

**Curriculum Vitae  
Stefano Selleri**

**Full Professor  
Department of Engineering and Architecture  
University of Parma, Italy**

**May 2020**

Contents

**Personal data** ..... 2

**Professional summary** ..... 2

**Education** ..... 3

**Professional development** ..... 3

**Affiliations and appointments** ..... 3

**Institutional duties** ..... 5

**Recruitment boards** ..... 6

**Teaching activities** ..... 7

    Courses at Parma University ..... 7

    Previous courses at Modena and Reggio Emilia University ..... 8

    Course for PhD students at Parma University ..... 9

**PhD supervisor** ..... 9

**Scientific activity** ..... 10

**International collaborations** ..... 11

**Research projects** ..... 12

**Contracts** ..... 14

**Spin-off and start-up** ..... 15

**Civil lawsuits** ..... 16

**Organization of national and international conferences** ..... 16

**Reviewer activity** ..... 17

**Guest editor** ..... 18

**IEEE JQE associate editor** ..... 18

**Sensors editorial board member** ..... 19

**Lectures and seminars** ..... 19

**Invited speeches** ..... 20

**Books and book chapters** ..... 21

**Publications** ..... 22

    International Journal Papers ..... 22

    International Conferences ..... 29

    National Journal Papers ..... 43

    National Conferences ..... 43

## Personal data

Name: Stefano Selleri  
Date of birth: 22/02/1966  
Location of birth: Bologna, Italy  
Family status: Married,  
Three children (1992, 1996, 1998)



Office: Dipartimento di Ingegneria e Architettura  
Università degli Studi di Parma  
Viale G.P. Usberti 181/A - Campus Universitario  
I-43124 Parma, Italy  
tel: +39 0521 905763  
fax: +39 0521 905758  
email: stefano.selleri@unipr.it  
web page: <http://gaem.tlc.unipr.it>

## Professional summary

Activity field: Electromagnetic Fields,  
"Settore Scientifico-Disciplinare ING-INF/02  
Campi Elettromagnetici - SSD ING-INF/02"  
"Settore Concorsuale 09/F1 Campi Elettromagnetici"

Researcher identifiers: ResearcherID: K-1343-2013  
Orchid ID: 0000-0001-8026-0846  
Scopus Author ID: 7005530955

Prof. Stefano Selleri is Full Professor in "Electromagnetics Fields" and has been teaching several university courses ranging from basic electromagnetics to advanced topics in antennas, microwaves, electromagnetic compatibility, optics, photonics and lighting. His scientific activity is mainly focused on the study, design and characterization of standard or speciality optical fibers and fiber based components for telecommunication, industrial and sensing applications. He has been working with different ICT companies for microwave antenna development and for optical amplifier design and experimental characterization. He is cofounder of a university spin-off company providing RF and microwave services, measurements and technical consultancy for wireless operators, public institutions and private customers. He is also cofounder of a start-up company which develops smart biological and chemical sensor devices integrated with mobile platforms. He is the leader of the Group of Applied ElectroMagnetics – GAEM at Parma University. He has been serving the University Administration being member of the Academic Board of Directors. He was in the role of Department Director and member of the Academic Senate.

## Education

- ✓ Scientific High School degree, A.B. Sabin of Bologna, in 1985.
- ✓ Graduated *Magna cum Laude* in Electronics Engineering, University of Bologna, in 1991.
- ✓ PhD degree in Information Technology at the Information Engineering Department, University of Parma in 1995.

## Professional development

- ✓ Since 16 May 1997 **University Researcher** at the Information Engineering Department of the University of Parma.
- ✓ Since 2002 **Associate Professor** in Electromagnetic Fields (*Settore Scientifico Disciplinare - SSD ING-INF/02 Campi Elettromagnetici*) at the Faculty of Engineering of the University of Parma. Leader of the Group of Applied ElectroMagnetics – GAEM (<http://gaem.tlc.unipr.it>).
- ✓ December 2007, **co-founder member** of the academic spin-off Net Integra Consulting.
- ✓ Awarded with the **National Scientific Qualification (*Abilitazione Scientifica Nazionale*)** as Full Professor in Electromagnetic Fields (*Settore Scientifico Disciplinare - SSD ING-INF/02 Campi Elettromagnetici*), call 2012, validity since 17/01/2014 to 17/01/2020.
- ✓ Since October 2013 **Full Professor** in Electromagnetic Fields (*Settore Scientifico Disciplinare - SSD ING-INF/02 Campi Elettromagnetici*) at the Department of Information Engineering of the University of Parma.
- ✓ From December 2013 to December 2016 **Director of the Department** of Information Engineering of the University of Parma.
- ✓ From December 2013 to December 2016 prof. Stefano Selleri has been **member of the Academic Senate (*Senato Accademico*)** of Parma University.
- ✓ June 2014, **co-founder member** of the new start-up company DNAPhone.
- ✓ Since January 2017 elected **member of the Board of Directors (*Consiglio di Amministrazione*)** of Parma University.

## Affiliations and appointments

- ✓ Prof. Stefano Selleri is the leader of the Group of Applied ElectroMagnetics – GAEM (<http://gaem.tlc.unipr.it>) at Parma University. GAEM comprises, beside Prof. Selleri himself, two associate professors, research assistants and PhD students, varying according to the employment conditions and fundings. GAEM runs laboratories and a clean room used for educational activity of students and for researches related to the analysis and characterization of optical and photonic devices as well as sensors and biosensors.

- ✓ IEEE Photonics Society (former LEOS) member and IEEE Senior Member since 2008. Membership n. 80617686.
- ✓ Member of the IEEE Photonics Society Italy Chapter Executive Committee since December 2006.
- ✓ May 2012 – December 2016, Chair of the IEEE Photonics Society Italy Chapter. Prof. Stefano Selleri led the Italian Chapter of the IEEE Photonics Society for almost five years. During his chair he strongly boosted the Chapter activities by organizing and supporting seminars, conferences, expositions, PhD schools, PhD awards, workshops and other events (<http://www.ieee-photonics.it>).  
In particular, during his Chair the Chapter has been worldwide awarded as the:
  - IEEE Most Innovate Chapter in 2013,
  - IEEE Region 8 Chapter Of The Year (COTY 2014) in 2013
  - IEEE Photonics Society Chapter Of The Year 2014 (COTY 2014) in 2014
  - IEEE Photonics Society Largest Membership Increase Award in 2016
- ✓ Officer of “Commission D – Electronics and Photonics” of the International Union of Radio Science (Union Radio Scientifique Internationale - URSI), for the period 2011-2018 and deputy officer of the same Commission for the period 2019-2022. In these roles, prof. Stefano Selleri has been involved in session organization of the URSI General Assembly and Scientific Symposium 2014 (GASS 2014) and in the successful Rome candidature submission for the GASS 2020 and its organization.
- ✓ Individual Member of the International Union of Radio Science (Union Radio Scientifique Internationale - URSI) since 15 May 2017, Individual Member n. M1720704491.
- ✓ Member of the Società Italiana di Elettromagnetismo - SIEm. In particular, member of the Scientific Board of SIEm. As SIEm member, he served as Conference Chair for the XXI RiNEm - Riunione Nazionale di Elettromagnetismo, September 12-14, 2016 Parma, Italy.
- ✓ Member of the Staff Board of the Photonics and Electro-Optics Group “Consiglio Direttivo del Gruppo tematico Fotonica ed Elettro-Ottica – FEO” of AICT/AEIT, Italy, 2012-2017.
- ✓ Member of the National Inter-University Consortium for Telecommunications (Consorzio Nazionale Inter-Universitario – CNIT), Research Unit of Parma.
- ✓ Associate member of “Istituto dei Materiali per l’Elettronica e il Magnetismo” IMEM – CNR, Parma, for research activity on "Innovative optical sensors", 2018-2020 and 2020-2022.
- ✓ Associate member of “Istituto di Scienze Applicate e Sistemi Intelligenti E. Caianiello” ISASI – CNR, Pozzuoli.
- ✓ Associate member of “Istituto Nazionale di Fisica Nucleare – INFN”, Laboratory for Accelerators and Applied Superconductivity - LASA, Milano, since June 2019.

