

CURRICULUM VITAE

Stavros Pissadakis

Contact address: *Institute of Electronic Structure and Laser (IESL),
Foundation for Research and Technology – Hellas (FORTH),
P.O. Box 1527, Heraklion 71 110, Crete, GREECE*

E-mail: pissas@iesl.forth.gr

PERSONAL DATA:
Birth: 1972

➤ EDUCATION

- Jan. 1996 – Jul. 2000: Department of Electronics and Computer Science -
Optoelectronics Research Centre (ORC),
University of Southampton, UK
-Ph.D.-

Thesis Title: *“Bragg Gratings in Optical Waveguides, Glasses, and Thin
Films using Excimer Laser Radiation”*

- Sept. 1989 – Jul. 1994: Department of Physics,
University of Crete, Greece
*-Four years Physics degree (Ptyhion)-
Grade: 6.94/10*

Specialisation: «Lasers and Applications»

➤ EMPLOYMENT HISTORY

- Jun. 2003- Institute of Electronic Structure and Laser, Foundation for
Research and Technology – Hellas, Heraklion, Greece
Principal Researcher (Reader level)

*Activity Leader:
Photonic Materials and Devices-Laboratory
<http://www.iesl.forth.gr/users/pmdl/>*

- Sept. 2005-Jan. 2006
• Sept. 2006-Jan. 2007
Visiting Assistant Professor

Course: Theory and Devices of Optical Waveguides

- Jan. 2003 – June 2003 Institute of Electronic Structure and Laser, Foundation for
Research and Technology – Hellas, Heraklion, Greece
Associate Researcher

- Feb. 2002 – Oct. 2002: Department of Computer and Electronic Engineering,
Technical University of Crete, Chania, Greece
Visiting Lecturer

Course: Optoelectronics

- Mar. 2001 – Jul. 2002: Military Service
Greek Army, Artillery Division

- Jun. 2000 – Dec. 2000: Optoelectronics Research Centre (ORC), University of Southampton, UK
Research Fellow
- Jan. 1995 – Jan. 1996: Institute of Electronic Structure and Laser (IESL), Foundation for Research and Technology-Hellas (FORTH), Heraklion, Greece
Research Assistant
(supported by a 12-months studentship for graduate specialisation in “Optoelectronics”)

➤ **PARTICIPATION AND COORDINATION OF NATIONAL AND INTERNATIONAL RESEARCH PROJECTS**

- Nov. 2013-: IESL-FORTH, Heraklion, Greece

Scientific contributor in the EU funded Integrated Project with title “Access Center to Photonics Innovation Solutions and Technology Support” (ACTPHAST), nominal budget 217KEuro, 48 months duration.

- Jul. 2013-Dec. 2015: IESL-FORTH, Heraklion, Greece

Scientific contributor in the GSRT funded project with title «ΑΝΑΠΤΥΞΙΑΚΕΣ ΠΡΟΤΑΣΕΙΣ ΕΡΕΥΝΗΤΙΚΩΝ ΦΟΡΕΩΝ- ΚΡΗΠΙΣ» (Proposals for the Development of Research Institutions), budget 179 kEuro, 16 months duration.

- Sept. 2011-: IESL-FORTH, Heraklion, Greece

Scientific coordinator in the EU funded Coordination Action project with title "Action to Support Photonic Innovation Clusters in Europe" (ASPICE), budget 76 kEuro, 36 months duration.

- Nov. 2010-: IESL-FORTH, Heraklion, Greece

National Delegate in the ESF founded COST project TD1001 with title "Novel and Reliable Optical Fibre Sensor Systems for Future Security and Safety Applications" (OFSeSa)

- Nov. 2009-: IESL-FORTH, Heraklion, Greece

Scientific coordinator in the EU funded CAPACITY project "Intelligent Adaptable Surface with Optical Fiber Sensing for Pressure-Tension Relief", budget 430 kEuro, 30 months duration.

- Dec. 2006-Mar. 2010: IESL-FORTH, Heraklion, Greece

National delegate in the ESF founded COST project 299 with title “Optical Fibres for New Challenges Facing the Information Society” (FIDES)

- Jan. 2006-Jun. 2008: IESL-FORTH, Heraklion, Greece

Scientific coordinator in the EU funded Coordination Action project "European Network of Optical Clusters - ENOC", budget 134 kEuro, 30 months duration.

- Jun. 2005-Jun. 2007: IESL-FORTH, Heraklion, Greece

Scientific coordinator in the EU funded INTERREG project "Réseau Optique Méditerranée - ROM", budget 217 kEuro, 30 months duration.

- Oct. 2003-Dec. 2007: IESL-FORTH, Heraklion, Greece

National delegate in the ESF founded COST project P11 with title “Physics of linear, non-linear and active photonic crystals”

- Oct. 2002 and Mar. 2001: Ultraviolet Laser Facility (ULF), IESL-FORTH, Heraklion, Greece

Personal research in the short-term EU funded project for the “Patterning of photosensitive and relief gratings in Ag⁺ ion-exchanged waveguides in phosphate glasses and Ta₂O₅ overlaid waveguides”

- Aug. 2000 – Dec. 2000: ORC-University of Southampton, UK

Personal research in an Intel-USA sponsored project for the development of “Optical Waveguide Amplifiers and Lasers in Ion-Exchanged Phosphate Glasses”

- Jun. 2000 – Sept. 2000: ORC-University of Southampton, UK

Joint research with collaborators from the Physics Department and the Southampton Oceanography Centre on the Paul Instrument Fund project “Pulsed Laser Photoablation Microscope”

- Mar. 1996 – Dec. 1997: ORC-University of Southampton, UK

Joint research in the European Project ACTS 028 “Towards Broadband Access Systems for CATV Optical Network - TOBASCO”, for the development of integrated optical gain-flattening filters embedded on optical amplifiers

- Jan. 1995 – Jan. 1996: IESL-FORTH, Heraklion, Greece

Personal research in the Greek Ministry for Research and Technology Project GSRT EPET II “National Optoelectronic Vision Sensor Systems”, for the development of the optical and scanning modules of an infrared night vision system for the Greek Army

- Sep. 1992 – Jul. 1994: IESL-FORTH, Heraklion, Greece

Participation in the European Project CEC ESPRIT 6863 “Parallel Optical Processors and Memories - POPAM”, for the patterning of computer generated holograms on a variety of materials using excimer laser micromachining

➤ ACADEMIC ACTIVITIES

- Deputy Stakeholder, *Photonics21 Platform*
- President and Executive Board Member: *Greek National Platform for Photonics*
- Member of the Advisory Board: *Journal of Optoelectronics and Advanced Materials*
- Guest Co-Editor
 - *Laser Chemistry, Special Issue on “Chemical and Physical Changes Induced in Optical Materials under High-Intensity Laser Irradiation”*
 - *Photonics and Nanostructures - Fundamentals and Applications*
 - *Materials, MDPI, Special Issue on “New Materials and Processing Methods for Microstructured Optical Fibres”*
- Co-Editor: *AIP Conference Proceedings Volume 1288, International Commission for Optics Topical Meeting on “Emerging Trends And Novel Materials In Photonics”*
- Conference co-Chair: *ICO Topical Meeting on “Emerging Trends and Novel Materials in Photonics”, Oct. 2009, Delphi, Greece*
- Member of Program/Technical Organising Committee:
 - *1st International Conference on Optical Complex Systems, Marseille, October 2005*

