

GEORGIOS KAKARANTZAS

Publications November 2013

A. DPhil THESIS

“Ion implanted waveguides in laser glasses” Department of Physics, University of Sussex, Brighton, UK (1994)

B. PATENTS

1. G. Kakarantzas, D. Marchese and A. Jha “New Rare Earth doped $\text{GeS}_x\text{-Ga}_2\text{S}_3$ - based glasses for 1.3 μm Fibre Amplifiers” *International Patent No.9514345/13-7-1995*.
2. G. Kakarantzas, T.A. Birks, T.E. Dimmick and P.St.J. Russell “Fabrication of miniature 2x2 fibre coupler” *International Patent PCT/GB/03206* filed on 17 Aug 2000.
3. W.J. Wadsworth, G. Kakarantzas, T.A. Birks and P.St.J. Russell “Improvements in and relating to optical fibres” *International Patent No. WO 03/058310* filed on 07 Jan 2003.

C. REFERRED JOURNAL PUBLICATIONS

1. “Losses in very Large Planar Waveguides”, G. Kakarantzas, E. Glavas and P. D. Townsend *Electronics Lett.* **25**, 102 (1989).
2. “Ion Implanted Optical Waveguides in KTaO_3 ”, J. Y. C. Wong, L. Zhang, G. Kakarantzas, P. D. Townsend, P. J. Chandler and L. A. Boatner *J. Appl. Phys.* **71**, 49 (1991).
3. “Very Low Loss Ion Implanted Waveguides in Lead Germanate Glass”, G. Kakarantzas, P. D. Townsend and J. Wang *Electronics Lett.* **29**, 489 (1993).
4. “1.9 μm Operation of a Tm: Lead Germanate Glass Waveguide Laser”, G. Kakarantzas, P. D. Townsend, D. P. Shepherd, D. J. Brink, J. Wang, A. C. Tropper, W. S. Brocklesby, D. C. Hanna and D. N. Payne *Opt. Lett.* **19**, 954 (1994).
5. “ GeS_x -based Chalcogenide Glasses”, A. Jha, P. Sapp and G. Kakarantzas *J. Adv. Sci. Technol.* **11**, 391 (1996).
6. “Spectroscopic and Thermal Properties of GeS_2 -based Chalcogenide Glasses”, D. Marchese, G. Kakarantzas, A. Jha, B. N. Samson and J. Wang *J. Modern Opt.* **43**, 963 (1996).
7. “ $^1\text{G}_4$ Lifetimes, Optical and Thermal Characteristics of Pr-doped GeS_2 -Chalcogenide Glasses”, D. Marchese, G. Kakarantzas and A. Jha *J. Non-Cryst. Sol.* **196**, 314 (1996).
8. “The Influence of Reactive Atmosphere Processing on the Crystallisation Kinetics of $\text{GaF}_3\text{-InF}_3$ based Glasses” A. Jha, B. E. Kinsman, E. R. Taylor and G. Kakarantzas *J. Non-Cryst. Sol.* **213 & 214**, 101 (1997).
9. “ CO_2 Laser Fabrication of Fused Fibre Couplers and Tapers”, T. E. Dimmick, G. Kakarantzas, T. A. Birks and P. St.J. Russell *Appl. Opt.* **38**, 6845 (1999).
10. “Direct Measurement of Optical Phase in the Near-Field” P.L. Phillips, J.C. Knight, J.M. Pottage, G. Kakarantzas and P.St.J. Russell, *Appl. Phys. Lett.* **76**, 6845 (2000).
11. “Phononic Stop Band in Optical Fibre Periodic Microstructures” A. Diez, G. Kakarantzas, T.A. Birks and P.St.J. Russell *Appl. Phys. Lett.* **76**, 3481 (2000).
12. “All fibre, Acousto-optic Tunable Notch Filters with Small Bandwidth-length Product” T. E. Dimmick, G. Kakarantzas, T. A. Birks and P. St.J. Russell *IEEE Photon. Technol. Lett.* **12**, 1210 (2000).