- ✓ Member of the Staff Board of AEIT-CORIFI – “Coordinamento Ricerca Innovazione Fotonica Italia”, being the leader of the Working Group 7 “Research Education and Training”, appointed again in 2015.
- ✓ Member of the Scientific Board, as delegate of Parma University, of the Research Center “Interazioni tra i Campi Elettromagnetici e Biosistemi” – ICEMB (Interactions between Electromagnetic Fields and Bio-systems) since 2014.
- ✓ Member of SITEIA.PARMA an inter-department Center of Parma University co-funded by the Emilia-Romagna local Government in the frame of the regional industrial research and technological transfer program (Programma Regionale per la Ricerca Industriale, l’Innovazione e il Trasferimento Tecnologico - PRRITT). SITEIA.PARMA is part of the regional High Technology Network.
- ✓ Member of CIDEA an inter-department Center of Parma University co-funded by the Emilia-Romagna local Government in the frame of the regional industrial research and technological transfer program (Programma Regionale per la Ricerca Industriale, l’Innovazione e il Trasferimento Tecnologico - PRRITT). CIDEA is part of the regional High Technology Network.
- ✓ Member of Future Technology Lab an inter-department Center of Parma University co-funded by the Emilia-Romagna local Government in the frame of the regional industrial research and technological transfer program (Programma Regionale per la Ricerca Industriale, l’Innovazione e il Trasferimento Tecnologico - PRRITT). Future Technology Lab is part of the regional High Technology Network.

## Institutional duties

- ✓ Prof. Stefano Selleri has been member of the Italian Language Commission for foreign students enrolled in engineering courses at Parma University, since 1997 to 2003.
- ✓ Prof. Stefano Selleri has been involved, with different roles, in the Italian Engineering Profession Qualifying Examination (Esame di Stato di Abilitazione all’Esercizio della Professione di Ingegnere) for the years 1998,1999 and 2014.
- ✓ Prof. Stefano Selleri has been member, 2004-2018, of the PhD Board “Collegio dei Docenti di Dottorato” of the PhD course in Information Technologies, University of Parma, and he is now member of the PhD Board of the course in Automotive Engineering for Intelligent Mobility, University of Bologna, in collaboration with University of Modena Reggio Emilia and University of Parma.
- ✓ Prof. Stefano Selleri has been member of Scientific Committee of Area 109, 2013-2018.
- ✓ From December 2013 to December 2016 Prof. Stefano Selleri has been Director of the Department of Information Engineering of the University of Parma. The department had more than 40 employees (professors and researchers), more than one hundred non-permanent researchers (PhD students, post-PhD, grant-holders, research assistants), more than ten technical and administrative employees.

- ✓ From December 2013 to December 2016 Prof. Stefano Selleri has been member, as Department Director, of the Academic Senate (*Senato Accademico*) of Parma University.
- ✓ Since January 2017 Prof. Stefano Selleri is member of the Board of Directors (*Consiglio di Amministrazione*) of Parma University.
- ✓ Prof. Stefano Selleri has been involved in the management of the curriculum student requests for the years 2006 and 2007.
- ✓ Prof. Stefano Selleri has been member delegate of Parma University, 2014-2018, attending the shareholder's meeting of Lepida s.p.a., a company promoted by the local government of Emilia-Romagna Land devoted to the development of hard and software communication services of all public institutions in Emilia-Romagna.
- ✓ Member of the Board of MUNER, the Motorvehicle University of Emilia-Romagna, a collaboration of the University of Bologna, University of Modena and Reggio Emilia, University of Parma, University of Ferrara and the companies Automobili Lamborghini, Dallara, Ducati, Ferrari, HaasF1Team, HPE COXA, Magneti Marelli, Maserati, Pagani, Scuderia Toro Rosso. <https://motorvehicleuniversity.com>
- ✓ Member of the National Commission for the National Scientific Qualification (*Abilitazione Scientifica Nazionale - ASN*) for the recruitment sector 09/F1 Electromagnetic Fields (*Campi Elettromagnetici*), October 2018 – October 2020.

## Recruitment boards

Prof. Stefano Selleri has been member of many recruitment selection boards in Italian Universities, for the Scientific Sector of “Electromagnetic Fields” (Campi Elettromagnetici), and for the “National Research Council” (Consiglio Nazionale delle Ricerche – CNR) and external referee for national institutions and foreign Universities, for the positions reported in the list below.

- ✓ Associate Professor at University of Modena and Reggio Emilia 2014
- ✓ Associate Professor at University of Parma 2014
- ✓ Associate Professor at Politecnico di Bari 2015
- ✓ Third Level Researcher at ISASI-CNR Pozzuoli 2015
- ✓ Associate Professor at University of Padua 2015
- ✓ Fifteen positions at national level for Research Director of CNR 2015 (the Commission resigned after a work of few months)
- ✓ Associate Professor at University of Parma 2016
- ✓ Associate Professor at University of Padua 2016
- ✓ Researcher type A at Politecnico di Milano 2017
- ✓ First Level Responsible of Research, CNIT 2017
- ✓ Associate Professor at University of Udine 2017
- ✓ Associate Professor at University of Padua 2017
- ✓ Professor at Institute of Photonic Technology / Friedrich-Schiller-University, Jena 2012
- ✓ Researcher at Denmark Technical University - DTU Copenhagen 2017
- ✓ Full professor at Politecnico of Bari 2018

- ✓ Full professor at University of Brescia 2018
- ✓ Two positions as First Research at CNR 2018
- ✓ Selection of Director candidate for Applied Physics Institute NELLO CARRARA (IFAC) 2018
- ✓ Full professor at University of Cassino 2019
- ✓ Researcher type A at University of Modena e Reggio Emilia 2020

Prof. Stefano Selleri has been member of many evaluation boards for the selection of Research Activity Scholarship at Parma University for the Scientific Sector of “Electromagnetic Fields” (*Campi Elettromagnetici*) in 2002, 2005, two in 2013, three in 2014, 2016, 2018, two in 2019.