- SPIE, *Photonics Europe, Brussels 2010*
 - IEEE, *Biophotonics Parma 2011*
 - EOS, PSDM, *Tunis 2012*
 - OSA, BGPP, *Colorado, 2012*
 - OSA, WSOF, *Sigtuna, 2013*
 - *3rd Mediterranean Photonics Conference, Trani, 2014*
- **Member of Local Organising Committee:** *1st International Symposium on Transparent Conducting Oxides, Heraklion, October 2006*
- **Conference Session Chairing**
 - *4th LAMP, Kyoto, Japan, May 2006*
 - **Photonics Europe, Strasbourg, France, April 2008**
 - **Photonics Europe, Brussels, Belgium, April 2010**
 - **IEEE Biophotonics Parma, Parma, Italy June 2011**
 - **CLEO Europe, Munich, Germany, May 2013**
 - **Spatio-Temporal Complexity in Optical Fibers, Como, Italy, September 2013**
- **Organisation of Meetings/Short-courses/Workshops**
 - *1st Short-course "Advanced Laser Processing in Photonics: State-of-the-art and Prospects", October 2006*
- **Reviewing activities**
 - **Journals:** *Applied Physics Letters, Optics Letters, Optics Express, Applied Optics, Applied Physics A, IEEE Photonic Technology Letters, Journal of the Optical Society of America B, Thin Solid Films, Applied Surface Science, Electronics Letters, Photonics and Nanostructures, Glass Science and Technology, Nanotechnology, Sensors, Laser Chemistry, Journal of Sensors, Journal of Physics D, Medical Physics, Optical Materials, Optical Engineering, Optics & Laser Technology, Measurement Science and Technology, European Journal of Physics D, Optics Communications, International Journal of Applied Glass Science, IEEE Photonics, Review of Scientific Instruments*
 - **Publishers:** *CRC-Press*
- **Expert Reviewer/Evaluator**
 - **Organisations:** *NSER-Canada (2008, 2011 and 2013), FCT I.P. - Fundação para a Ciência e Tecnologia (2012), Technology Foundation STW, The Netherlands (2013)*
 - **Projects:** *EU ERA.NET (2011), EURASIA (2013)*
- **Seminars and Colloquia**
 - **Fibre Sensors Group, Heriot Watt University, UK, January 2003**
 - **EPFL, Switzerland, July 2003**
 - **IOM, University of Leipzig, Germany, September 2005**
 - **Departamento de Física Aplicada, University of Valencia, Spain, November 2005**
 - **Summer School, Physics Department, University of Crete, July 2006**
 - **Shortcourse "Advanced Laser Processing in Photonics: State of the Art and Prospects" IESL, FORTH, October 2006**
 - **Department of Electrical and Computer Engineering, University of Toronto, September 2007**
 - **Department of Electronic Engineering & Applied Physics, Aston University, September 2007**
 - **Department of Electronics, Technical School of Crete, July 2008**
 - **Concertation meeting on Photonics Enabled Applications, Athens, Sept 2009**
 - **IIT, Lecce, May 2010**
 - **Dipartimento di Ingegneria dell'Informazione, Univ. Parma, July 2010**
 - **Dublin Institute of Technology, September 2011**
 - **Fast-Dot Workshop/School, Heraklion, September 2011**
 - **CEIT, San Sebastian, Spain, July 2013**



COLLABORATIONS

- Recently initiated
 - *Kiriama Ltd, Australia*
- Active

- *Leibniz-Institute for Surface Modification, Leipzig, Germany*
- *Institute of Photonic Technology Jena, Jena, Germany*
- *Dipartimento di Ingegneria dell'Informazione, Università degli Studi di Parma, Italy*
- *Acreo AB, Stockholm, Sweden*
- *Optoelectronics Research Centre, University of Southampton, UK*
- *Dr N. Pleros, Department of Informatics, AUTH, Greece*
- *Dr. A. Lappas, FUN, FORTH-IESL*
- *Dr. M. Farsari, FORTH-IESL*
- *Prof. D. Anglos, FORTH-IESL, Department of Chemistry, UoC*
- Past
 - *Electronic and Communications Engineering, Dublin Institute of Technology, Ireland*
 - *Departamento de Física Aplicada, Universidad de Valencia, Valencia, Spain*
 - *Dr. U. Jonas, Bio-organic Materials Chemistry, FORTH-IESL*
 - *Lichttechnisches Institut, Universität Karlsruhe, Karlsruhe, Germany*
 - *Department of Electronics, Carleton University, Ottawa, Canada*
 - *Prof. N.A.Vainos, NHRF, Athens, Greece*

➤ SUPERVISING ACTIVITIES

- *Post-docs*
 - K.Kosma, G.Konidakis, G.Zito, P.Childs, A.Rahman, J.Vanda, G.Tsibidis
- *PbD students*
 - V. Melissinaki (started on Jan.2012), M.Sozzi (visiting 12 months), A.Candiani (visiting 18 months), S.Torres (visiting 6 months)
- *M.s.c. students*
 - S.Timotheatos, I.Tagoudi, C.Spitieri, I.Michelekaki, M.Livitziis, A.Candiani, G.Violakis, C.Pappas, E.Vagiartakis,
- *Undergraduate students, summer-practice/ diplomas*
 - W.Deibel, G.Pahis, M.Klontzas, T. Bournelis

➤ RESEARCH INTERESTS

- Study of photosensitivity and surface-, volume-damage processes in optical materials under high intensity laser irradiation.
- Fabrication of complex 1-D periodic structures in waveguide and fibre components, employing variety of inscription methods. Exploitation of UV laser radiation for high-resolution patterning of periodic structures in optical materials and integrated optical devices.
- Development of optical waveguide and fibre devices for optical communications and sensing applications. Investigation of novel optical designs, materials and waveguide fabrication methods, for realisation of those devices. Implementation of tuneability capabilities for dynamic performance adjustment in the above optical waveguide and fibre devices.
- Photonic Crystal Fibre and Microstructured Optical Fibre sensing, actuating and probing devices. Development of in-fibre devices exhibiting new functionalities, utilising disruptive approaches and materials implementations.
- Investigation of new optical materials and configurations for the development of high-efficiency, multi-dimensional periodic structures scattering in the near-IR and visible bands. Development of multi-beam interference methods for efficient recording of complex 2- and 3-dimensional periodic structures in “soft” (polymeric) and “hard” (oxides, glasses, crystals) materials of sub-micron resolution.

