: fiber source*. [JOURNAL OF BIOPHOTONICS](#) 1, 53 (2008).
- <sup>13</sup> K. Moutzouris, F. Sotier, F. Adler, A. Leitenstorfer. *Sum frequency generation of continuously tunable blue pulses from a two-branch femtosecond fiber source*. [OPTICS COMMUNICATIONS](#) 274, 417 (2007).
- <sup>12</sup> C. Erny, K. Moutzouris, J. Biegert, D. Kuhlke, F. Adler, A. Leitenstorfer, U. Keller. *Mid-infrared difference-frequency generation of ultrashort pulses tunable between 3.2 and 4.8  $\mu$ m from a compact fiber source*. [OPTICS LETTERS](#) 32, 1138 (2007).
- <sup>11</sup> K. Moutzouris, F. Adler, F. Sotier, D. Träutlein, A. Leitenstorfer. *Multimilliwatt ultrashort pulses continuously tunable in the visible from a compact fiber source*. [OPTICS LETTERS](#) 31, 1148 (2006).
- <sup>10</sup> K. Moutzouris, F. Sotier, F. Adler, A. Leitenstorfer. *Highly efficient second, third and fourth harmonic generation from a two-branch femtosecond erbium fiber source*. [OPTICS EXPRESS](#) 14, 1905 (2006).
- <sup>9</sup> F. Adler, K. Moutzouris, A. Leitenstorfer, H. Schnatz, B. Lipphardt, G. Grosche, F. Tauser. *Phase-locked two-branch erbium-doped fiber laser system for long-term precision measurements of optical frequencies*. [OPTICS EXPRESS](#) 12, 5872 (2004).
- <sup>8</sup> S. Venugopal Rao, K. Moutzouris, M. Ebrahimzadeh. *Nonlinear frequency conversion in semiconductor optical waveguides using birefringent, modal and quasi-phase-matching techniques*. [JOURNAL OF OPTICS A: PURE & APPLIED OPTICS](#) 6, 569 (2004).
- <sup>7</sup> K. Moutzouris, S. Venugopal Rao, M. Ebrahimzadeh, A. De Rossi, M. Calligaro, V. Ortiz, V. Berger. *Second harmonic generation through optimized modal phase matching in semiconductor waveguides*. [APPLIED PHYSICS LETTERS](#) 83, 620 (2003).
- <sup>6</sup> K. Zeaiter, D.C Hutchings, R.M Gwilliam, K. Moutzouris, S. Venugopal Rao, M. Ebrahimzadeh. *Quasi-phase-matched second-harmonic generation in a GaAs/AlAs superlattice waveguide by ion-implantation-induced intermixing*. [OPTICS LETTERS](#) 28, 911 (2003).
- <sup>5</sup> S. Venugopal Rao, K. Moutzouris, M. Ebrahimzadeh, A. De Rossi, G. Gintz, M. Calligaro, V. Ortiz, V. Berger. *Influence of scattering and two-photon absorption on the optical loss in GaAs-Al<sub>2</sub>O<sub>3</sub> nonlinear waveguides measured using femtosecond pulses*. [IEEE JOURNAL OF QUANTUM ELECTRONICS](#) 39, 478 (2003).
- <sup>4</sup> V. Loyo-Maldonado, H.K Lee, C.R Stanley, S. Venugopal Rao, K. Moutzouris, M. Ebrahimzadeh, J.S Aitchison. *Generation of ultrashort electrical pulses in semiconductor waveguides*. [IEEE PHOTONICS TECHNOLOGY LETTERS](#) 15, 428 (2003).
- <sup>3</sup> S. Venugopal Rao, K. Moutzouris, M. Ebrahimzadeh, A. De Rossi, G. Gintz, M. Calligaro, V. Ortiz, V. Berger. *Measurements of optical loss in GaAs/Al<sub>2</sub>O<sub>3</sub> nonlinear waveguides in the infrared using femtosecond scattering technique*. [OPTICS COMMUNICATIONS](#) 213, 223 (2002).