## Teaching activities

Since 2001 Prof. Stefano Selleri has been in charge for many university courses related to Electromagnetism as listed below. In the following CFU stands for “Credito Formativo Universitario”, a credit equivalent to the European Credit Transfer and Accumulation System (ECTS) credit.

He also contributed with seminars and exercises and he authored some textbooks for students in electromagnetics and photonics. He has been also in charge for the mark recording of the course *Etica e Pratica Professionale dell’Ingegnere* (Ethics and Professional Activity of the Engineer) (1 CFU) for the Laurea Triennale in Informatics, Electronics and Telecommunications Engineering, for the Academic Years 2013-2014 and 2014-2015.

Student evaluations of his course teaching performances always results in high marks.

All courses of the last years held at Parma University are listed on the official Parma University site at the following web page: <https://personale.unipr.it/it/ugovdocenti/person/21593>

## Courses at Parma University

- ✓ *Elettromagnetismo Applicato* (Applied Electromagnetics) (9 CFU) for the Laurea Triennale in Informatics, Electronics and Telecommunications Engineering, since 2011-2012 Academic Year.
- ✓ *Automotive Lighting Technology* (3 CFU, 1st Module) course in English for the Laurea Magistrale in Advanced Automotive Electronic Engineering, University of Bologna, in collaboration with University of Modena Reggio Emilia, University of Ferrara, University of Parma, since 2017-2018 Academic Year.
- ✓ *Campi Elettromagnetici* (Electromagnetic Fields) (2 CFU) for the Laurea Triennale in “Tecnico della prevenzione negli ambienti e nei luoghi di lavoro”, at the Medicine and Surgery Department, University of Parma, since 2017-2018 Academic Year.
- ✓ *Fabbricazione Digitale* (Digital Fabrication) (3 CFU, 1st Module) for the Laurea Triennale in Information Systems Engineering, since 2019-2020 Academic Year.
- ✓ *Electromagnetic Compatibility* (3 CFU, 1st Module) course in English for the Laurea Magistrale in Electric Vehicle Engineering, University of Bologna, in collaboration with University of Modena Reggio Emilia, University of Ferrara, University of Parma, since 2020-2021 Academic Year.



- ✓ *Antennas for Wireless Systems* (6 CFU) course in English for the Laurea Magistrale in Communications Engineering, 2014-2015 – 2016-2017 Academic Years.
- ✓ *Microwaves* (6 CFU) course in English for the Laurea Magistrale in “Communications Engineering”, 2012-2013 and 2013-2014 Academic Years.
- ✓ *Microonde* (Microwaves) (6 CFU) for the Laurea Magistrale in “Ingegneria delle Telecomunicazioni”, 2009-2010 – 2011-2012 Academic Years.
- ✓ *Microonde* (Microwaves) (5 CFU) for the Laurea Specialistica in “Ingegneria delle Telecomunicazioni”, 2003-2004 – 2008-2009 Academic Years.
- ✓ *Propagazione Guidata* (Guided Propagation) (5 CFU) for the Laurea Triennale in “Ingegneria Elettronica e delle Telecomunicazioni”, 2003-2004 – 2010-2011 Academic Years.
- ✓ *Antenne A* (Antennas A) (5 CFU) for the Laurea Triennale in “Ingegneria Elettronica e delle Telecomunicazioni”, 2010-2011 Academic Year.
- ✓ *Componenti Fotonici B* (Photonics Components B) (5 CFU) for the Laurea Specialistica in “Ingegneria delle Telecomunicazioni”, 2003-2004 – 2009-2010 Academic Years.
- ✓ *Campi Elettromagnetici* (Electromagnetic Fields) (3 CFU) for the Laurea Triennale in “Tecnico della prevenzione negli ambienti e nei luoghi di lavoro”, at the Medicine and Surgery Faculty, 2003-2004 – 2009-2010 Academic Years.
- ✓ *Componenti e Circuiti Ottici* (Optical Components and Circuits), for the five years Laurea in “Ingegneria Elettronica e delle Telecomunicazioni”, 2001-2002, 2002-2003 and 2003-2004 Academic Years.
- ✓ *Campi Elettromagnetici* (Electromagnetic Fields), for the five years Laurea in “Ingegneria Elettronica, Informatica e delle Telecomunicazioni”, 2002/2003 Academic Year.
- ✓ *Antenne A* (Antennas A), for the Laurea Triennale in “Ingegneria Elettronica e delle Telecomunicazioni”, from 26 April to 4 June 2004, for substitute teaching of maternity leave.

### **Previous courses at Modena and Reggio Emilia University**

- ✓ *Campi Elettromagnetici* (Electromagnetic Fields) (9 CFU) for the Laurea in “Ingegneria Elettronica” of the University of Modena and Reggio Emilia”, 2012-2013 and 2013-2014 Academic Years.
- ✓ *Compatibilità Elettromagnetica* (Electromagnetic Compatibility), for the Laurea in “Ingegneria delle Telecomunicazioni” of the “Facoltà di Ingegneria” of University of Modena and Reggio Emilia”, 2005-2006 Academic Year.

## Course for PhD students at Parma University

- ✓ Stefano Selleri, Annamaria Cucinotta, Federica Poli, *Sensori in Fibra Ottica* (Optical Fiber Sensors) (10 hours), for the PhD degree in “Tecnologie dell’Informazione”, Parma University, February 2008.

## PhD supervisor

Prof. Stefano Selleri has been advisor of many students of MS and PhD curricula. He has been member, 2004-2018, of the PhD Board “Collegio dei Docenti di Dottorato” of the PhD course in Information Technologies, University of Parma, and he is now member of the PhD Board of the course in Automotive Engineering for Intelligent Mobility, University of Bologna, in collaboration with University of Modena Reggio Emilia and University of Parma.

The following list reports name, thesis title and degree year of PhD students he tutored.

- ✓ Matteo Fuochi, “Microstructured Fibers for Optical Devices and High-Power Delivery” (2005)
- ✓ Altaf H. Bouk, “Electromagnetic Propagation in Photonic Crystal Optical Fibers and Waveguides” (2005)
- ✓ Federica Poli, “Photonic Crystal Fibers: Design, Applications and Perspectives” (2006)
- ✓ Lorenzo Rosa, “Radio-Over-Fiber System Technologies” (2007)
- ✓ Matteo Foroni, “Fantasies using optical fibers” (2008)
- ✓ Davide Passaro, “The Bright Future of Optical Fiber Beyond Telecommunications” (2009)
- ✓ Michele Sozzi, “Optical Fibers for Sensing Applications” (2011)
- ✓ Enrico Coscelli, “Design of innovative photonic crystal fibers for high power lasers” (2012)
- ✓ Alessandro Candiani, “Optical fiber sensors for physical and biological measurements” (2012)
- ✓ Masruri, “Flexible low loss THz and ultra-high power IR waveguiding using PCFs” (2015)
- ✓ Carlo Molardi “Photonic Crystal Fibers Design for 2  $\mu\text{m}$  Wavelength Operation” (2016)

Prof. Stefano Selleri has been member of many commissions or external examiner for PhD degree in Italy

- ✓ Politecnico of Bari 2011,
- ✓ University of Bologna 2012,
- ✓ Politecnico of Milano 2014,
- ✓ University of Modena e Reggio Emilia 2015,
- ✓ University of Trento 2015,
- ✓ University of Parma, “Material Science and Technology” 2017,
- ✓ University of Parma, “Material Science and Technology” 2020,
- ✓ University Mediterranea of Reggio Calabria, 2020

and abroad

- ✓ University of Nottingham 2006,
- ✓ University of Adelaide 2011,
- ✓ Denmark Technical University - DTU Copenhagen 2016,
- ✓ University of Southampton 2020.