13. "High Strain-induced Wavelength Tunability in Tapered Fibre Acousto-optic filters" A. Diez, G. Kakarantzas, T.A. Birks and P.St.J. Russell *Electron. Lett.* **36**, 1187 (2000).
14. "Miniature all-fiber devices based on CO₂ laser microstructuring of tapered fibers" G. Kakarantzas, T.E. Dimmick, T. A. Birks and P. St.J. Russell *Opt. Lett.* **26**, 1137-39 (2001).
15. A. Diez, G. Kakarantzas, T.A. Birks and P.St.J. Russell "Strain induced phase-matching and tunability of acoustic gratings in fibres" *Appl. Phys. Lett.* **79**, 1390 (2001).
16. "1-D acoustic cavity in optical fibers using two acoustic Bragg gratings", A. Diez, G. Kakarantzas, T.A. Birks and P.St.J. Russell *IEEE Photon. Technol. Lett.* **13**, 975 (2001).
17. "Structural Long-Period Gratings in Photonic Crystal Fibres" G. Kakarantzas, T.A. Birks and P.St.J. Russell, *Opt. Lett.* **27**, 1013 (2002).
18. "Rocking Filter Formation in Non-Photosensitive Highly-Birefringent Photonic Crystal Fibers" G. Kakarantzas, A.Ortigosa-Blanch, T.A. Birks and P.St.J. Russell, *Opt. Lett.* **28**, 156 (2003).
19. "Low-loss deposition of Sol-gel-derived silica films on tapered fibers" G. Kakarantzas, S.G. Leon-Saval, T.A. Birks and P.St.J. Russell, *Opt. Lett.* **29**, 694 (2004).
20. "Modelling of a highly nonlinear chalcogenide dual-core photonic crystal fiber coupler" I. D. Chremmos, G. Kakarantzas, and N.K. Uzunoglu, *Opt. Comms.* **251**, 339-45 (2005).
21. "Splice-free interfacing of photonic crystal fibres" S. G. Leon-Saval, T. A. Birks, N. Y. Joly, A. K. George, W. J. Wadsworth, G.Kakarantzas and P. St.J. Russell *Opt. Lett.* **30**, 1629 (2005).
22. "Rigorous Analysis of the Coupling Between Two Nonparallel Optical Fibers" I. D. Chremmos, N.K. Uzunoglu and G. Kakarantzas, *J. Lightwave Techn.* **24**, 3779 (2006).
23. "Numerical study of guided modes in arrays of metallic nanowires" C. G. Poulton, M. K. Schmidt, G. J. Pearce, G. Kakarantzas and P. St. J. Russell, *Opt. Lett.* **32** 1647-9 (2007).
24. "Bending loss and thermo-optic effect of a hybrid PDMS/silica photonic crystal fiber," C. Markos, K. Vlachos and G. Kakarantzas, *Opt. Express* **18**, 24344 (2010).
25. "Guiding and thermal properties of a hybrid polymer-infused photonic crystal fiber" C. Markos, K. Vlachos and G. Kakarantzas, *Opt. Mat. Express* **2**, 929 (2012).
26. "Broadband guidance in a Hollow-Core Photonic Crystal Fiber with Polymer-Filled Cladding", C. Markos, G. Antonopoulos and G. Kakarantzas, *IEEE Photon. Technol. Lett.* **25**, 2003 (2013).

D. INVITED TALKS

1. G. Kakarantzas "Fabrication and Optical properties of Periodically Micro-tapered Fibre" *Mini-Symposium on Son et Lumiere*, Grasmere, Cumbria, 21-24 Aug 2000. Chairman of the Org. Committee: Prof. R. Loudon FRS
2. G. Kakarantzas "Acoustics in Optical Fibres: a harmonious collaboration of sound and light" *Spring Conference 2002: Past, Present and Future Acoustics*, Manchester UK, 25-27 March 2002.
3. G. Kakarantzas, T.A. Birks and P.St.J. Russell "Post-processing of photonic crystal fibres using a CO₂ laser beam: a step towards miniature compact fibre devices" *4th International Conference on Information, Communications & Signal Processing*, Singapore, 15-18 Dec 2003.