<sup>2</sup> K. Moutzouris, S. Venugopal Rao, M. Ebrahimzadeh, A. De Rossi, V. Berger, M. Calligaro, V. Ortiz. *Efficient second-harmonic generation in birefringently phase-matched GaAs/Al<sub>2</sub>O<sub>3</sub> waveguides*. [OPTICS LETTERS](#) 26, 1785 (2001).

<sup>1</sup> A.S. Helmy, D.C Hutchings, T.C Kleckner, J.H Marsh, A.C Bryce, J.M Arnold, C.R Stanley, J.S Aitchison, C.T.A Brown, K. Moutzouris, M. Ebrahimzadeh. *Quasi phase matching in GaAs-AlAs superlattice waveguides through bandgap tuning by use of quantum-well intermixing*. [OPTICS LETTERS](#) 25, 1370 (2000).

#### PEER REVIEW CONFERENCE PROCEEDINGS

<sup>38</sup> I. Christakis, K. Moutzouris, O. Tsakiridis, I. Stavrakas. *Barometric Pressure as a correction factor for low-cost particulate matter sensors*. 3rd Intl. Conference on Environmental Design; Athens, Greece; 22 Oct 2022 through 23 Oct 2022. [IOP CONFERENCE SERIES: EARTH AND ENVIRONMENTAL SCIENCE](#), 1123, 012068 (2022).

<sup>37</sup> T. Migos, I. Christakis, K. Moutzouris and I. Stavrakas. *On the Evaluation of Low-Cost PM Sensors for Air Quality Estimation*. 8th International Conference on Modern Circuits and Systems Technologies; Thessaloniki; Greece; 13 May 2019 through 15 May 2019. [IEEE MOCAS CONFERENCE PROCEEDINGS](#), 1-4 (2019).

<sup>36</sup> M. Matiatou, P. Giannios, K. Moutzouris, N. Michalopoulos, S. Koutsoumpos, K. Toutouzas, G.C Zografos. *Correlation of tissue optical characteristics to breast pathology*. 16th St. Gallen International Breast Cancer Conference, BCC 2019; Vienna; Austria; 2 March 2019 through 23 March 2019. [THE BREAST](#) 44, S131 (2019).

<sup>35</sup> M. Matiatou, P. Giannios, K. Moutzouris, N. Michalopoulos, S. Koutsoumpos, K. Toutouzas, G.C Zografos. *Identifying a relation between refractive index and breast pathology using prism coupling refractometry*. 11th European Breast Cancer Congress, EBCC11; Barcelona; Spain; 21 March 2018 through 23 March 2018. [EUROPEAN JOURNAL OF CANCER](#) 92, S126 (2018).

<sup>34</sup> J. Oelhafen, T. Mayr, K. Moutzouris, J. Roths, K. Drechsler. *Calibration and uncertainty of a fibre optic measurement system for Fresnel reflectometer sensors*. 25th International Conference on Optical Fiber Sensors, OFS 2017; Jeju; South Korea; 24 April 2017 through 28 April 2017. [PROCEEDINGS OF SPIE](#) 10323, ARTICLE No 103235O, 1-4 (2017).

<sup>33</sup> D. Triantis, I. Stavrakas, C. Anastasiadis, K. Moutzouris. *Electrical conductivity of polyurethane (PU) based fibro-porous membranes*. International Conference Science in Technology; SCinTE-2015; Athens; Greece; 5 November 2015 through 7 Sept. 2015. [SCINTE CONFERENCE PROCEEDINGS](#) 2, 21-23 (2015).

<sup>32</sup> S.K. Kourkoulis, E.D. Pasiou, I. Stavrakas, G. Hloupis, D. Triantis, K. Moutzouris. *An experimental study of the mechanical response of a typical epistyles' connection under pure shear*. 39th Solid Mechanics Conference; Zakopane; Poland; 1 Sept. 2014 through 5 Sept. 2014. [SOLMECH BOOK OF ABSTRACTS](#), 125-126 (2014).