➤ PUBLICATIONS

• BOOK CHAPTERS

1. “Laser processing of optical fibres: new photosensitivity findings, refractive index engineering and surface structuring,” in Laser growth and processing of photonic devices, Editor N.A.Vainos, Woodhead Publishing Ltd (2012)
2. “Fiber Optic–based Pressure Sensing Surface for Skin Health Management in Prosthetic and Rehabilitation Interventions” in Biomedical Engineering, Editor R.Hudak, InTech Press (2012)

• JOURNAL PUBLICATIONS

1. N.A.Vainos, S.Mailis, S.Pissadakis, L.Boutsikaris, P.J.M.Parmiter, P.Dainty, and T.J.Hall, Excimer laser use for microetching computer-generated holographic structures, *Appl. Opt.* **35**, pp. 6304-6319 (1996)
2. S.Pissadakis, S.Mailis, L.Reekie, J.S.Wilkinson, R.W.Eason, N.A.Vainos, K.Moschovis, G.Kiriakidis, Permanent holographic recording in indium oxide thin films using 193nm excimer laser radiation, *Appl. Phys. A* **69**, pp.333-336 (1999)
3. S.Pissadakis, L.Reekie, M.Hempstead, M.N.Zervas, J.S.Wilkinson, Ablated gratings on borosilicate glass by 193nm excimer laser radiation, *Appl. Phys. A* **69**, pp. S739-S741 (1999)
4. S.Mailis, L.Reekie, S.Pissadakis, S.J.Barrington, R.W.Eason, N.A.Vainos, C.Grivas, Large photo-induced refractive index changes in pulsed laser deposited lead germanate glass waveguides with controllable refractive index sign change, *Appl. Phys. A* **69**, pp. S671-S674 (1999)
5. S.Pissadakis, L.Reekie, M.Hempstead, M.N.Zervas, J.S.Wilkinson, Relief gratings on Er/Yb-doped borosilicate glasses and waveguides by excimer laser ablation, *Appl. Surf. Sc.* **153**, pp. 200-210 (2000)
6. S.Pissadakis, L.Reekie, M.N.Zervas, J.S.Wilkinson, G.Kiriakidis, Gratings in indium oxide film overlayers on ion-exchanged waveguides by excimer laser micromachining, *Appl. Phys. Lett.* **78**, pp. 694-696 (2001)
7. S.Pissadakis, M.N.Zervas, D.A.Sager, J.S.Wilkinson, Superstrate index control of waveguide grating reflectivity, *Opt. Lett.* **27**, pp. 327-329 (2002)
8. S.Pissadakis, L.Reekie, M.N.Zervas, J.S.Wilkinson, Sub-micron period relief gratings in InO_x thin films and waveguides, patterned using 248nm excimer laser ablation, *J. Appl. Phys.* **95**, pp.1634-1641 (2004)
9. S.Pissadakis, A.Ikiades, C.Y.Tai, N.P.Sessions, J.S.Wilkinson, Sub-micron period grating structures in Ta₂O₅ thin oxide films patterned using UV laser post-exposure chemically assisted selective etching, *Thin Solid Films* **453-454C**, pp. 458-461 (2004)
10. S.Pissadakis, A.Ikiades, P.Hua, A.K.Sheridan, J.S.Wilkinson, Photosensitivity of ion-exchanged Er-doped phosphate glasses using 248nm excimer laser radiation, *Opt. Express* **12**, pp. 3131-3136 (2004)
11. S.Pissadakis, M.N.Zervas, L.Reekie, J.S.Wilkinson, High reflectivity Bragg gratings fabricated by 248nm excimer laser holographic ablation in thin Ta₂O₅ films overlaid on glass waveguides, *Appl. Phys. A* **79**, pp. 1093-1096 (2004)
12. S.Pissadakis, M.Konstantaki, Photosensitivity of Ge-doped silica fibres under 213nm, picosecond Nd:YAG irradiation, *Opt. Express* **13**, pp. 2605-2610 (2005)
13. S.Pissadakis, L.Reekie, An elliptical Talbot interferometer for fiber Bragg grating fabrication, *Rev. Sci. Instr.* **76**, pp. 066101-066103 (2005)
14. S.Pissadakis, A.Ikiades, P.Hua, A.K.Sheridan, J.S.Wilkinson, Strong refractive index changes induced in Ag⁺ ion-exchanged Er-doped phosphate glass using 248nm excimer laser radiation, *Glass Technol.* **46**, pp. 76-79 (2005)
15. R.Böhme, S.Pissadakis, M.Ehrhardt, D.Ruthe and K.Zimmer, Ultra-short laser processing of transparent material at the interface to liquid, *J. Phys. D* **39**, pp. 1398–1404 (2006)
16. G.Violakis, M.Konstantaki, S.Pissadakis, Accelerated Recording of Negative Index Gratings in Ge-doped Optical Fibres Using 248nm, 500fs Laser Radiation, *IEEE Photonics Technol. Lett.* **18**, pp. 1182- 1184 (2006)

17. M.Konstantaki, S.Pissadakis, S.Pispas, N.Madamopoulos, N.Vainos, An optical fibre long-period grating humidity sensor utilizing PEO/CoCl₂ outcladding overlayers, *Applied Optics* **45**, pp. 4567-4571 (2006)
18. R.Böhme, S.Pissadakis, S.Ruthe, K.Zimmer, Laser backside etching of fused silica with ultrashort pulses, *Appl. Phys. A* **85**, pp. 75-78 (2006)
19. K.Zimmer, R.Böhme, S.Pissadakis, L.Hartwig, G.Reisse and B.Rauschenbach, Backside etching of fused silica with Nd:YAG laser, *Appl. Surc. Sc.* **253**, pp. 2796-2800 (2006)
20. C.Pappas, S.Pissadakis, Periodic Nanostructuring of Er/Yb-codoped IOG1 Phosphate Glass by using ultraviolet laser-assisted Selective Chemical Etching, *J. Appl. Phys.* **100**, pp. 114308 (2006)
21. S.Pissadakis, R.Böhme, K.Zimmer, Sub-micron periodic structuring of sapphire crystal by LIBWE, *Opt. Expr.* **15**, pp. 1428-1433 (2007)
22. M.Stroisch, T.Woggon, U.Lemmer, G.Bastian, G.Violakis, S.Pissadakis, Organic semiconductor distributed feedback laser fabricated by direct laser interference ablation, *Opt. Expr.* **15**, pp. 3968-3973 (2007)
23. S.Pissadakis, C.Pappas, Planar periodic structures fabricated in Er/Yb-codoped phosphate glass using multi-beam ultraviolet laser holography, *Opt. Expr.* **15**, pp. 4296-4303 (2007)
24. C.Pappas, S.Pissadakis, UV-assisted selective chemical etching of submicron period relief gratings in Er/Yb-codoped IOG1 phosphate glass, *J. Phys. Conf. Ser.* **59**, pp. 310-313 (2007)
25. R.Böhme, S.Pissadakis, M.Ehrhardt, T.Rudolph, D.Ruthe, and K.Zimmer, Backside etching of fused silica with ultra-short laser pulses at the interface to absorbing liquid, *J. Phys. Conf. Ser.* **59**, pp. 173-176 (2007)
26. M.Livitzis, S.Pissadakis, Bragg grating recording in low-defect optical fibers using ultraviolet femtosecond radiation and a double-phase mask interferometer, *Opt. Lett.* **33**, pp. 1449-1451 (2008)
27. S.Pissadakis and I.Michelakaki, Photosensitivity of the Er/Yb-codoped Schott IOG1 phosphate glass using 248nm, femtosecond and picosecond laser radiation, *Laser Chemistry Volume 2008*, Article ID 868767, 7 pages, doi:10.1155/2008/868767
28. S.Pissadakis, C.Pappas, Nanostructuring of photonic crystals in phosphate glass substrates using ultraviolet laser beams, *Int. J. Nanotechnol.* **6**, pp. 99-111 (2009) (*invited*)
29. S.Pissadakis, M.Livitzis, G.D.Tsibidis, J.Kobelke and K.Schuster, "Type IIA Grating Inscription in a Highly Non-Linear Microstructured Optical Fiber," *IEEE Photonics Technol. Lett.* **21**, pp. 227-229 (2009)
30. I.Michelakaki, S.Pissadakis, Atypical behaviour of the surface hardness and the elastic modulus of a phosphate glass matrix under 193nm laser irradiation, *Appl. Phys. A* **95**, pp. 453-456 (2009)
31. S.Pissadakis, M.Livitzis, G.D.Tsibidis, Investigations on the Bragg Grating Recording in Standard and All-silica Microstructured Optical Fibers Using Picosecond 248nm, Laser Radiation, *Journal of the European Optical Society – Rapid Publications – JEOS* **4**, pp. 09049 (2009)
32. A.Candiani, M.Konstantaki, W.Margulis, S.Pissadakis, A spectrally tunable microstructured optical fibre Bragg grating utilizing an infiltrated ferrofluid, *Opt. Express* **18**, pp. 24654-24660 (2010)
33. M.Konstantaki, A.Candiani, S.Pissadakis, Optical fibre long period grating spectral actuators utilizing ferrofluids as outcladding overlayers, *JEOS* **6**, pp. 11007 (2011)
34. M.Sozzi, A.Rahman, S.Pissadakis, Negative refractive index gratings recorded in a phosphate glass optical fibre using 248nm, 500fs laser radiation, *Opt. Mat. Express* **1**, pp. 121-127 (2011)
35. M.Konstantaki, S.Pissadakis, Optically tunable long period fiber gratings utilizing a photochromic out-cladding overlayer, *Opt. Fiber Technol.* **17**, pp. 168-170 (2011)
36. P.Childs, A.Candiani, S.Pissadakis, Optical fiber cladding ring magnetic field sensor, *IEEE Photonics Technol. Lett.* **23**, pp. 929 - 931 (2011)
37. A.Candiani, W.Margulis, C. Sterner, M.Konstantaki, and S.Pissadakis, Phase defected Bragg gratings realized in microstructured optical fibres utilizing infiltrated ferrofluids, *Opt. Lett.* **36**, pp. 2548-2550 (2011)