## Scientific activity

The research activity of Prof. Stefano Selleri is mainly focused on the study of electromagnetic propagation in fiber-based optical devices. In particular, the behaviour of optical lasers and amplifiers has been investigated, starting from standard operation in the telecommunications bands then moving to sensing, biomedical and industrial application fields. Researches are performed through theoretical investigations and experimental activities always in the frame of international collaborations and national and international projects.

### Numerical analysis of optical propagation

The theoretical approach, other than on analytical methods, was mainly based on the development of numerical methods, first of all the *Finite Element Method* (FEM). This has been developed thoroughly for years, leading to the implementation of extremely reliable and efficient codes. Formulations for modal analysis, mono- and bi-dimensional as well as scalar and full-vector, were developed. The electromagnetic propagation analysis, started with the development of the *Beam Propagation Method* with scalar mono-dimensional codes, has been subsequently generalized to obtain bi-dimensional cross-section full-vector codes. Moreover, formulations of propagators for *Finite-Element Time-Domain* and *Finite-Element Frequency-Domain* analysis were also implemented.

### Optical amplifiers

For what pertains the study of optical amplifiers, efficient codes were developed employing the so-called *spectral* and *spatial* amplifiers formulations which implement the *propagation* and *population rate equations*, also integrated with finite elements modal solvers, when an accurate knowledge of the pump and signal field distribution is required. Recent developments integrate modal and propagation analysis with amplification and thermal effects in high power fiber lasers. This theoretical study and simulation activity has always been joined to an intense laboratory activity aiming to characterize the doped fibers and to experimentally verify the performance of the optical amplifiers subject of the study.

### Photonic Crystal Fibers

The scientific activity has been strongly focused for years on the study of photonic-crystal optical fibers, microstructured and holey fibers. The research activity is performed in partnership with several European research centres and in the frame of different projects. The study has concerned with the dispersion, amplification and nonlinear properties, in terms of their possible applications, in particular for power fiber laser development. In the frame of the ALPINE project, Selleri's research group has been designing double cladding fibers for the fabrication of lasers used in photovoltaic industrial processing. His group is currently studying mode competition and transverse mode instability in medium and high power fiber lasers.

### Radio Frequency and Microwaves

Prof. Stefano Selleri has been also involved in the study of Radio over Fiber technologies, in particular to investigate the impact of intermodulation distortion, to extend the radio cellular coverage, particularly suitable for a multi-operator and multi-band scenario. He also studied solutions for multiple operators and low environmental impact base-stations for cellular phone networks. He is co-founder member of an academic spin-off, Net Integra Consulting, devoted to provide RF services, measurements and technical consultancy for wireless operators and customers.

## Optical sensing

During his activity Prof. Stefano Selleri has been involved in research activities regarding optical sensing based on both standard and photonic crystal fibers. Two themes were thoroughly studied: the usage of photonic crystal fibers as sensing element for biological applications, especially for the hybridization of DNA chains and the usage of optical fiber based systems to monitor and control physical parameters like fluid level or temperature in tunnel and civil infrastructures. He is co-founder member of the new start-up company DNAPhone which develops food sensors exploiting photonics technologies and mobile platforms.

## Publications

The outcomes of all the activities result in many international publications authored by Prof. Stefano Selleri on the different subjects and can be view at <http://gaem.tlc.unipr.it> In particular, he is author of more than three hundred papers published on established international journals or presented to international conferences. He also authored more than one hundred national journal or conference papers, as well as monographs and textbooks at university level for students in electromagnetics and photonics.

## International collaborations

Prof. Stefano Selleri has demonstrated a great dynamism to settle relationships with other research centres and universities and to inspire young students and researchers. For instance, his group had or has collaborations with:

- ✓ DTU the Technical University of Denmark that hosted an Italian student working toward his MS thesis and for research activity. Prof. Jesper Leasgard will be hosted as Visiting Professor for the second term of the academic year 2017-2018;
- ✓ the University of Southampton that hosted the PhD student Matteo Fuochi;
- ✓ the University of Laval in Canada that hosted a couple of Italian students working toward their MS thesis, the PhD student Marco Sisto and that sent a student to Italy for the Bachelor thesis, being S. Selleri his tutor;
- ✓ INO, the National Institut d'Optique in Quebec for research activity;
- ✓ the Brno University of Technology which settled two bilateral agreements with the Parma university for student and research exchanges; Parma University hosted Prof. Jiri Petraceck from Brno University as Visiting Professor for the second term of the academic year 2016-2017;
- ✓ the Hokkaido University in Japan that hosted the post PhD student Lorenzo Rosa;
- ✓ the COMSATS Institute of Information Technology, Pakistan that signed a Memorandum of Understanding with Parma University;
- ✓ the University of Balochistan in Pakistan which sent a student for his PhD course into Selleri's group;
- ✓ the Tsinghua University in Beijing China for research activity;
- ✓ the University of Navarra in Spain that hosted two PhD students and sent to Parma two PhD students for visits of some month;
- ✓ the Institute of Electronic Structure and Laser (IESL) of the Foundation for Research and Technology – FORTH in Greece that hosted two PhD students for two-year activity. Moreover, Stavros Pissadakis will be hosted as Visiting Professor for the second term of the academic year 2017-2018;

- ✓ the Institute for Photonics and Advanced Sensing (IPAS) and The ARC Centre for Nanoscale Biophotonics, The University of Adelaide, Australia, that hosted one PhD student for one year for research activity;
- ✓ Xlim Research Institute, France, for research activity;
- ✓ the Singapore Institute of Manufacturing Technology, Singapore, that hosted and financially supported the PhD student Carlo Molardi.
- ✓ The Institute of Laser for Postgraduate Studies, University of Baghdad, that sent four PhD students (Riyadh Mwad Naife, Hussein Thamer Salloom, Reem Mohammed Ibrahim Al Zubaidi and Sarah Kadhim Mohsin) for four to six months' research activity between 2012 and 2016.
- ✓ The Nazarbayev University, Kazakistan, that sent Dr. Asma Perveen in Parma as Visiting Researcher for laser application activity for more than one month in 2017.

These contacts always represent an important opportunity for students, young researchers and PhD students to be inserted in outstanding groups at national and international levels working towards high quality objectives.

Different student exchanges have been also carried on as Short Term Scientific Missions, a specific tool of the Cost Actions Prof. Stefano Selleri was involved in.

He himself exploited the Short Term Scientific Mission within the COST Action P11 scientific programme on “Physics of linear, non-linear and active photonic crystals”, from 19 to 23 July 2004 at Brno University of Technology.