<sup>31</sup> I. Stavrakas, D. Triantis, G. Hloupis, K. Moutzouris, C. Anastasiadis. *Monitoring Spatial Damage Development Through Electrical Current and Acoustic Emission Detection when Marble Specimens are Subjected to Mechanical Loading*. 8th International Conference on Advanced Computational Engineering and Experimenting; ACEX2014; Paris; France; 30 June 2014 through 3 July 2014. [ACEX BOOK OF ABSTRACTS](#), 43-44 (2014).

<sup>30</sup> G. Hloupis, V. Bimpikas, I. Stavrakas, K. Moutzouris, C. Stergiopoulos, D. Triantis. *Developing open source dataloggers for inquiry learning*. 6th International Conference on Computer Supported Education, CSEDU 2014; Barcelona; Spain; 1 April 2014 through 3 April 2014. [CSEDU PROCEEDINGS](#) 1, 555-562 (2014).

<sup>29</sup> G. Hloupis, I. Stavrakas, D. Triantis, K. Moutzouris. *Electrical current and acoustic emissions when marble specimens are subjected to compressive mechanical loading*. 30th Danubia-Adria Symposium on Advances in Experimental Mechanics, DAS 2013; Primosten; Croatia; 25 September 2013 through 28 September 2013. [DAS PROCEEDINGS](#), 123-124 (2013).

<sup>28</sup> G. Hloupis, G.T Malliaros, I. Stavrakas, K. Moutzouris, D. Triantis. *Remote Lab experiments: Preliminary results from an introductory electronic engineering module*. 5th Intl. Conf. on Computer Supported Education, CSEDU 2013; Aachen; Germany; 6 May 2013 through 8 May 2013. [CSEDU PROCEEDINGS](#), 277-280 (2013).

<sup>27</sup> G. Hloupis, I. Stavrakas, K. Moutzouris, D. Triantis. *Low cost experimental devices for educational seismic networks*. 4th International Conference on Computer Supported Education, CSEDU 2012; Porto; Portugal; 16 April 2012 through 18 April 2012. [CSEDU PROCEEDINGS](#) 1, 356-359 (2012).