38. M.Malinauskas, A.Gaidukeviciute, V.Purlysa, A.Zukauskasa, I.Sakellari, E.Kambouraki, A.Candiani, S.Pissadakis, R.Gadonas, A.Piskarskas, C.Fotakis, M.Vamvakaki, and M.Farsari, Direct laser writing of microoptical structures using a Ge-containing hybrid material, *Metamaterials* **5**, pp. 135-140 (2011)
39. A.Candiani, M.Sozzi, A.Cucinotta, S.Selleri, R.Veneziano, R.Corradini, R.Marchelli, P.Childs, and S.Pissadakis, Optical fiber ring cavity sensor for label-free DNA detection, *IEEE Journal of Selected Topics in Quantum Electronics* **18**, pp. 1176-1183 (2012)
40. M.Konstantaki, A.Klini, D.Anglos, S.Pissadakis, An ethanol vapour detection probe based on a ZnO nanorod overlaid optical fibre long-period grating, *Optics Express* **20**, pp. 8472-8484 (2012)
41. I.Konidakis, G.Zito, and S.Pissadakis, Photosensitive, all-glass AgPO₃/silica photonic bandgap fiber, *Opt. Lett.* **37**, pp. 2499-2501 (2012)
42. M.Malinauskas, A.Žukauskasa, V.Purlysa, A.Gaidukevičiūtė, Z.Balevičius, A.Piskarskas, C.Fotakis, S.Pissadakis, D.Gray, R.Gadonas, M.Vamvakaki, M.Farsari, 3D microoptical elements formed in a photostructurable germanium silicate by direct laser writing, *Optics and Lasers in Engineering* **50**, pp. 1785–1788 (2012)
43. A.Candiani, W.Margulis, C. Sterner, M.Konstantaki, and S.Pissadakis, Optofluidic magnetometer developed in a microstructured optical fibre *Opt. Lett.* **37**, pp. 4467-4469 (2012)
44. M. Konstantaki, P.Childs, M.Sozzi, S.Pissadakis, Relief Bragg reflectors inscribed in solid core photonic crystal fibres, *Laser & Photonic Reviews* **7**, pp. 439–443 (2013)
45. K.Kosma, G.Zito, K.Schuster and S.Pissadakis, Whispering gallery mode microsphere resonator integrated inside a microstructured optical fiber, *Opt. Lett.* **38**, pp. 1301-1303 (2013)
46. A.Candiani, A.Bertucci, S.Giannetti, M.Konstantaki, W.Margulis, A.Manicardi, S.Pissadakis, A.Cucinotta, R.Corradini, and S.Selleri, Label-free DNA biosensor based on a Peptide Nucleic Acid-functionalized microstructured optical fiber Bragg grating, *J. Biomed. Opt.* **18**, 057004 (2013)
47. A.Candiani, M.Bravo, S.Pissadakis, M.Lopez-Amo, and S.Selleri, Magnetic field sensor based on backscattered intensity using ferrofluid, *IEEE Photonics Technol. Lett.* **25**, pp. 1481 – 1484 (2013)
48. G.Zito, S.Pissadakis, Holographic polymer-dispersed liquid crystal Bragg grating integrated inside a solid core photonic crystal fiber, *Opt. Lett.* **38**, pp. 3253-3256 (2013)
49. I.Konidakis, M.Androulidaki, G.Zito, S.Pissadakis, Growth of ZnO nanolayers inside the capillaries of photonic crystal fibres, *Thin Solid Films*, <http://dx.doi.org/10.1016/j.tsf.2013.06.058>
50. A.Candiani, A.Argyros, R.Lwin, S.G.Leon-Saval, S.Selleri, S.Pissadakis, A loss-based, magnetic field sensor implemented in a ferrofluid infiltrated microstructured polymer optical fiber (submitted to *Appl. Phys. Lett.*)
51. I.Konidakis, S.Pissadakis, Silver plasmon resonance effects in AgPO₃/silica photonic bandgap fiber (in preparation, to be submitted to *Opt. Express*)
52. A.Bertucci, A.Candiani, S.Giannetti, A.Manicardi, A.M.Cucinotta, G.Spotto, M.Konstantaki, S.Pissadakis, S.Selleri, R.Corradini, Detection of Unamplified Genomic DNA by a PNA-based Microstructured Optical Fiber (MOF) Bragg-Grating Optofluidic system (in preparation, to be submitted to *Angewandte Chemie*)

• CONFERENCE PUBLICATIONS

1. N.A.Vainos, S.Mailis, S.Pissadakis, P.Dainty and T.J.Hall, Excimer laser micromachining: Materials Reference Library & Microetching of Holographic Optical Interconnect Structures, *Proc. 4th Inter. Conf. On Holographic Systems, Comp. and Applications*, Neuchatel, Switzerland, Sept. 1993
2. N.A.Vainos, S.Mailis, S.Pissadakis, N.Madamopoulos, L.Boutsikaris, G.Patrinou and A.Petrakis, Excimer laser microetching: Microoptics & Computer generated holography, *2nd EPS School on Lasers and Applications*, Crete, Greece, May 1994
3. L.Boutsikaris, S.Mailis, N.Madamopoulos, S.Pissadakis, A.Petrakis, N.A.Vainos, P.Dainty, P.J.Parmeter and T.J.Hall, Computer generated holographic diffractive structures by direct excimer laser microetching, *Proc. Photonics West conference on Optoelectronic, Microphotonic & Laser Technologies*, San Jose, California, USA, pp.448-455, Feb.