Prof. Stefano Selleri ability in motivating and inspire young researchers is also confirmed by about one hundred and fifty men-months through different projects, being he the scientific supervisor, supported by the Regional Government of Emilia-Romagna and the Spinner Consortium, from 2003 to 2013.

## Research projects

Over the years, Prof. Stefano Selleri has been involved in several projects which proved his serious and fruitful ability to establish new interdisciplinary activities and organize and manage research groups. The main projects are listed in the following.

- ✓ **Scientific supervisor** for the Parma research unit within the project “Fotovoltaico ad alta efficienza”, coordinated by IMEM-CNR within the Triennial Plan 2019-2021 of the Electric System National Research programme funded by the Italian Ministry MiSE.
- ✓ Researcher in the **CoACh** project “Cold management in Agro-food Chains: solutions for process digitalization”, project funded by Regione Emilia Romagna in the frame of the “POR-FESR EMILIA ROMAGNA 2014-2020, Asse 1 - Ricerca e innovazione, Azione 1.2.2” programme 2018.
- ✓ **Scientific supervisor** for the Parma research unit within the project “**Materiali, dispositivi e processi innovativi per la fabbrica 4.0**” funded by the Emilia Romagna Government, in the frame of the POR FSE 2014/2020.

- ✓ **Coordinator** of the project: "Short-pulse high-speed fiber laser cutting of multi-layer polymeric materials" 2012-2013, supported by EU FP7 **Nexpresso** Project. The project supported the purchase of an about € 20.000 solid state laser.
- ✓ **Project Coordinator** of the FP7 Collaborative IP project **ALPINE** - Advanced Lasers for Photovoltaic INdustrial processing Enhancement, 2009-2012, supported by EU FP7 Programme. Project budget € 9.119.574,00, EU contribution € 5.899.987,00, contribution to Parma research group € 721.080,00.
- ✓ **COST (European Cooperation in Science and Technology) Action MP702**: "Towards functional sub-wavelength photonic structures", supported by EU, 2007-2012.
- ✓ **COST (European Cooperation in Science and Technology) Action 299**: "Optical Fibres for New Challenges Facing the Information Society", supported by EU, 2005-2010.
- ✓ **Coordinator** of the project "Development of new all-fiber lasers, for telecom, sensors and industrial applications", **Italy-Spain Integrated Actions**, supported by MIUR, 2009-2010.
- ✓ **Coordinator** of the project "PUlSED fiber laser for MAterial processing - PUMA", Scientific and Technological Cooperation Program between **Italy and Franch Community of Belgium**, supported by Ministry of Foreign Affairs, 2009-2010.
- ✓ "Progettazione REti di Telecomunicazione per la Minimizzazione dell'Impatto Ambientale – **PREMIA**", with the "Edil Scavi srl" company supported by Regional Government of Sicily, Italy, 2007.
- ✓ **Coordinator** of the project "Design of passive devices based on microstructured fibers for optical communication systems", Scientific and Technological Cooperation Program between **Italy and Pakistan**, supported by MAE – Ministry of Foreign Affair, 2006-2007.
- ✓ **TECAL** Laboratory Project, supported by Regional Government of Emilia-Romagna, Italy, 2006-2007.
- ✓ **COST (European Cooperation in Science and Technology) Action P11**: "Physics of linear, nonlinear and active photonic crystals", supported by EU, 2003-2007.
- ✓ Annual projects supported by the Italian Ministry of University and Research, among them: Studio di fibre a cristallo fotonico per amplificazione ottica e compensazione della dispersione (2004), Amplificazione parametrica in fibre ottiche a cristallo fotonico (2005), Amplificazione in banda S tramite fibre ottiche depresse drogate con erbio (2006), Sorgenti ottiche per sistemi Radio over Fiber (2007).
- ✓ "INtegrazione e SErvizi per la BAnda LARga – **INSEBALA**", supported by the Regional Government of Emilia-Romagna, Italy, 2005-2006.
- ✓ **Coordinator** of the project "Modelling of novel photonic components for telecommunications", Scientific and Technological Cooperation Program between **Italy and Czech Republic**, supported by Ministry of Foreign Affair, 2002-2004.

- ✓ **Coordinator** of the project “Full vectorial mode solver for the analysis of waveguide devices”, Scientific and Technological Cooperation Program between **Italy and Czech Republic**, supported by MAE – Ministry of Foreign Affairs, 1999-2000.
- ✓ “Large Optical Bandwidth by amplifier Systems based on TELLURITE fibers doped with Rare earths – **LOBSTER**”, 2000-2003, supported by IST – EU Program.
- ✓ “Fluoroaluminate Amplifiers for Second Telecom window – **FAST**”, 1995-1997, supported by ACTS – EU Program.
- ✓ Coordinator of more the fifteen Technological Transfer Projects funded by the SPINNER Consortium in the period 2003-2012, corresponding to more than **150 men-month** activity.

## Contracts

Prof. Stefano Selleri has been involved in several projects and contracts with private industries and public institutions as scientific responsible. The following list reports the anonymous company name, year of the contract, amount of the contract and title of the activity.

- ✓ XXX 2004 €10.000, “Sviluppo di antenne AM/FM e TV per autoveicoli”.
- ✓ XXX 2006 €10.000, “Sviluppo di antenne a vetro su berlina tipo 1 e su berlina di tipo 2”.
- ✓ XXX 2006 €8.000, “Sviluppo di antenne a vetro su vettura coupé”.
- ✓ XXX €55.000, “Studio e progettazione dell'ottica e dell'elettronica di controllo per un laser a semiconduttore”.
- ✓ XXX 2007 €22.000, “Sviluppo di stadi amplificatori per laser di potenza”.
- ✓ XXX 2007 €150.000, “Sviluppo di un sistema di monitoraggio di temperatura e di CO2 in galleria”.
- ✓ XXX 2008 €12.000, “Consulenza nella realizzazione del piano di monitoraggio e di risanamento di campi elettromagnetici a radiofrequenza”.
- ✓ XXX 2007 €500, “Misure a banda larga di emissioni di campo elettromagnetico in ambiente urbano”.
- ✓ XXX 2008 €25.000, “Sviluppo di stadi amplificatori di potenza per laser in fibra”.
- ✓ XXX 2009 €500, “Esecuzione di misure di campo elettromagnetico a banda larga ad alta frequenza in ambiente outdoor”.
- ✓ XXX 2013 US\$ 4.000, “Biosensori basati su fibre a cristallo fotonico”.
- ✓ XXX 2013 US\$ 4.000, “Optical fiber sensors and laser”.
- ✓ XXX 2014 €50.000, “Modelling of large mode area fibers”.
- ✓ XXX 2017 €8.000, “Caratterizzazione e progettazione di antenne”.

As leader of his group GAEM he also promoted and was involved in the following contract activities:

- ✓ XXX 2012 €3.000, “Studio, sviluppo e simulazione di bocca carta illuminata da luce Led diffusa”.
- ✓ XXX 2013 €35.000, “Sviluppo di laser di potenza in fibra drogata con tulio”.
- ✓ XXX 2014 €6500, “Analisi simulate e misure con termocamera relative al confronto tra l'utilizzo di un telefono smartphone in assenza e in presenza di dispositivo distanziatore”.