- <sup>26</sup> G. Hloupis, I. Stavrakas, A. Alexandridis, K. Moutzouris, D. Triantis. *Can open source electronics platforms be beneficial for early warning systems?* European Geosciences Union General Assembly, EGU 2011; Vienna; Austria; 03 April 2011 through 8 April 2011. [GEOPHYSICAL RESEARCH ABSTRACTS](#) 13, EGU2011-13004 (2011).
- <sup>25</sup> G. Hloupis, I. Stavrakas, K. Moutzouris, A. Alexandridis, D. Triantis. *WSN open source development platform: Application to green learning.* 25th Eurosensors Conference; Athens; Greece; 4 September 2011 through 7 September 2011. [PROCEDIA ENGINEERING](#) 25, 1049-1052 (2011).
- <sup>24</sup> A. Leitenstorfer, A. Sell, D. Träutlein, F. Adler, K. Moutzouris, F. Sotier, M. Kahl, R. Bratschitsch, R. Huber, E. Ferrando-May. *Ultrabroadband Er: fiber Systems and Applications.* 16th International Conference on Ultrafast Phenomena, UP 2008; Stresa; Italy; 9 July 2008 through 13 July 2008. [SPRINGER SERIES IN CHEMICAL PHYSICS 92: ULTRAFAST PHENOMENA XVI](#), 735-737 (2010).
- <sup>23</sup> K. Moutzouris, I. Stavrakas, C. Anastasiadis, D. Triantis. *Theoretical Study of second harmonic generation in strontium and calcium tartrato-antimonates.* International Commission for Optics topical meeting: Emerging trends and novel materials in photonics, ICO 2009; Delphi; Greece; 7 October 2009 through 9 October 2009. [ICO PROCEEDINGS](#), 114 (2009).
- <sup>22</sup> O. Kokabee, A. Esteban Martin, K. Moutzouris, M. Ebrahim-Zadeh. *1-GHz femtosecond optical parametric oscillator pumped by a 76-MHz Ti:Sapphire laser.* Conference on Lasers and Electro-Optics, CLEO 2009; Baltimore, MD; United States; 31 May 2009 through 5 June 2009. [OSA TECHNICAL DIGEST SERIES](#), PAPER CWC5 (2009).
- <sup>21</sup> O. Kokabee, A. Esteban Martin, K. Moutzouris, M. Ebrahim-Zadeh. *Extended-cavity GHz-repetition-rate femtosecond optical parametric oscillator pumped at 76 MHz.* The European Conference on Lasers and Electro-Optics, CLEO/Europe 2009; Munich; Germany; 14 June 2009 through 19 June 2009. [CLEO/EUROPE CONFERENCE DIGEST](#), PAPER CD10-3 (2009).
- <sup>20</sup> K. Moutzouris, F. Adler, A. Sell, A. Leitenstorfer. *Ultra-wide band wavelength converters.* 10th Anniversary International Conference on Transparent Optical Networks, ICTON; Athens; Greece; 22 June 2008 through 26 June 2008. [ICTON CONFERENCE PROCEEDINGS](#) 1, ARTICLE No 4598406, 198-201 (2008).
- <sup>19</sup> C. Erny, K. Moutzouris, J. Biegert, U. Keller, D. Kühlke, F. Adler, A. Leitenstorfer. *Femtosecond mid-infrared difference-frequency-generation tunable between 3.2  $\mu$ m and 4.8  $\mu$ m from a compact fiber source.* Conference on Lasers and Electro-Optics, CLEO 2007; Baltimore, MD; United States; 6 May 2007 through 11 May 2007. [OSA TECHNICAL DIGEST SERIES](#), PAPER CThL4 (2007).
- <sup>18</sup> D. Träutlein, E. Ferrando-May, F. Adler, K. Moutzouris, A. Leitenstorfer, U. Camenisch, H. Nägeli, A. Jeromin. *Confocal microscopy and micromanipulation based on a femtosecond fiber laser with ultrawide tuning range.* The European Conference on Lasers and Electro-Optics, CLEO/Europe 2007; Munich; Germany; 17 June 2007 through 22 June 2007. [CLEO/EUROPE CONFERENCE DIGEST](#), PAPER CL2-3 (2007).
- <sup>17</sup> C. Erny, K. Moutzouris, J. Biegert, U. Keller, D. Kühlke, F. Adler, A. Leitenstorfer. *Femtosecond mid-infrared difference-frequency-generation tunable between 3.2  $\mu$ m and 4.8  $\mu$ m from a compact fiber source.* The European Conference on Lasers and Electro-Optics, CLEO/Europe 2007; Munich; Germany; 17 June 2007 through 22 June 2007. [CLEO/EUROPE CONFERENCE DIGEST](#), PAPER CA9-1 (2007).
- <sup>16</sup> K. Moutzouris, F. Adler, F. Sotier, D. Träutlein, A. Leitenstorfer. *Fiber-laser pumped MgO:LiNbO<sub>3</sub> based frequency doubler providing sub-picosecond pulses continuously tunable from 520 nm to 700 nm.* Conference on Lasers and Electro-Optics, CLEO 2006; Long Beach, CA; United States; 21 May 2006 through 26 May 2006. [OSA TECHNICAL DIGEST SERIES](#), PAPER JThC54 (2006).
- <sup>15</sup> F. Tauser, A. Zach, F. Lison, F. Adler, K. Moutzouris, A. Leitenstorfer. *Two alternative approaches to broadband visible light generation with mode-locked Erbium fiber lasers.* Conference on Lasers and Electro-Optics, CLEO 2006; Long Beach, CA; United States; 21 May 2006 through 26 May 2006. [OSA TECHNICAL DIGEST SERIES](#), PAPER JWB37 (2006).
- <sup>14</sup> F. Adler, K. Moutzouris, A. Leitenstorfer, H. Schnatz, B. Lipphardt, G. Grosche, F. Tauser. *Two-branch Er: fiber laser system for long-term optical frequency metrology.* Conference on Lasers and Electro-Optics, CLEO 2005; Baltimore, MD; United States; 22 May 2005 through 27 May 2005. [OSA TECHNICAL DIGEST SERIES](#), PAPER CThU4 (2005).