1995

4. S.Pissadakis, S.Mailis, L.Reekie, R.W.Eason, N.A.Vainos, K.Moschovis, G.Kiriakidis, Photorefractivity of indium oxide (InO_x) using 193nm excimer laser radiation, Proc. CLEO/Europe '98 Glasgow, Scotland, CWF50, Sept. 1998
5. S.Pissadakis, L.Reekie, M.Hempstead, M.N.Zervas, J.S.Wilkinson, Ablated gratings on borosilicate glass by 193nm excimer laser radiation, 5th International Conference on Laser Ablation (COLA) Goettingen, Germany, 211, July 1999
6. S.Mailis, L.Reekie, S.Pissadakis, S.J.Barrington, R.W.Eason, Large photoinduced refractive index changes in pulsed laser deposited lead germanate glass waveguides with controllable refractive index sign change, 5th International Conference on Laser Ablation (COLA) Goettingen, Germany, 182, July 1999
7. S.Pissadakis, L.Reekie, M.N.Zervas, J.S.Wilkinson, K.Moschovis, G.Kiriakidis, High-index overlay gratings on K^+ -exchanged waveguides in BK-7 glass using excimer laser ablation, CLEO 2000 San Francisco, CWK38, May 2000
8. S.Pissadakis, L.Reekie, M.N.Zervas, J.S.Wilkinson, K.Moschovis, G.Kiriakidis, Indium oxide overlay gratings realised on glass waveguides using excimer laser ablation, EXMATEC (Expert Evaluation & Control of Compound Semiconductor Materials & Technologies) 2000 Crete, Greece, 86, May 2000
9. S.Pissadakis, L.Reekie, J.S.Wilkinson, G.Kiriakidis, Sub-micron period grating structures in Ta_2O_5 and InO_x thin oxide films fabricated using 248nm interferometric excimer laser ablation, CLEO/Europe 2000, Nice, France, CWF50, Sept 2000
10. S.Pissadakis, D.A.Sager, M.N.Zervas, J.S.Wilkinson, Superstrate index control of waveguide grating reflectivity, CLEO/Pacific Rim 2001, Chiba, Japan, ME2-2, p.100-101, July 2001
11. S.Pissadakis, A.Ikiades, C.Y.Tai, N.Sessions, J.S.Wilkinson, Sub-micron period grating structures in Ta_2O_5 thin oxide films patterned using UV laser post-exposure chemically assisted selective etching, E-MRS, Strasburg, France, H.IV-3, June 2003
12. S.Pissadakis, L.Reekie, M.N.Zervas, J.S.Wilkinson, High reflectivity Bragg gratings fabricated by 248nm excimer laser holographic ablation in thin Ta_2O_5 films overlaid on glass waveguides, 7th International Conference on Laser Ablation (COLA), Heraklion, Greece, Th-09, October 2003
13. S.Pissadakis, A.Ikiades, P.Hua, A.K.Sheridan, J.S.Wilkinson, Strong refractive index changes induced in Ag^+ ion-exchanged Er-doped phosphate glass using 248nm excimer laser radiation, 7th ESG Conference on Glass Science and Technology, Athens, Greece, O-PH5, April 2004
14. S.Pissadakis, M.N.Zervas, L.Reekie, J.S.Wilkinson, Bragg grating micromachining in optical waveguides using pulsed UV laser radiation, LPM2004, Nara, Japan, 17-5 #181, May 2004
15. M.Konstantaki, G.Papaioannou, S.Pissadakis, S.Pispas, N.Madamopoulos, N.A.Vainos, Optical fibre long-period grating humidity sensor utilizing PEO/ CoCl_2 outcladding overlayers, SPIE "Optics and Optoelectronics", Poland, vol. 5952, pp. 126-132, August 2005
16. R.Böhme, M.Ehrhardt, T.Rudolph, D.Ruthe, K.Zimmer, S.Pissadakis, Backside etching of fused silica with ultra-short laser pulses at the interface to absorbing liquid, 8th International Conference on Laser Ablation (COLA), Banff, Canada, TuPO17, September 2005
17. C.Pappas, S.Pissadakis, UV-assisted selective chemical etching of submicron period relief gratings in Er/Yb-codoped IOG-1 phosphate glass, 8th International Conference on Laser Ablation (COLA), Banff, Canada, MoPO79, September 2005
18. S.Pissadakis, M.Konstantaki, Type IIA Gratings Recorded in B-Ge Codoped Optical Fibre Using 213nm Nd:YAG radiation, 31st European Conference on Optical Communication (ECOC), Glasgow, UK We4.P.31, September 2005
19. C.Pappas, S.Pissadakis, Periodic Nanostructuring of Er/Yb-codoped IOG1 Phosphate Glass using UV-assisted Selective Chemical Etching, 3rd International Symposium on Nanomanufacturing (ISNM), Limassol, Cyprus, TMP4, November 2005
20. C.Pappas, S.Pissadakis, 2-D Grating Reflectors Fabricated in Er/Yb-codoped Phosphate Glass using Multi-beam UV-laser Holography and Selective Chemical Etching, Workshop "Advances in Nanophotonics", PHOREMOST project meeting, Heraklion, Greece, #18, October 2005