4. T.A. Birks, G. Kakarantzas, P.St.J. Russell "Photonic Crystal Fiber Devices" *Fiber-based Component Fabrication, Testing, and Connectorization*, Bruges, Belgium, 29 October 2002.
5. T. A. Birks, G. Kakarantzas and P. St.J. Russell, "All-fibre devices based on tapered fibres" *OFC 2004*, Paper ThK2, Los Angeles, CA, USA 22-27 Feb 2004.
6. G. Kakarantzas, C.G. Poulton and C. Riziotis "Thin metallic and dielectric films on silica nanofibres" *1st Mediterranean Conference on Nano-photonics MediNano-*, Istanbul, Turkey 6-7 Oct 2008.
7. G. Kakarantzas, C. Markos and K. Vlachos "Silica-Polymer Photonic Crystal Fibers" *3rd Mediterranean Conference on Nano-photonics MediNano-3*, , Belgrade, Serbia, 18-19 Oct 2010.
8. G. Kakarantzas, "Tunable Devices in PDMS/Silica Hybrid Photonic Crystal Fibers" *4th Mediterranean Conference on Nano-photonics MediNano-4*, Rome, Italy, 24-25 Oct 2011.

E. PUBLICATIONS IN INTERNATIONAL CONFERENCE PROCEEDINGS

1. "Ion Implanted Waveguides in Laser Glasses", in Modifications Induced by Irradiation in Glasses (ed. P. Mazzoldi), *E-MRS Symposium Proceedings Vol.29*, pp.97-102 (1991).
2. "Ion Implanted Glass Waveguides" G. Kakarantzas and P. D. Townsend, *Proc. 4th International Conference on Defects in Insulating Materials (ICDIM)*, p.102 (1992).
3. "Chemical Effects in Ion Implanted Glass Waveguides" *Proc. of the Conference on Advances in Amorphous State Chemistry*, Vol.1, pp. 79-83 (1993).
4. "A 1.9 μ m Thulium Doped Lead Germanate Glass Waveguide Laser", G. Kakarantzas, P. D. Townsend, D. P. Shepherd, D. J. Brink, D. C. Hanna, D. N. Payne, J. Wang and A. C. Tropper *Proc. 11th Conf. in Quantum Electronics*, Technical Digest Paper 1059, pp.77-8 (1993).
5. "Epitaxial Thin Films and Ion Implanted Waveguide Lasers", D. P. Shepherd, D. C. Hanna, J. K. Jones, A. C. Large, A. C. Tropper, G. Kakarantzas, P. J. Chandler, P. D. Townsend, L. Zhang, I. Chartier, B. Fernard and D. Pelenc *Proc. International Symposium on Optoelectronic Materials*, Paper SXV-6-93P (1993)
6. "The influence of reactive atmosphere processing on the crystallization kinetics of GaF₃/InF₃-based glasses", A. Jha, B.E. Kinsman, E.R. Taylor and G. Kakarantzas, *Proc. 10th International Symposium on Non-Oxide and New Optical Glasses (ISNOG)*, pp.109-12 (1996).
7. "Pr⁺³-doped GeS₂-Ga₂S₃-based chalcogenide glasses for 1.3 μ m fibre amplifiers" D. Marchese, G. Kakarantzas and A. Jha *IEEE Mediterranean Electrotechnical Conference-MELECON*, Vol. I-III, p. 1525 (1996).
8. "Fabrication of high performance fibre tapers and couplers using a CO₂ laser rig" G. Kakarantzas, T. E. Dimmick, T. A. Birks and P. St.J. Russell, *CLEO Pacific Rim* Seoul, S. Korea, Vol. 2, pp.127-8 (1999)
9. "Fused taper fibre microcoupler" G. Kakarantzas, T.E. Dimmick, T.A. Birks and P.St.J. Russell, *OFC 2000* Baltimore USA Vol. 1, pp-35-7 (2000).
10. "Narrow-band acousto-optic tunable filter fabricated from highly uniform tapered optical fiber" *OFC 2000* Baltimore USA, Vol. 4, pp.25-7 (2000).
11. "Transmission Filters based on Periodically Micro-tapered Fibre", G. Kakarantzas, R. Le Roux, T.A. Birks and P.St.J. Russell, *CLEO 2000* San Francisco USA, Vol.1, pp. 574-75 (2000).