- <sup>13</sup> F. Tauser, A. Zach, F. Lison, F. Adler, K. Moutzouris, A. Leitenstorfer, H. Schnatz, B. Lipphardt. *Extending scope and applicability of femtosecond light pulses from erbium-doped fiber lasers*. Commercial and Biomedical Applications of Ultrafast Lasers V; San Jose, CA; United States; 24 January 2005 through 27 January 2005. [PROCEEDINGS OF SPIE 5714](#), ARTICLE NO 01, 1-8 (2005).
- <sup>12</sup> S. Venugopal Rao, K. Moutzouris, M. Ebrahimzadeh, A. De Rossi, M. Calligaro, V. Ortiz, V. Berger. *Modal phase matching in GaAs/AlGaAs waveguides: second harmonic generation with femtosecond pulses near 1.5  $\mu$ m*. Conference on Lasers and Electro-Optics, CLEO 2003; Baltimore, MD; United States; 1 June 2003 through 6 June 2003. [OSA TECHNICAL DIGEST SERIES](#), PAPER CTUG1 (2003).
- <sup>11</sup> K. Moutzouris, S. Venugopal Rao, M. Ebrahimzadeh, R. M. Gwilliam, K. Zeaiter, D. C. Hutchings. *Second harmonic generation in first-order quasi-phase-matched GaAs/AlAs superlattice waveguides by use of ion-implantation induced intermixing*. Conference on Lasers and Electro-Optics, CLEO 2003; Baltimore, MD; United States; 1 June 2003 through 6 June 2003. [OSA TECHNICAL DIGEST SERIES](#), PAPER CTHU4 (2003).
- <sup>10</sup> K. Zeaiter, D. Hutchings, R.M. Gwilliam, S. Venugopal Rao, K. Moutzouris, M. Ebrahimzadeh. *First-order quasi phase matched second harmonic generation in GaAs/AlAs superlattice waveguides by use of ion-implantation induced intermixing*. The European Conference on Lasers and Electro-Optics, CLEO/Europe 2003; Munich; Germany; 22 June 2003 through 27 June 2003. [CLEO/EUROPE CONFERENCE DIGEST](#), ARTICLE NO 1312300, 239 (2003).
- <sup>9</sup> K. Moutzouris, S. Venugopal Rao, M. Ebrahimzadeh, A. De Rossi, M. Calligaro, V. Ortiz, V. Berger. *Second harmonic generation in GaAs/AlGaAs waveguides with femtosecond pulses near 1.55  $\mu$ m using modal phase matching technique*. The European Conference on Lasers and Electro-Optics, CLEO/Europe 2003; Munich; Germany; 22 June 2003 through 27 June 2003. [CLEO/EUROPE CONFERENCE DIGEST](#), ARTICLE NO 1312320, 259 (2003).
- <sup>8</sup> S. Venugopal Rao, K. Moutzouris, M. Ebrahimzadeh, A. De Rossi, V. Berger, M. Calligaro, V. Ortiz. *Efficient second harmonic generation in birefringently phase-matched GaAs/Al<sub>2</sub>O<sub>3</sub> waveguides using femtosecond pulses at 2.01  $\mu$ m*. Conference on Lasers and Electro-Optics, CLEO 2002; Long Beach, CA; United States; 19 May 2002 through 24 May 2002. [OSA TECHNICAL DIGEST SERIES](#), PAPER CTUN5 (2002).
- <sup>7</sup> V. Loyo-Maldonado, J.S Aitchison, S. Venugopal Rao, K. Moutzouris, M. Ebrahimzadeh. *Generation of ultrashort electrical pulses in semiconductor waveguides*. Conference on Lasers and Electro-Optics, CLEO 2002; Long Beach, CA; United States; 19 May 2002 through 24 May 2002. [OSA TECHNICAL DIGEST SERIES](#), PAPER CTUN6 (2002).
- <sup>6</sup> K. Moutzouris, S. Venugopal Rao, M. Ebrahimzadeh, A. De Rossi, M. Calligaro, V. Ortiz, G. Ginitz, V. Berger. *Measurements of optical loss in GaAs/Al<sub>2</sub>O<sub>3</sub> nonlinear waveguides in the infrared using femtosecond scattering technique*. Conference on Lasers and Electro-Optics, CLEO 2002; Long Beach, CA; United States; 19 May 2002 through 24 May 2002. [OSA TECHNICAL DIGEST SERIES](#), PAPER CWA7 (2002).
- <sup>5</sup> K. Zeaiter, D.C Hutchings, K. Moutzouris, S. Venugopal Rao, M. Ebrahimzadeh. *Quasi-phase-matched second harmonic generation in an GaAs/AlAs superlattice waveguide using ion-implantion induced intermixing*. 15th Annual Meeting of the IEEE Lasers and Electro-Optics Society; Glasgow; United Kingdom; 10 November 2002 through 14 November 2002. [IEEE/LEOS ANNUAL MEETING CONFERENCE PROCEEDINGS 1](#), 81-82 (2002).
- <sup>4</sup> A.S. Helmy, D.C Hutchings, T.C Kleckner, J.S Aitchison, A.C Bryce, J.H Marsh, P. Martin, J.P Landesman, C.T.A Brown, K. Moutzouris, M. Ebrahimzadeh, S.G Ayling. *Quantum well intermixing technologies for quasi-phase-matching gratings in GaAs/AlAs superlattice waveguides*. 13th Annual Meeting of the IEEE Lasers and Electro-Optics Society; Rio Grande, Puerto Rico; USA; 13 November 2000 through 16 November 2000. [IEEE/LEOS ANNUAL MEETING CONFERENCE PROCEEDINGS 2](#), PAPER THD4, 712-713 (2000).
- <sup>3</sup> A.S Helmy, D.C Hutchings, T.C Kleckner, J.H Marsh, A.C Bryce, J.M Arnold, C.R Stanley, C.T.A Brown, K. Moutzouris, M. Ebrahimzadeh. *Quasi-phase matched second harmonic generation by modulating bulk-like  $\chi^{(2)}$  coefficients in GaAs-AlAs superlattices by quantum well intermixing*. Conference on Lasers and Electro-Optics, CLEO 2000; San Francisco, CA; USA; 7 May 2000 through 12 May 2000. [OSA TECHNICAL DIGEST SERIES](#), PAPER PD25 (2000).