- ✓ XXX 2014 €16.000, “Sviluppo di un bundle di fibre ottiche per l’illuminazione di un proiettore”.
- ✓ XXX 2014 €15.000, “Studio di fattibilità e realizzazione di laser scribing con laser a picosecondo su substrati ceramici funzionalizzati con film sottili a base di a-Si”.
- ✓ XXX 2015 €14.000, “Sviluppo di sistemi diagnostici per analisi chimiche e biologiche”.
- ✓ XXX 2015 €22.000, “Studio di fattibilità e realizzazione di laser scribing con laser a picosecondo su substrati ceramici funzionalizzati con film sottili a base di a-Si - Integrazione per attività aggiuntive”.
- ✓ XXX 2015 €100.000, “Test di taglio laser e analisi ottica e morfologica su film sottili”.
- ✓ XXX 2016 €16.000, “Sviluppo di sistemi diagnostici per analisi chimiche e biologiche”.
- ✓ XXX 2016 €30.000, “Sviluppo di sistemi diagnostici per analisi chimiche e biologiche”.

## Spin-off and start-up

### Spin-off: Net Integra Consulting

In December 2007, Prof. Stefano Selleri, as one of the co-founder members, established a new academic spin-off called **Net Integra Consulting** devoted to provide RF and microwave services, measurements and technical consultancy for wireless operators and customers.

This new enterprise has been involved since its very beginning with Public Institution and Authorities for monitoring the electromagnetic level in urban centres and manage antenna site planning with private providers and with several telecommunication service companies for a huge variety of services and activities. Up to date, the company has two employers, besides the original company promoters. <http://www.netintegra.it>

### Start-up: DNAPhone

In June 2014, Prof. Stefano Selleri established a new company, **DNAPhone**, together with five co-founder members. DNAPhone is a clear example of a “4.0 industry” company thanks to its integration of smart services and technologies. The company develops sensor devices for the measurements of biological, chemical parameters by means of a photonic technologies integrated with mobile platforms and cloud storage services.

The company produce two different devices, the first one designed for educational activity, while the second is developed for business customs working in the vine sector. Up to date, the company has five employers, besides the original company promoters. <http://www.dnaphone.it>.

In the frame of this activity Prof. Stefano Selleri has been involved in the following **patent submission**: “Optoelectronic device for use in the colorimetric analysis of sample fluid, apparatus and method for colorimetric analysis of sample fluid”, European patent submission n. 16202482.2 – 1554, 27-1-2017.

### SENSIFO

Prof. Stefano Selleri was the coordinator of the spin-off proposal “SENSIFO - Sensori in fibra ottica”, funded by the SPINNER consortium in 2004-2005. The activity carried on by the spin-off proposers did not give rise to a company as planned.



## Civil lawsuits

Prof. Stefano Selleri has been involved in three civil lawsuits in 2002, 2013 and 2017 as technical advisor (“Consulente Tecnico”) or external technical advisor issued by the Civilian Court of Parma. Due to grounds for confidentiality details are not provided.

## Organization of national and international conferences

- ✓ Member of the **Organizing Committee** of the Italian Conference on Optics and Photonics – ICOP2020, Parma, Italy, 9-11 September, 2020.
- ✓ Member of Local Organizing Committee of the XXXIII General Assembly and Scientific Symposium (GASS) of the International Union of Radio Science (Union Radio Scientifique Internationale-URSI), 29 August – 5 September 2020, Rome, Italy.
- ✓ Member of the International Advisory Committee of BioPhotonics 2019, 4th International Conference on Biophotonics, National Taiwan University, Taipei, Taiwan, September 15-18, 2019.
- ✓ Member of the Subcommittee on Optics and Photonics and **organizer** of the Focus Session on Optical Fibers for High Power Applications at “Photonics & Electromagnetics Research Symposium” PIERS 2019, 17-20 June 2019, Rome.
- ✓ Member Organizing Committee of the European Conference on Optical Communication - ECOC 2018, to be held in Roma on September 23-27, 2018.
- ✓ Member of the Technical Program Committee of RTSI 2017 – 3° International Forum on Research and Technologies for Society and Industry, Modena, Italy, 11-13 September 2017.
- ✓ Member of the Executive Committee of the Conference Fotonica 2016, Padova, Italy, 3-5 May 2017.
- ✓ Member of the Organizing Committee of the conference “3rd PARMA NANO-DAY”, Parma, 12-14 July 2017.
- ✓ Member of the Scientific Committee of the international PhD School “Photonic integration: advanced materials, new technologies and applications”, Erice, Sicily, Italy, 25 September - 1 October 2016.
- ✓ **Chair** of the Ventunesima Riunione Nazionale di Elettromagnetismo, RiNEm 2016, Parma, 12-14 September 2016.
- ✓ Member of the Organizing Committee of the the 18th International Conference on Transparent Optical Networks ICTON 2016, Trento, Italy, 10-14 July 2016.
- ✓ Member of the Executive Committee of the Conference Fotonica 2016, Roma, Italy, 6-8 June 2016.
- ✓ Member of the organizing Committee of the Conference GS 2015, Parma, Italy, 15- 17 June 2015.
- ✓ **Chair** of the IEEE International Workshop BioPhotonics 2015, Florence, 20-22 May 2015.
- ✓ Member of the Executive Committee of the Conference Fotonica 2015, Turin, Italy, 6-8 May 2015.
- ✓ Member of the Executive Committee of the Conference Fotonica 2014, Naples, Italy, 12-14 May 2014.
- ✓ Member of the Program Committee of the Mediterranean Photonics Conference, Trani, Italy, 7-9 May 2014.