12. "Whispering Gallery modes in Prolate Fibre Microcavities" T.A. Birks, R. Le Roux, G. Kakarantzas, and J.C. Knight, *CLEO 2000* San Francisco USA, Vol.1, pp. 608-9 (2000).
13. "Directional coupling in a twin core photonic crystal fiber using heat treatment" G. Kakarantzas, B.J. Mangan, T.A. Birks, J.C. Knight and P.St.J. Russell, *CLEO 2001* Baltimore, USA, Vol.1, pp.599-600 (2001).
14. "Photonic Crystal Fiber Devices" T.A. Birks, G. Kakarantzas, P.St.J. Russell, Proc. SPIE **4943**, pp. 142-51 (2003).
15. "Miniature Mach-Zehnder interferometer based on rocking filters in photonic crystal fiber" G. Kakarantzas, T.A. Birks and P.St.J. Russell *CLEO/QELS 2003* Baltimore USA, Vol.88, pp.452-53 (2003).
16. "All-fiber devices based on sol-gel coated tapered fibers" G. Kakarantzas, S.G. Leon-Saval, T.A. Birks and P.St.J. Russell *CLEO/QELS 2004*, San Francisco, CA, USA Vol.96A, pp. 1595-6 (2004).
17. "Splice-less interfacing of conventional fiber to photonic crystal fibers" S.G. Leon-Saval, G. Kakarantzas, T.A. Birks and P.St.J. Russell *CLEO/QELS 2004*, San Francisco, CA, USA Vol.2, pp.733-4 (2004).
18. "Rigorous Analysis of Scattering by a Spherical Particle Coupled to a Subwavelength-Diameter Wire Waveguide", I. Chremmos, N.K. Uzunoglu and G. Kakarantzas, *Mediterranean Microwaves Symposium 2005 (MMS'05)*, Athens, Greece, Vol.1, pp. 160-64, (2005).
19. "Guided Modes in Arrays of Metallic Nanowires", C. G. Poulton, M. K. Schmidt, G. J. Pearce, G. Kakarantzas and P. St. J. Russell *CLEO/QELS 2007* Vol. 1-5, pp. 903-04 (2007).
20. "Up-Tapering of Optical Fibers Using a Conventional Flame Tapering Rig", G. Kakarantzas, L. Prill-Sempere and P. St. J. Russell, *CLEO/QELS 2007*, Vol.1-5, pp. 1652-53 (2007).
21. "Thermo-optic effect of an index guiding photonic crystal fiber with elastomer inclusions", C. Markos, K. Vlachos, and G. Kakarantzas, Proc. SPIE 7753, 775340 (2011).
22. "Guiding and birefringent properties of a hybrid PDMS/silica photonic crystal fiber", C. Markos, K. Vlachos and G. Kakarantzas, Proc. SPIE 7914, 791427 (2011).
23. "Guiding and birefringent properties of a hybrid PDMS/silica photonic crystal fiber", C. Markos, K. Vlachos and G. Kakarantzas, Proc. SPIE 7914, 791427 (2011).
24. "Direct Bragg grating writing in a hybrid PDMS/silica photonic crystal fiber", G. Kakarantzas, A. Diez, J.L. Cruz, C. Markos, M.V. Andres, and K. Vlachos, *CLEO EUROPE/EQEC*, Art. No 5942824, (2011).
25. "Partial power recovery of bend-induced loss using a hybrid index-guiding photonic crystal fiber", C. Markos, K. Vlachos and G. Kakarantzas, *CLEO EUROPE/EQEC*, 5942860, (2011).
26. "Modeling of photonic crystal fiber with polymer inclusions", C. Markos, K. Vlachos, and G. Kakarantzas, Proc. SPIE 8426, 84260Y (2012).
27. "Formation of PDMS films inside the holes of silica photonic crystal fibers", C. Markos, K. Vlachos, and G. Kakarantzas, Proc. SPIE 8426, 842604 (2012).
28. "Fibre optic sensors for solid rocket motors health monitoring", L. Bancallari*, M. Sepe, L. Eineder, G. Tussiwand, G. Kakarantzas, C. Riziotis, N. Beverini, and E. Maccioni, Proc. of the 5th International Symposium on Optronics in Defence and Security, (OPTRO2012), Paris, France, 085 (2012).