<sup>2</sup> A.S Helmy, D.C Hutchings, T.C Kleckner, J.H Marsh, A.C Bryce, J.M Arnold, C.R Stanley, C.T.A Brown, K. Moutzouris, M. Ebrahimzadeh. *Quasi-phase-matching in GaAs-AlAs superlattice waveguides via bandgap tuning using quantum well intermixing*. Nonlinear Optics: Materials, Fundamentals, and Applications; Kauai-Lihue, HI; USA; 6 August 2000 through 10 August 2000. [IEEE NONLINEAR OPTICS: MATERIALS, FUNDAMENTALS AND APPLICATIONS - CONFERENCE PROCEEDINGS](#), PAPER TuD2-1, 159-161 (2000).

<sup>1</sup> C.J Hooker, E.J Divall, W.J Lester, K. Moutzouris, C.J Reason, I.N Ross. *A low cost adaptive optical system for Laser wavefront control*. 2nd International Workshop on Adaptive Optics for Industry and Medicine; Durham; UK; 12 July 1999 through 16 July 1999. [ADAPTIVE OPTICS FOR INDUSTRY AND MEDICINE](#), 3-7 (1999).

#### CHAPTERS IN COLLECTIVE VOLUMES

<sup>2</sup> F. Adler, A. Sell, F. Sotier, D. Träutlein, K. Moutzouris, A. Leitenstorfer. *Widely tunable femtosecond Er: fiber lasers and applications*. In: [ENCYCLOPEDIA OF LASER RESEARCH](#), EDITED BY: J.R McDONALD, NOVA SCIENCE PUB. INC., 489-516 (2012).