- ✓ **Co-Chair** of the International Workshop on “Spatio-Temporal Complexity in Optical Fibers”, Como, Italy, 16-18 September 2013.
- ✓ Member of the Executive Committee of “Workshop Gruppo Biosensori Ottici e Biofotonica”, Sestri Levante, Italy, 19-20 September 2013.
- ✓ Member of the International Advisory Committee of IEEE International Workshop BioPhotonics 2013, Taipei, Taiwan, 17-19 July 2013.
- ✓ Member of the Executive Committee of the Conference Fotonica 2013, Milano, Italia, 14-16 May 2013.
- ✓ Member of the Technical Subcommittee on Optical Sensing and Metrology Conference on Lasers and Electro-Optics Europe (CLEO/Europe) and International Quantum Electronics Conference (IQEC), Munich, Germany, 12-16 May 2013.
- ✓ Member of the Executive Committee of the Conference Fotonica 2012, Firenze, Italy, 15-17 May 2012.
- ✓ Member of the Executive Committee of “Convegno Nazionale Sensori - Innovazione, attualità e prospettive”, Roma, Italy, 15-17 February 2012.
- ✓ **Chair** of the IEEE International Workshop BioPhotonics 2011, Parma, 8-10 June 2011.
- ✓ Member of the Technical Subcommittee on Optical Sensing and Metrology Conference on Lasers and Electro-Optics Europe (CLEO/Europe) and European Quantum Electronics Conference (EQEC), Munich, Germany, 2011.
- ✓ Member of the Technical Subcommittee on Optical Sensing and Metrology Conference on Lasers and Electro-Optics Europe (CLEO/Europe) and European Quantum Electronics Conference (EQEC), Munich, Germany June 14-19, 2009.
- ✓ Member of the Technical Program Committee of the Subcommittee on “Modelling, Numerical Simulation, and Theory” IPNRA 2008 - Integrated Photonics and Nanophotonics Research and Applications, organized by the Optical Society of America – OSA, Boston, USA, July 13-16, 2008.
- ✓ **Chair** of the Winter Topical on “Photonic crystal Fibers: Technology and Applications”, Winter Topicals 2008 – Nonlinear Photonics organized by IEEE-LEOS, Sorrento, Italy, January 14-16, 2008.
- ✓ **Chair** of the Subcommittee on “Modelling, Numerical Simulation, and Theory” IPNRA 2007 - Integrated Photonics and Nanophotonics Research and Applications, co-located with Slow Light, Topical Meetings organized by the Optical Society of America – OSA, Salt Lake City, Utah, USA, July 8-11, 2007.
- ✓ Member of the International Program Committee of the IASTED International Conference “Antennas, Radar, and Wave Propagation (ARP 2007)”, Montreal, Quebec, Canada - May 30 – June 1, 2007 and Special Session Organizer of the "Radio over Fiber Technologies and Applications" Special Session in ARP 2007.
- ✓ Member of the Technical Program Committee of the Subcommittee on “Modelling, Numerical Simulation, and Theory” IPRA 2006 - Integrated Photonics Research and Applications, co-located with Nanophotonics, Topical Meetings, Optical Society of America – OSA, Uncasville, Connecticut, USA, April 24-28, 2006.
- ✓ Member of the Technical Program Committee of the “Conference on Lasers and Electro-Optics/Europe” - CLEO/EUROPE 2005, Munich, Germany, 12-17 June 2005.

## Reviewer activity

Prof. Stefano Selleri has been serving for years as reviewer for the most important scientific journals and conferences of the field, among them IEEE-LEOS Journal of Lightwave Technology, IEEE

Photonics Technology Letters, IEEE Journal of Selected Topics in Quantum Electronics, IEEE Sensors Journal, IEEE Journal of Quantum Electronics, Optics Express (Optical Society of America - OSA), Optics Letters (OSA), Journal of Optical Society of America B (OSA), Laser Physics Letters (OSA), Photonics Journal (OSA), Optics Communications (Elsevier), Optical and Quantum Electronics, Sensors & Actuators: B. Chemical (Elsevier), Optical Fiber Technology (Elsevier), Journal of Optics, Journal of Modern Optics, Chinese Optics Letters, Sensors (MDPI), Biosensors (MDPI), Materials (MDPI).

He also served as independent reviewer for projects funded by the Italian Ministry (MIUR) and for national and international institutions:

- ✓ Australian Solar Institute,
- ✓ RNID London,
- ✓ NATEC Denmark,
- ✓ Swiss National Science Foundation,
- ✓ Australian Research Council,
- ✓ French National Research Agency,
- ✓ University of Roma Tor Vergata.
- ✓ Italian national agency for the university system and research evaluation (Agenzia Nazionale di Valutazione del Sistema Universitario e della Ricerca – ANVUR) as reviewer of publications of the period 2011-2014.

## Guest editor

- ✓ Prof. Stefano Selleri has been Guest Editor of the International Journal of Modern Physics B, Condensed Matter Physics; Statistical Physics; Atomic, Molecular and Optical Physics, Volume 28, Issue 12, 10 May 2014, doi.org/10.1142/S0217979214020020. The title of the special issue is: "High-Brightness Fiber and Fiber-Coupled Sources".
- ✓ Prof. Stefano Selleri has been Guest Editor with Dr. Tarun Kumar Gangopadhyay of the CSIR, "Central Glass & Ceramic Research Institute", India, of the Special Issue "Optical Sensors Using Microstructured and Photonics Crystal Fibers", [https://www.mdpi.com/journal/sensors/special\\_issues/Microstructured\\_and\\_Photonics\\_Crystal\\_Fibers](https://www.mdpi.com/journal/sensors/special_issues/Microstructured_and_Photonics_Crystal_Fibers)

## IEEE JQE associate editor

Prof Stefano Selleri is Associate editor of **IEEE Journal of Quantum Electronics**. The IEEE Journal of Quantum Electronics is dedicated to the publication of manuscripts reporting novel experimental or theoretical results. Published bi-monthly by the IEEE Photonics Society, in both web-based and print form, the journal comprises original contributions describing significant advances in the understanding of quantum electronics phenomena or the demonstration of new devices, systems, or applications.

<https://www.photonicsociety.org/publications/journal-of-quantum-electronics/editorial-board>

## Sensors editorial board member

Prof Stefano Selleri is member of the Editorial Board of **Sensors (MDPI)**. Sensors provides an advanced forum for the science and technology of sensors and biosensors. It publishes reviews (including comprehensive reviews on the complete sensors products), regular research papers and short notes. Its aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible.

<http://www.mdpi.com/journal/sensors/sectioneditors/physicalsensors>

## Lectures and seminars

- ✓ Stefano Selleri, “Photonic crystal fibers, properties and applications”, IEEE Photonics Society Italy Chapter seminar, 27 March 2017, INFN, “Laboratori Nazionali del Sud”, Catania, Italy.
- ✓ Stefano Selleri, “Laser”, two lessons for the European Master Degree in Oral Laser Applications – EMDOLA, organized by University of Parma, in 2012 and 2017, 12-10-2012 and 17-2-2017.
- ✓ Stefano Selleri, “Design and modelling of photonics crystal fibers”, 1 July 2014, University of Bern, Switzerland.
- ✓ Stefano Selleri, “Fiber based platform for biosensing”, IEEE Photonics Society Italy Chapter seminar, 18 November 2013, Naples, Italy.
- ✓ Stefano Selleri, “Fiber lasers: status and applications”, IEEE Photonics Society Italy Chapter seminar, 30 May 2013, Modena, Italy.
- ✓ Stefano Selleri, “Fiber based platform for biosensing”, IEEE Photonics Society Italy Chapter seminar, 13 February 2013, Pavia, Italy.
- ✓ Stefano Selleri, “Fiber optics platform for biomedical detection”, IEEE Photonics Society Italy Chapter Workshop, Brescia, Italy, 29-30 May, 2012.
- ✓ Stefano Selleri, “Fibre fotoniche per la bio-sensoristica”, panelist of the round-table on: “Fotonica per la Vita - Photonics for Life”, Salone dei 500, Palazzo Vecchio, Florence, 15 May 2012.
- ✓ Stefano Selleri, “Photonic crystal fiber numerical design for fiber lasers used in photovoltaics scribing”, 5th Annual Meeting Photonic Devices, Zuse-Institut Berlin (ZIB), Berlin, 23-24 February 2012.
- ✓ Stefano Selleri, “Optical fiber platform for the detection of biological components”, workshop on Nanophotonics for sensing & nonlinear optics: Next generation photonic materials, structures & devices, Serafino, Institute for Photonics & Advanced Sensing (IPAS), McLaren Vale, South Australia, 24-26 August 2011.
- ✓ Stefano Selleri, "Biosensor optical fiber platform for the detection of relevant components in biological fluids", 14th International Erlangen Graduate School in Advanced Optical Technologies (SAOT) Workshop on “Fiber Lasers, Sensors and Materials”, Reichenschwand, Nurnberg, Germany, 27-29 July 2011.
- ✓ Stefano Selleri, A. Cucinotta, F. Poli, D. Passaro, E. Coscelli, “Advanced Fiber Lasers for Photovoltaic thin film Module Scribing”, 8 October 2010, Centro di Eccellenza per l'Ingegneria dell'Informazione, della Comunicazione e della Percezione (CEIICP), Pisa, Italy.
- ✓ Annamaria Cucinotta, Stefano Selleri, “Le Lavorazioni Laser per il Fotovoltaico”, ExpoLaser 2008, Piacenza, 14 November 2008.
- ✓ Stefano Selleri, “Hollow Core Photonic Crystal Fibers”, Brno University of Technology, Czech Republic, April 16-20, 2007, Teaching Staff Mobility, Socrates/Erasmus Project.