PRESENTATIONS AT INTERNATIONAL CONFERENCES

1. "Ion Implanted Waveguides in Laser Glasses" G. Kakarantzas*, L. Zhang and P. D. Townsend *E-MRS Symposium*, Strasbourg France. 5-7 November 1991. (Oral)
2. "Ion Implanted Glass Waveguides", G. Kakarantzas* and P. D. Townsend *4th International Conference on Defects in Insulating Materials (ICDIM)*, Nordkirchen Germany, 17-19 May 1992. (Poster)
3. "Chemical Effects in Ion Implanted Glass Waveguides" G. Kakarantzas* and P. D. Townsend *Conference on Advances in Amorphous State Chemistry*, London, Nov 1993. (Poster)
4. "A 1.9 μm Thulium Doped Lead Germanate Glass Waveguide Laser" G. Kakarantzas, P. D. Townsend, D. P. Shepherd*, D. J. Brink, D. C. Hanna, D. N. Payne, J. Wang and A. C. Tropper *11th Conf. in Quantum Electronics*, , Belfast, UK, 30 August - 2 September 1993. (Oral)
5. "Epitaxial Thin Films and Ion Implanted Waveguide Lasers" D. P. Shepherd*, D. C. Hanna, J. K. Jones, A. C. Large, A. C. Tropper, G. Kakarantzas, P. J. Chandler, P. D. Townsend, L. Zhang, I. Chartier, B. Fernard and D. Pelenc *International Symposium on Optoelectronic Materials*, Honolulu USA, 16-19 Nov 1993. (Oral)
6. " Pr^{3+} -doped GeS_2 - Ga_2S_3 -based Chalcogenide Glasses for 1.3 μm Fibre Amplifiers", D. Marchese*, G. Kakarantzas and A. Jha *IEEE 8th Melecon Conf.*, Bari, Italy, 13-16 May 1996. (Oral)
7. "Direct Measurement of the Optical Phase in the Near-Field", P. L. Phillips*, J. C. Knight, P. St.J. Russell, G. Kakarantzas and J. M. Pottage "Direct Measurement of the Optical Phase in the Near-Field" *CLEO 1999*, Baltimore USA, 23-28 May 1999. (Oral)
8. "Fabrication of High Performance Fibre Tapers and Couplers using a CO_2 Laser Rig", G. Kakarantzas*, T. E. Dimmick, T. A. Birks and P. St.J. Russell *CLEO Pacific Rim*, Seoul, S. Korea, 30 August-03 September 1999. (Oral)
9. Russell "CO₂ laser processing of fibre tapers and couplers: a step towards miniaturisation" G. Kakarantzas*, T. E. Dimmick, T. A. Birks and P. St.J. *14th Conf. in Quantum Electronics*, Manchester, UK, 06-09 September 1999. (Oral)
10. "Fused taper fibre microcoupler" G. Kakarantzas*, T.E. Dimmick, T.A. Birks and P.St.J. Russell *OFC 2000*, Baltimore, USA, 07-10 March 2000. (Oral)
11. "Narrow-band acousto-optic tunable filter fabricated from highly uniform tapered optical fiber" T.E. Dimmick*, G. Kakarantzas, T.A. Birks and P.St.J. Russell *OFC 2000*, Baltimore, USA, 07-10 March 2000. (Oral)
12. "Transmission Filters based on Periodically Micro-tapered Fibre" G. Kakarantzas*, R. Le Roux, T.A. Birks and P.St.J. Russell, *CLEO 2000*, San Francisco USA, 07-12 May 2000. (Oral)
13. "Whispering Gallery modes in Prolate Fibre Microcavities" T.A. Birks*, R. Le Roux, G. Kakarantzas and J.C. Knight *CLEO 2000*, San Francisco, USA, 07-12 May 2000. (Oral)
14. "Long Period Gratings (LPGs) based on Periodically Microtapered Fibre" G. Kakarantzas*, R. Le Roux, T.A. Birks and P.St.J. Russell *Applied Optics and Optoelectronics IoP Conf.*, Loughborough, UK 12-15 September (2000). (Oral)
15. "Directional Coupling in a twin core Photonic Crystal Fibre using heat treatment", G. Kakarantzas*, B.J. Mangan, T. A. Birks, J.C. Knight and P. St.J. Russell *CLEO/QELS 2001* Baltimore, USA, 6 - 11 May 2001. (Oral)