<sup>1</sup> K. Moutzouris, F. Adler, F. Sotier, D. Träutlein, A. Sell, E. May, A. Leitenstorfer. *Highly efficient nonlinear frequency conversion schemes for compact femtosecond Er: fiber lasers: from the near ultraviolet through the entire visible into the near infrared*. In: [PROGRESS IN NONLINEAR OPTICS RESEARCH](#), EDITED BY: M. TAKAHASHI & H. GOTO, NOVA SCIENCE PUB. INC., 85-114 (2008).

#### THESES & MONOGRAPHS

<sup>1</sup> K. Moutzouris. *Nonlinear frequency conversion in isotropic semiconductor waveguides*. [PHD THESIS, ST ANDREWS RESEARCH REPOSITORY](#), UNIVERSITY OF ST ANDREWS, 1-180 (2003).

#### TECHNICAL REPORTS

<sup>1</sup> C.J Hooker, E.J Divall, W.J Lester, K. Moutzouris, C.J Reason, I.N Ross. *A closed-loop adaptive optical system for Laser wavefront control*. [CENTRAL LASER FACILITY-RUTHERFORD APPLETON LABORATORY ANNUAL REPORT 98/99](#), 199 (1999).

#### PRESENTATIONS AT CONFERENCES WITHOUT PROCEEDINGS

<sup>16</sup> P. Giannios, K.G Toutouzas, M. Matiatou, K. Stasinou, M.M Konstadoulakis, G.C Zografos, K. Moutzouris. *Visible to near infrared refractive properties of freshly-excised human-liver tissues: Marking hepatic malignancies*. 30th Panhellenic Congress of Surgery & International Surgical Forum 2016; Thessaloniki; Greece; 9 November 2016 through 12 November 2016.

<sup>15</sup> K. Toutouzas, K. Moutzouris, M. Matiatou, G.C Zografos, P. Giannios. *Refractive index as a potential marker for hepatic malignancies*. 27th International Conference of the Society for Medical Innovation and Technology, SMIT 2015; Brno; Czech Republic; 10 September 2015 through 12 September 2015.

<sup>14</sup> P. Giannios, K. Moutzouris, M. Matiatou, G. Georgiou, G.C Zografos, K. Toutouzas. *Refractive index as a novel tumor marker*. 29th Panhellenic Congress of Surgery & International Surgical Forum 2014; Athens; Greece; 12 November 2014 through 15 November 2014.

<sup>13</sup> D. Triantis, I. Stavrakas, G. Hloupis, K. Moutzouris, P. Photopoulos. *Study of the influence of the filler concentration on electrical energy storage in ZnO or TiO<sub>2</sub>/Epoxy resin composites*. European Materials Research Society Spring Meeting, EMRC 13; Strasburg; France; 27 May 2013 through 31 May 2013.

<sup>12</sup> D. Triantis, I. Stavrakas, K. Moutzouris, T.G Malliaros, G.C Psarras, A. Kanapitsas, C. Tsonos. *Influence of the TiO<sub>2</sub> filler concentration in polymer matrices on the energy storage using Isothermal Depolarization Currents*. International Congress on Materials and Renewable Energy, MRE 13; Athens; Greece; 1 July 2013 through 3 July 2013.

<sup>11</sup> V. Bimpikas, M. Bardanis, N. Kokras, G. Hloupis, C. Dalla, I. Stavrakas, K. Moutzouris, D. Triantis. *Low cost experimental system for the recording of home cage activity of laboratory rats*. 10th International Conference on Nanosciences & Nanotechnologies, NN13; Thessaloniki; Greece; 9 July 2013 through 12 July 2013.