21. [S.Pissadakis](#), C. Pappas, Two-Dimensional Bragg Reflectors Fabricated in IOG-1 Phosphate Glass using Multi-beam UV-laser Interference, Photonics Europe, Strasbourg, France, 6182-21, April 2006
22. G.Violakis, M.Konstantaki, [S.Pissadakis](#), Inscription of Thermally Durable Type IIA Gratings in B-Ge doped Optical Fibres Using 248nm, 500fs Radiation, CLEO-USA, CTuY6, May 2006
23. D.Ruthe, K.Zimmer, T.Höche, J.Gerlach, B.Rauschenbach, D.Anglos, [S.Pissadakis](#), Non-ablating, low-fluence irradiation of multi-layer-stacks with ultrashort laser pulses, E-MRS, Nice, France H P2-18, May 2006
24. [S.Pissadakis](#), C. Pappas, Laser Induced Volume Damage Effects in IOG-1 Phosphate Glass and Selective Chemical Etching Processes: a new route to efficient glass nanostructuring, Otto Schott Workshop, Jena, Germany, 2006
25. I.Michelakaki, M.Livitzis, [S.Pissadakis](#), Photosensitivity of Er/Yb-codoped Schott IOG1 phosphate glass using 248nm, 500fs laser radiation, CLEO-Europe 2007, CJ-22-TUE
26. G.Violakis, M.Konstantaki, [S.Pissadakis](#), Comparative results on the recording of Type IIA gratings in B-Ge optical fibres using femtosecond and picosecond 248nm laser radiation, CLEO-Europe 2007, CE-12-TUE
27. G.Violakis, S.Georgiou, M.Konstantaki and [S.Pissadakis](#), A Comparative Study on the Type IIA Photosensitivity of a B/Ge Optical Fiber Using Ultraviolet, Femtosecond Radiation BGPP, JWA59, September 2007
28. [S.Pissadakis](#), M.Livitzis, G.Tsibidis, J.Kobelke and K.Schuster, Inscription of Type IIA Bragg Reflectors in a Highly Non-Linear Microstructured Optical Fiber Using Deep Ultraviolet Laser Radiation, SPIE Optics and Optoelectronics Europe 2009, 7357-19
29. A.Candiani, M.Konstantaki, [S.Pissadakis](#), Magnetic Tuning of Optical Fibre Long Period Gratings, CLEO-Europe 2009, CH4.2
30. A.Z.Subramanian, [S.Pissadakis](#), C.J.Oton, J.S.Wilkinson, Sub-micron Period Relief Grating Structures on Erbium Doped Ta₂O₅ waveguides Inscribed Using 213nm, 150ps Laser Radiation, CLEO-Europe 2009, CE4.6
31. [S.Pissadakis](#), G.D.Tsibidis and M.Livitzis, Photosensitivity and Grating Recording in All-silica Standard and Microstructured Optical Fibres using 248nm, fs and ps Laser Radiation, CLEO-Europe 2009 CM7.4
32. K.Zimmer, R.Böhme, M.Ehrhardt, B.Rauschenbach, [S.Pissadakis](#), Backside wet etching of submicron gratings in crystalline materials with UV laser pulses, 10th International Conference on Laser Ablation (COLA), Singapore, November 2009
33. K.Schuster, J.Kobelke, Y.Wang, A.Schwuchow, J.Kirchhof, H.Bartelt, [S.Pissadakis](#), Highly Photosensitive PCFs with Extremely Germanium Doped Core, ICO-Photonics Delphi, Greece, AIP Conference Proceedings, Volume 1288, pp. 47-51, 2010
34. M.Konstantaki, [S.Pissadakis](#), Optical fibre long period gratings with photochromic outcladding overlayers, ICO-Photonics Delphi, Greece, AIP Conference Proceedings, Volume 1288, pp. 55-58, 2010
35. A.Candiani, M.Konstantaki, S.Pissadakis, W.Margulis, Spectral tuning of a microstructured optical fibre Bragg grating by employing an infiltrated ferrofluidic actuator, Photonics Europe 2010, 7714-24
36. A.Candiani, M.Konstantaki, W.Margulis, [S.Pissadakis](#), Spectral tuning of a microstructured fibre Bragg grating utilizing an infiltrated ferrofluidic defect, BGPP 2010, CTuC2
37. M.Konstantaki, A.Klini, D.Anglos, [S.Pissadakis](#), A detection probe for organic vapors based on optical fibre long-period gratings and ZnO nanorod out-claddings, TCM 2010, 464
38. M.Sozzi, A. Cucinotta, S. Selleri, R.Corradini, M. Konstantaki, [S.Pissadakis](#), Label-free detection of DNA biomolecules with a long period grating-based fiber optic sensor, Photonics West 2011, 7894-20
39. A.Candiani, W.Margulis, C.Sterner, M.Konstantaki, [S.Pissadakis](#), Magneto-fluidic microstructured optical fibre Bragg gratings, EOSOF 2011, 4401
40. [S. Pissadakis](#), D. Anglos, A. Klini, M. Konstantaki, Long period optical fibre grating outcladding overlaid sensors: a versatile photonic platform for health and bio applications, IEEE Biophotonics 2011 Parma, We2.5
41. A.Candiani, W.Margulis, C.Sterner, M.Konstantaki, [S.Pissadakis](#), A vectorial magnetometer utilising a

microstructured optical fibre Bragg grating infiltrated by a ferrofluid, CLEO-Europe 2011, CH6.3

42. M.Sozzi, A. Rahman, S.Pissadakis, Demonstration of negative refractive index photosensitivity mechanism in a phosphate glass optical fibre using 248nm, 500fs laser radiation, CLEO-Europe 2011, CM3.1

43. M.Sozzi, A.Cucinotta, R.Corradini, R.Marchelli, M.Konstantaki, S.Pissadakis, S. Selleri, Label-free DNA detection with PNA modified long period fiber grating-based sensor, CLEO-Europe 2011, JSIV1.2

44. A.Klini, M.Konstantaki, D.Anglos, S.Pissadakis, An optical fiber long-period grating sensor for organic vapors utilizing a ZnO nanorod out-cladding, CLEO-Europe 2011, CK9.5

45. M.Malinauskas, A.Zukauskas, V.Purlys, E.Kambouraki, A.Gaidukeviciute, I.Sakellari, S.Pissadakis, R.Gadonas, M.Vamvakaki, and M.Farsari, Direct laser writing of microoptical structures using a germanium-containing hybrid photopolymer, CLEO-Europe 2011, CE8.3

46. A.Candiani, M.Konstantaki, S.Pissadakis, C.Sterner, W.Margulis, Microstructured optical fibre Bragg grating modulator employing an infiltrated ferrofluid, IEEE Biophotonics 2011 Parma, Th6.2

47. G.T.Kanellos, D.Tsiokos, N.Pleros, P.Childs, S.Pissadakis, G.Papaioannou, Enhanced durability FBG-based sensor pads for biomedical applications as human-machine interface surfaces, IEEE Biophotonics 2011 Parma, We2.3

48. A.Candiani, P.Childs, S.Pissadakis, M.Sozzi, E.Coscelli, F.Poli, A.Cucinotta, S.Selleri, R.Veneziano, R.Corradini, R.Marchelli, Double tilted fiber Bragg grating for label-free DNA detection, IEEE Biophotonics 2011 Parma, We2.4

49. M.Konstantaki, A.Klini, D.Anglos, S.Pissadakis, An ethanol vapor detection probe based on a ZnO nanorod overlaid optical fibre long-period grating, OFS-2011, Ottawa, 7753-267

50. A.Candiani, P.Childs, S.Pissadakis, M.Sozzi, E.Coscelli, F.Poli, A.Cucinotta, S.Selleri, R.Veneziano, R.Corradini, R.Marchelli, Label-free DNA sensor based on a Double Tilted Bragg Gratings, 4th International Workshop on Multi Analyte Biosensing Devices 2011, Athens, O10

51. A.Candiani, P.Childs, S.Pissadakis, M.Sozzi, E.Coscelli, F.Poli, A.Cucinotta, S.Selleri, R.Veneziano, R.Corradini, R.Marchelli, Label-free DNA biosensor based on double tilted fiber Bragg grating, Photonics West 2012, 8218-23

52. M.Malinauskas, A.Zukauskas, K.Tikuišis, V.Purlys, E.Kabouraki, S.Pissadakis, M.Farsari, R.Gadonas, Laser fabrication of micro-optical components of hybrid polymers, SPIE, Photonics West 2012, 8257-29

53. A.Candiani, G.Zito, A.Argyros, R.Lwin, S.L.Saval, S.Selleri, S.Pissadakis, A grating-less in fibre magnetometer realised in a polymer-MOF infiltrated using ferrofluid, SPIE, Photonics Europe 2012, 8426-13

54. I.Konidakis, G.Zito, S.Pissadakis, Photonic bandgap guiding into a composite AgPO₃-glass/silica microstructured optical fibre, SPIE, Photonics Europe 2012, 8426-06

55. A.Candiani, M.Konstantaki, W.Margulis, S.Pissadakis, : A shear-displacement sensor based on a ferrofluidic defected microstructured optical fibre Bragg grating, BGPP-OSA 2012, BTu2E.2.