16. "Rocking Filter Formation in Non-Photosensitive Highly Birefringent Photonic Crystal Fibre" G. Kakarantzas*, A.Ortgosa-Blanch, T.A. Birks, J.C.Knight and P.St.J. Russell *ECOC 2002* Copenhagen, Denmark, 8-12 September 2002. (Oral)
17. "Rocking Filters in Non-Photosensitive Highly Birefringent Photonic Crystal Fibre", G. Kakarantzas*, A.Ortgosa-Blanch, T.A. Birks, J.C.Knight and P.St.J. Russell *Photon 2002*, Cardiff, UK, 02-05 September 2002. (Oral)
18. "Miniature Mach-Zehnder interferometer based on rocking filters in photonic crystal fiber" G. Kakarantzas*, T.A. Birks and P.St.J. Russell *CLEO/QELS 2003*, Baltimore, USA, 01-06 June 2003. (Oral)
19. "All-fiber devices based on sol-gel coated tapered fibers" G. Kakarantzas*, S.G. Leon-Saval, T.A. Birks and P.St.J. Russell *CLEO/QELS 2004*, San Francisco, CA, USA, 18-20 May 2004. (Oral)
20. "Splice-less interfacing of conventional fiber to photonic crystal fibers" S.G. Leon-Saval*, G. Kakarantzas, T.A. Birks and P.St.J. Russell *CLEO/QELS 2004*, San Francisco, CA, USA, 18-20 May 2004. (Oral)
21. "Rigorous Analysis of Scattering by a Spherical Particle Coupled to a Subwavelength-Diameter Wire Waveguide" I. Chremmos*, N.K. Uzunoglu and G. Kakarantzas *Mediterranean Microwave Symposium*, Athens, Greece, 06-08 September 2005. (Oral)
22. "Up-tapering of optical fibers using a conventional flame tapering rig" G. Kakarantzas*, L. Prill-Sempere, P.St.J. Russell, Conference on Lasers and Electro-Optics, CLEO 2007, Baltimore, USA, 06-11 May 2007. (Oral)
23. "Guided modes in arrays of metallic nanowires" C.G. Poulton*, M. Schmidt, G. Pearce, G. Kakarantzas, P.St.J. Russell, Conference on Lasers and Electro-Optics, CLEO 2007, Baltimore, USA, 06-11 May 2007. (Oral)
24. "Thin metallic and dielectric films on silica nanofibres", G. Kakarantzas*, C.G. Poulton and C. Riziotis, 1st Mediterranean Conference on Nano-photonics MediNano-1, Istanbul, Turkey, 6-7 Oct 2008 (Invited talk).
25. "Engineering waveguide dispersion using thin films on silica nanofibre tapers", G. Kakarantzas, C.G. Poulton* and C. Riziotis, 8th International Photonic & Electromagnetic Crystal Structures Meeting-PECS VIII; Sydney, Australia, April 5-9, 2009 (oral).
26. "Fibre-optic based pressure microsensors", C. Markos*, K.G. Vlachos and G. Kakarantzas, 2nd Mediterranean Conference on Nano-Photonics Medinano-2; Athens, Greece, 26-27 October, 2009 (poster).
27. "Tailoring the waveguide dispersion of silica nanofibers using multiple thin dielectric films", G. Kakarantzas*, C.G. Poulton and C. Riziotis, ICO - Emerging Trends and Novel Materials in Photonics; Delphi, Greece, 7-9 October 2009 (oral).
28. "Fibre-optic interferometric pressure sensor based on droplet-shaped PDMS elastomer" C. Markos*, K.G. Vlachos and G. Kakarantzas, ICO - Emerging Trends and Novel Materials in Photonics; Delphi, Greece, 7-9 October 2009 (oral).
29. "Silica-polymer photonic crystal fiber", G. Kakarantzas*, C. Markos, and K. Vlachos, 3rd Mediterranean Conference on Nanophotonics MediNano-3, Belgrade, Serbia, 18-19 October 2010 (Invited talk).
30. "Bend measurements of a photonic crystal fiber with elastomer inclusions", C. Markos*, K. Vlachos, and G. Kakarantzas, 3rd Mediterranean Conference on Nanophotonics MediNano-3, Belgrade, Serbia, 18-19 October 2010 (poster).
31. "Tunable Devices in PDMS/Silica Hybrid Photonic Crystal Fibers", G. Kakarantzas*, C. Markos and K. Vlachos, 4th Mediterranean Conference on Nano-photonics MediNano-4, Rome, Italy, 24-25 Oct 2011 (Invited Talk).