- <sup>10</sup> A.C. Erny, K. Moutzouris, J. Biegert, U. Keller, D. Kühlke, F. Adler, A. Leitenstorfer. *Femtosecond mid-infrared difference-frequency-generation tunable between 3.2  $\mu\text{m}$  and 4.8  $\mu\text{m}$  from a compact fiber source*. Swiss Physical Society Annual Meeting, SPS 2008; Geneva; Switzerland; 26 March 2008 through 27 March 2008.
- <sup>9</sup> O. Kokabee, A. Esteban Martin, K. Moutzouris, M. Ebrahim-Zadeh. *Repetition-rate-tunable multi-GHz femtosecond optical parametric oscillator*. NATO Advanced Study Institute, Laser control and monitoring in new materials, biomedicine, environment, security and defense; Ottawa; Canada; 24 November 2008 through 5 December 2008.
- <sup>8</sup> A. Leitenstorfer, F. Adler, E. Feuerbacher, K. Moutzouris, A. Sell, D. Träutlein, E. May. *Broadband femtosecond fiber lasers and applications: From bioimaging via precision metrology to ultrafast single photonics*. 3rd International Symposium on Ultrafast Photonic Technologies, ISUPT 2007; Cambridge, MA; USA; 20 August 2007 through 21 August 2007.
- <sup>7</sup> A. Leitenstorfer, F. Adler, K. Moutzouris, A. Sell. *Ultrabroadband femtosecond fiber systems and applications*. 36th Winter Colloquium on the Physics of Quantum Electronics, PQE XXXVI; Utah; USA; 2 January 2006 through 2 January 2006.
- <sup>6</sup> F. Adler, H. Schnatz, B. Lipphardt, G. Grosche, K. Moutzouris, A. Leitenstorfer. *Er:Faserlaser-system für höchstpräzise langzeitmessungen optischer frequenzen*. 69th Annual meeting of the German Physical Society (DPG); Berlin; Germany; 4 March 2005 through 9 March 2005.
- <sup>5</sup> F. Adler, K. Moutzouris, F. Sotier, A. Sell, D. Träutlein, A. Leitenstorfer. *Femtosecond Er:Fiber lasers: Compact sources for precision metrology and modern photonics*. International Fair and Conference on innovation and market entries with nano- and micro-technologies, NanoEurope 2005; St. Gallen; Switzerland; 13 September 2005 through 15 September 2005.
- <sup>4</sup> S. Venugopal Rao, K. Moutzouris, M. Ebrahimzadeh, A. De Rossi, M. Calligaro, V. Ortiz, G. Ginitz, V. Berger. *Measurements of optical loss in GaAs/Al<sub>2</sub>O<sub>3</sub> nonlinear waveguides in the infrared using femtosecond scattering technique: The role of two-photon absorption*. 56th Scottish Universities Summer School in Physics on Ultrafast Photonics, SUSSP 2002; St. Andrews; UK; 1 September 2002 through 14 September 2002.
- <sup>3</sup> K. Moutzouris, S. Venugopal Rao, M. Ebrahimzadeh, A. De Rossi, M. Calligaro, V. Ortiz, G. Ginitz, V. Berger. *Measurements of optical loss in GaAs/Al<sub>2</sub>O<sub>3</sub> nonlinear waveguides in the infrared using femtosecond scattering technique*. IEEE Lasers and Electro-Optics Society, Schotish Chapter Meeting; Heriot-Watt; Edinburgh; Scotland; UK; 1 May 2002.
- <sup>2</sup> S. Venugopal Rao, K. Moutzouris, C.T.A Brown, M. Ebrahimzadeh, A. De Rossi, V. Berger, M. Calligaro, V. Ortiz. *Efficient second harmonic generation in GaAs/AlGaAs waveguides using birefringent phase-matching*. 15th Biennial Meeting of the Institute of Physics: Quantum Electronics & Photonics group, QEP-15; Glasgow; Scotland; UK; 3 September 2001 through 6 September 2001.
- <sup>1</sup> D.C Hutchings, A.S Helmy, T.C Kleckner, K. Zeaiter, J.H Marsh, J.M Arnold, J.S Aitchison, C.T.A Brown, K. Moutzouris, M. Ebrahimzadeh. *Quasi-phase-matching of optical parametric processes in semiconductor waveguides*. IEEE Lasers and Electro-Optics Society, Schotish Chapter Meeting; Edinburgh; Scotland; UK; 3 October 2000.