56. M.Konstantaki, M.Sozzi, P.Childs, S.Pissadakis, Relief Bragg gratings inscribed inside microstructured optical fibres, BGPP-OSA 2012, BM3D.2

57. G.Zito, S.Pissadakis, Integrated Holographic Polymer-Dispersed Liquid Crystal Bragg Reflector into Photonic Crystal Fibre, BGPP-OSA 2012, BM3D.4

58. A.Candiani, G.Zito, A.Argyros, R.Lwin, S.L.Saval, S.Selleri, S.Pissadakis, A magnetic field sensor based on a ferrofluid infiltrated PMMA-microstructured optical fibre, SOF-OSA 2012, SW1E.3

59. I.Konidakis, G.Zito, S.Pissadakis, Photosensitive All-Glass AgPO₃/Silica Photonic Band-Gap Fibre, SOF-OSA 2012, SM3E.6

60. I.Konidakis, M.Androulidaki, G.Zito, S.Pissadakis, Growth of ZnO nanolayers inside the capillaries of photonic crystal fibres, TCM 2012, 396

61. A.Candiani, S.Giannetti, M.Sozzi, E.Coscelli, F.Poli, A.Cucinotta, A.Bertucci, R.Corradini, M.Konstantaki, W.Margulis, S.Pissadakis, S.Selleri, Microstructured optical fiber Bragg grating sensor for DNA detection, SPIE, Photonics West 2013, 8576-13

62. V.Melissinaki, M.Vamvakaki, M.Farsari, S.Pissadakis, Fabry-Perot Vapor Microsensor onto Fiber Endface Fabricated by Multiphoton Polymerization Technique, CLEO-Europe 2013, CH-3.2

63. K.Kosma, G.Zito, K.Schuster and S.Pissadakis, Microsphere resonator integrated inside a microstructured optical fiber, CLEO-Europe 2013, CK-4.4

64. A.Candiani, S.Giannetti, M.Sozzi, E.Coscelli, F.Poli, A.Cucinotta, A.Bertucci, R.Corradini, M.Konstantaki, W.Margulis, S.Pissadakis, S.Selleri, PNA-modified photonic crystal fibers for DNA detection, CLEO-Europe 2013 CLEO, CL-P.1

• INVITED CONTRIBUTIONS

1. S.Pissadakis, UV interferometric ablation and structural modification for the fabrication of sub-micron scale periodic structures in “hard” optical materials, ESPC2004, Wroclaw, Poland, July 2004

2. S.Pissadakis, M.Konstantaki, Grating inscription in optical fibres using 213nm, picosecond radiation: a new route in silicate glass photosensitivity, ICTON2005, Barcelona, Spain, July 2005

3. S.Pissadakis, Guided Wave Optical Sensors for Security Applications: Principles, State-of-the-Art and Prospects, Workshop on: "Security Applications of LIBS and Other Optical Technologies", 3rd Euro-Mediterranean Symposium on Laser-Induced Breakdown Spectroscopy, EMSLIBS 2005, Aachen, Germany

4. S.Pissadakis, Deep UV radiation induced photodissociative processes in transparent optical materials: index engineering and structural modification effects, 4th LAMP, Kyoto, Japan, May 2006

5. S.Pissadakis, M.Konstantaki, G.Violakis, Recording of Type IIA Gratings in B-Ge codoped Optical Fibres Using 248nm Femtosecond and Picosecond Laser Radiation, ICTON2006, Nottingham, UK, June 2006

6. G.Violakis, S.Pissadakis, Recording of Bragg gratings in all-silica microstructured fibres using deep ultraviolet laser radiation, ESPC2007, Rome, Italy, July 2007

7. S.Pissadakis, Target acquisition and recognition in the modern battlefield using laser radiation, 1st Conference Herakleitos, Athens, June 2007

8. S.Pissadakis, M.Livitziis, G.Violakis and M.Konstantaki, Inscription of Bragg reflectors in all-silica microstructured optical fibres using 248nm, picosecond and femtosecond laser radiation, SPIE Photonics Europe, Strasbourg, France, April 2008

9. S.Pissadakis, Bragg gratings in standard and microstructured all-silica fibres inscribed using ultra-fast ultraviolet radiation, ESPC2008, Athens, Greece, June 2008

10. S.Pissadakis, A.Candiani, M.Konstantaki, Magneto-optical long-period gratings, ICTON2009, Portugal 2009

11. S.Pissadakis, A.Candiani, M. Konstantaki, M. Livitziis, G. Tsibidis, J. Kobelke and K. Schuster, Bragg reflectors inscribed in micro structured optical fibres: inscription considerations and device development, MEDINANO 2, Athens 2009

12. S.Pissadakis, N.A.Vainos, M.Konstantaki, Thin Film Overlaid Long Period Fibre Grating Sensors: Examples and Prospects for Advanced Health Monitoring Applications, ITAB-2009, Cyprus 2009

13. S.Pissadakis, Bragg grating actuators in microstructured optical fibres utilising ferrofluids, COST 299 Closing Workshop, Romania 2010

14. A.Candiani, M.Konstantaki, W.Margulis, S.Pissadakis, Spectral tuning of microstructured optical fibre Bragg gratings utilizing ferrofluids, SWP 2010, Munich

15. A.Candiani, W.Margulis, C.Sterner, M.Konstantaki, S.Pissadakis, Sensing and actuating photonic devices

in magnetofluidic, microstructured optical fibre Bragg gratings, SPIE Optics and Optoelectronics Europe, Prague, 8073B-113, April 2011

16. A.Candiani, M.Konstantaki, W.Margulis, S.Pissadakis, A smart-skin shear sensor based on ferrofluid infiltrated Bragg grating in a microstructured optical fibre, SPIE Photonics Europe, Brussels, Belgium, April 2012, 8426-07

17. A.Candiani, S.Giannetti, A.Cucinotta, A.Bertucci, R.Corradini, M.Konstantaki, W.Margulis, S.Pissadakis, S.Selleri, DNA biosensors implemented on PNA-functionalized microstructured optical fibers Bragg gratings, SPIE Optics and Optoelectronics Europe, Prague, 8775-1, April 2013

18. S.Pissadakis, *et al*, Ultrafast laser structuring of optical fibres, Progress in Ultrafast Laser Modifications of Materials, Cargese, April 2013

19. I.Konidakis and S.Pissadakis, Electric field induced polarization effects in AgPO₃/silica photonic bandgap fiber, ICTON Cartagena, June 2013

20. A. Candiani, S. Giannetti, A. Cucinotta, A. Bertucci, A. Manicardi, M. Konstantaki, W. Margulis, S.Pissadakis, R. Corradini, S. Selleri, "Biophotonics photonic crystal fibers platform for nanoparticle-enhanced DNA," Biophotonics 2013, National Taiwan University, Taipei, Taiwan, July 17-19, 2013

21. S.Pissadakis, Plasmonic and Resonating Optical Operations inside MOFs and PCFs, Spatio-Temporal Complexity in Optical Fibers, Como, Italy, September 2013

22. K.Kosma, G.Zito, K.Schuster and S.Pissadakis, Microsphere resonators integrated inside microstructured optical fibers: studies and optimization, MEDINANO 6, Toulouse, France, October 2013