32. "Direct Bragg grating writing in a hybrid PDMS/silica photonic crystal fiber", G. Kakarantzas*, A. Diez, J.L. Cruz, C. Markos, M.V. Andres, and K. Vlachos, Conference on Lasers and Electro-Optics Europe and 12th European Quantum Electronics Conference, CLEO EUROPE/EQEC, Munich, Germany, 22- 26 May 2011 (Oral).
33. "Guiding and birefringent properties of a hybrid PDMS/silica photonic crystal fiber", C. Markos*, K. Vlachos, and G. Kakarantzas, SPIE, Photonics West, San Francisco, USA, 22-27 January 2011 (poster).
34. "Thermo-optic effect of an index guiding photonic crystal fiber with elastomer inclusions", C. Markos*, K. Vlachos, and G. Kakarantzas, 21st Int'l Conf. on Optical Fiber Sensors – OFS 21, Ottawa, Canada, 15-19 May 2011 (poster).
35. "Partial power recovery of bend-induced loss using a hybrid index-guiding photonic crystal fiber", C. Markos*, K. Vlachos, and G. Kakarantzas, Conference on Lasers and Electro-Optics Europe, and 12th European Quantum Electronics Conference, CLEO EUROPE/EQEC, Munich, Germany 22- 26 May 2011 (poster).
36. "Formation of PDMS films inside the holes of silica photonic crystal fibers", C. Markos, K. Vlachos, and G. Kakarantzas*, Conference on Microstructured and Specialty Optical Fibres, Brussels, Belgium; 17-19 April 2012 (Oral).
37. "Modeling of photonic crystal fiber with polymer inclusions", C. Markos, K. Vlachos, and G. Kakarantzas*, Conference on Microstructured and Specialty Optical Fibres, Brussels, Belgium; 17-19 April 2012 (poster).
38. "Fibre optic sensors for solid rocket motors health monitoring", L. Bancallari*, M. Sepe, L. Eineder, G. Tussiwand, G. Kakarantzas, C. Riziotis, N. Beverini, and E. Maccioni, 5th International Symposium on Optronics in Defence and Security, (OPTRO2012), Paris, France; February 8-10, 2012 (Oral).

G. PAPERS IN NATIONAL CONFERENCES

1. G. Kakarantzas, A.Ortgosa-Blanch, T.A. Birks and P.St.J. Russell "New trends in photonic crystal fibre research: Micro-structuring along the third dimension" *XVIII Greek Conf. on Solid State Physics*, Heraclion, Crete (2002).
2. G. Kakarantzas, T.A. Birks and P.St.J. Russell "Miniature Mach-Zehnder interferometer based on rocking filters in photonic crystal fiber" *XIX Greek Conf. on Solid State Physics*, Thessaloniki (2003).
3. G. Kakarantzas "Optical Fibre Nanowires: An important step towards super-sensitive nano-photonic devices" *Laser Olympics*, Athens (2004).
4. C. Markos*, K. Vlachos and G. Kakarantzas "Hybrid Index-Guiding Photonic Crystal Fiber with Tunable Birefringence", *XVII Panhellenic Conference on Solid State Physics and Materials Science*, Ioannina, Greece, 26-29 September 2010, pp. 121-122 (2010) (poster).

H. PRESS RELEASES

1. "Light Constructions" by Sunny Bains, OE Reports No. 198 June 2000 (SPIE Publication).
2. "Tiny Coupler Promises to Shrink Equipment" interviewed by Pauline Rigby, *Fibre Systems*, 4, No. 5 June 2000.
3. "Fiber optics - Infrared laser shapes new miniature devices" interviewed by Valerie Coffey, *Laser Focus World*, 37, No.12, December 2001. (PennWell Publication).
4. "Structural Long period gratings in PCF" interviewed by Philip Espinasse *OE Magazine* (SPIE Publication) September 2002.

I. CITATIONS FOR JOURNAL PUBLICATIONS

Sum of times cited: **610** (source ISI Web of Science).

Sum of times cited without self citations: **581** (source ISI Web of Science).

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