23. I.Konidakis, M.Konstantaki, and S.Pissadakis, Materials Growth and Processing in the capillaries of Photonic Crystal Fibres: towards the Lab-in-a-Fibre Protocol, OPTO, Photonics West, San Francisco, February 2014

24. K.Kosma, G.Zito, K.Schuster and S.Pissadakis, Whispering-gallery modes excitation in microspheres integrated inside microstructured optical fibers, LASE, Photonics West, San Francisco, February 2014

- **CONSULTATION REPORTS**

1. S.Pissadakis, *et al*, *Yearly Review for the sector of "Nanotechnology" for the year 2011*, SEV Hellenic Federation of Enterprises

- **OTHER PUBLICATIONS**

2. S.Pissadakis, *Fabrication, Analysis and Device Development using Proton Exchange Waveguides in LiNbO₃ crystals*, Ptyhion Thesis, Heraklion 1994

3. S.Pissadakis, C.Balas, *Introduction to Optoelectronics*, Lecture Notes, Technical University of Crete, Chania 2002

4. S.Pissadakis, *Theory and Devices of Optical Waveguides*, Lecture Notes, University of Crete, Heraklion 2005

- **HIGHLIGHTS/PRESENTATIONS IN BROAD SCIENTIFIC PRESS**

1. **Photorefractive and ablated gratings in InO_x thin films using excimer laser radiation**, ADVANCED COATINGS & SURFACE TECHNOLOGY ALERT, John Wiley & Sons' newsletter division, Technical Insights Alert C990197, 1131099, September 3rd 1999

2. **Lasers etch sub-micron structures into sapphire**, <http://optics.org/article/27379>

3. **Materials Processing: Picosecond UV lasers pave the way to new applications**
http://www.laserfocusworld.com/display_article/325457/12/none/none/Feat/Materials-Processing-Picosecond-UV-lasers-pave-the-way-to-new-application

4. **VerticalNews, Research News on Photonics/Nanotechnology**,
<http://www.verticalnews.com/newsletters/Nanotechnology-Business-Journal/2009-03-09/65488NBJ.html>

5. VerticalNews, Research News on Photonics, <http://physics.verticalnews.com/articles/1740634.html>
6. VerticalNews, Research News on Photonics, <http://www.verticalnews.com/article.php?articleID=1681937>
7. Topical meeting boosts optics in Greece, ICO Newsletter <http://www.ico-optics.org/pdfs/ICONewsletterApr2010.pdf>
8. SPIE-Newsroom, Magnetofluidic sensors and actuators based on microstructured optical fiber gratings <http://spie.org/x51580.xml?ArticleID=x51580>
9. MRS Bulletin, Magnetofluidics used for tuning optical fibers <http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=8354196>
10. Frost & Sullivan, Technical insight alerts, Ferrofluids Enable Enhanced Fiber-Based Sensors, August 26th 2011
11. International Innovation, Lighting the way, Issues 2, pp. 37-39 (2011) www.researchmedia.eu
12. Optics and Photonics News, OSA, Optics in 2011 Highlights, Magnetofluidically Tunable Microstructured Optical Fiber Grating Devices, December 2011 <http://www.osa-opn.org/OpenContent/Features/Diffraction-1.aspx>
13. National Documentation Centre-Greece, Νέοι φωτονικοί αισθητήρες στην ανίχνευση μαγνητικών πεδίων από το ΙΤΕ, December 2011, http://www.ekt.gr/content/display?ses_mode=rnd&ses_lang=el&prnbr=84330
14. Περιοδικό Καινοτομία, τεύχος 12/2011-02/2012 <http://kainotomia.ekt.gr/issue/2012/86/files/assets/basic-html/page11.html>
15. SPIE-Newsroom, Shear sensing smart-pads based on ferrofluid infiltrated microstructured optical fibers, <http://spie.org/x88699.xml?highlight=x2406&ArticleID=x88699>
16. Optics and Photonics News, OSA, Optics in 2012 Highlights, Relief Photonic Crystal Fiber Bragg Grating Reflectors, December 2012 http://www.osa-opn.org/home/articles/volume_23/december_2012/
17. New optical fibre technology for thermally ultra-durable optical fibre sensors, Περιοδικό Καινοτομία, Ιανουάριος 2013 <http://www.et-online.gr/default.asp?pid=19&la=1&arc=12&art=285&nwID=22>
18. Λιγότερα έλκη από τεχνητά μέλη, Εφημερίδα Καθημερινή, 27 Μαΐου 2013, http://trans.kathimerini.gr/4dcgi/_w_articles_qsite2_1_24/05/2013_500595
19. Optics and Photonics News, OSA, Optics in 2013 Highlights, Integrating microsphere resonators inside microstructured optical fibers, December 2013 http://www.osa-opn.org/home/articles/volume_24/december_2013/features/photonic_structures/#.UtAWevuMBnI

➤ PATENTS

1. N.A.Vainos, S.Mailis, S.Pissadakis, L.Boutsikaris and C.Fotakis, GR PATENT No. 1002163
2. N.A.Vainos, S.Mailis, S.Pissadakis, L.Boutsikaris and C.Fotakis, European Patent No. 966000044

Short CV

Dr Stavros Pissadakis was born in Chania, Greece, on 1972. He obtained his Ptychion degree in 1994 from the Physics Department of University of Crete, Greece and his Ph.D. degree in 2000 from Optoelectronics Research Centre (ORC), University of Southampton, UK. His Ph.D. studies were focused in the field of integrated optical devices with emphasis in the design and fabrication of grating structures in optical waveguides using excimer laser radiation. He has been employed as Research Assistant in the Foundation for Research and Technology-Hellas (FORTH), Institute of Electronic Structure and Laser (IESL), Greece (1995) and as Research Fellow in Optoelectronics Research Centre, University of Southampton, UK (2000). He has taught undergraduate and post-graduate courses and designed courses syllabus as Visiting Lecturer in the Department of Computer and Electronic Engineering, Technical University of Crete, Greece (2002); and Visiting Assistant Professor in the Physics Department, University of Crete (2005 and 2006). Since January 2003 he has joined FORTH-IESL as Associate Researcher, where later he was elected Researcher Grade D (July 2003), promoted to Researcher Grade C (October 2005). At December 2009, he was promoted to Principal Researcher (tenured Reader level). At year 2004, he established the [Photonic Materials and Devices Laboratory \(PMDL\)](#) in the premises of FORTH-IESL. He has been involved in several European, National and Industrial research Projects, while he has attracted and coordinated as a principal investigator a research budget of more than 1.27MEuros in total. His current scientific interests include design and fabrication of optical waveguide and standard fibre devices for switching and sensing applications, microstructured and photonic crystal fibre devices, optofluidics, laser assisted materials nano-processing and study of photosensitivity in optical fibres and materials using high intensity laser radiation. He has been heavily involved in the activities of the European Technological Platform Photonics21, participating at the elaboration of the first Strategic Research Agenda (SRA); being also a deputy stakeholder. Moreover, he has triggered the formation of a similar Thematic Technological Platform for Photonics in Greece (*Photonics^{GK}*), being the President of the Executive Board. He has been expert reviewer for European and International research Projects and several high impact journals, while he was an Organizing Co-chair of the ICO-Photonics Delphi International Conference on 2009, held at Delphi, Greece. Dr Pissadakis is an author/co-author of 49 publications in refereed journals and of more than 80 in international conferences, including several invited contributions. He is a member of OSA and SPIE.