- ✓ Stefano Selleri, "Optical Fiber Amplifiers for WDM systems", Brno University of Technology, Czech Republic, April 16-20, 2007, Teaching Staff Mobility, Socrates/Erasmus Project.
- ✓ Stefano Selleri, "Optical Fiber Amplifiers for WDM systems", Nottingham University, United Kingdom, November 24, 2006.
- ✓ Stefano Selleri, "Optical Amplifiers for WDM Systems", Brno University of Technology, Czech Republic, March 31, 2003, Teaching Staff Mobility, Socrates/Erasmus Project.
- ✓ Stefano Selleri, "Photonic Crystal Fibers", Brno University of Technology, Czech Republic, April 1, 2003, Teaching Staff Mobility, Socrates/Erasmus Project.

## Invited speeches

- ✓ L. Rosa, S. Mckee, L. Vincetti, F. Poli, S. Selleri, A. Cucinotta, "Thermo-optic effects in multicore fibers for high power lasers," SPIE Photonics Europe 2020, Fiber Lasers and Glass Photonics: Materials through Applications II conference, March 29 - April 2, 2020, Strasbourg, France.
- ✓ S. Selleri, "Boosting accessibility of diagnostics tools for 3D printing, consumer electronics, digital imaging and open source software conversion", Optical Metrology, 24-27 June 2019, Munich, Germany.
- ✓ A. Cucinotta, F. Pasquali, M. Barozzi, A. Tonelli, A. Candiani, L. Vincetti, S. Selleri "Smartphone-based Approach for Colorimetric Dipstick Analysis", "Photonics & Electromagnetics Research Symposium", PIERS 2019, 17-20 June 2019, Rome.
- ✓ S. Selleri, S.H. Pallangal, L. Vincetti, L. Rosa, F. Poli, A. Cucinotta, "Modal guidance and phase shift in thermally loaded multi-core fibers," TE1-I2, International Conference on Fiber Optics and Photonics - PHOTONICS 2018, December 12-15, 2018, New Delhi, India.
- ✓ L. Vincetti, C. Molardi, F. Giovanardi, F. Poli, S. Selleri, A. Cucinotta, "Photonic Crystal Fibers for Label-free DNA Detection", Photonics@SG, 31 July – 4 August 2017, Singapore.
- ✓ S. Selleri, "Low cost and smart diagnostic platforms for chemical analysis", GS 2015, 15-17 June 2015, Parma, Italy.
- ✓ A. Candiani, S. Giannetti, A. Bertucci, A. Manicardi, R. Corradini, M. Konstantaki, S. Pissadakis, A. Cucinotta, S. Selleri, "Biophotonics photonic crystal fibers platform for nanoparticle-enhanced DNA," The Second Biophotonics Conference, July 17-19, 2013, National Taiwan University, Taipei, Taiwan.
- ✓ A. Candiani, S. Giannetti, Hussein T. Salloom, M. Sozzi, A. Hadi Al-Janabi, A. Cucinotta, S. Selleri, "Nanoparticle enhanced fiber platform for biosensing applications," EOS Topical Meetings, 12-14 September 2013, Capri, Italy.
- ✓ A. Candiani, S. Giannetti, A. Cucinotta, A. Bertucci, A. Manicardi, M. Konstantaki, W. Margulis, S. Pissadakis, R. Corradini, S. Selleri, "DNA biosensors implemented on PNA-functionalized microstructured optical fibers Bragg gratings," proc. SPIE Optics and Optoelectronics 2013, April 15-18, 2013, Prague, Czech Republic, paper 8775-1.
- ✓ S. Selleri, A. Bosio, A. Cucinotta, M. Sozzi, D. Menossi, Y. Hernandez, A. Bertrand, C. Duterte, "Optimization of pulsed fiber laser scribing for CdTe and CIGS solar cells," ICTON 2012, Coventry, United Kingdom, July 2-5, 2012.
- ✓ S. Selleri, "Microstructured and standard optical fibers for the detection of relevant components in biological fluids", Micro- and nano-photonic materials and devices, Trento, Italy, 16-18 January 2012.
- ✓ Y. Hernandez; A. Bertrand; S. Selleri; F. Salin; L. Leick; M. Hueske; R. Petkovsek; F. Ferrario; N. Lichtenstein, "Recent Progress on the ALPINE (Advanced Lasers for Photovoltaic INDUSTRIAL

processing Enhancement) FP7 Integrated Project", Fiber Laser Applications - FILAS 2011, FThB1, Istanbul, Turkey, February 16-17 2011.

- ✓ S. Selleri, "Recent status and prospects of EU-funded ALPINE project," SPIE Photonics West 2011, San Francisco (CA), United States, paper 7921-26, January 22-27, 2011.
- ✓ S. Selleri "Microstructured optical fibers exploitation: from photovoltaics to biosensing," IEEE Photonics Society Winter Topical Meetings 2011, Keystone (CO), United States, January 10-12, 2011.
- ✓ S. Selleri, A. Cucinotta, F. Poli, "Active photonic crystal fiber amplifiers and lasers", The 9th International Conference on Optical Communications and Networks (ICOON2010), Nanjing, China, 24-27 October 2010.
- ✓ F. Poli, E. Coscelli, D. Passaro, A. Cucinotta, S. Selleri, "Accoppiamento tra modi guidati e di cladding in fibre a cristallo fotonico polarizzanti", FOTONICA 2010, P2.23, Pisa, May 25-27, 2010.
- ✓ S. Selleri, A. Cucinotta, F. Poli, D. Passaro, "Yb-doped Rod-type Photonic Crystal Fibers for High Brilliance Lasers", ICO Photonics Conference on Emerging Trends & Novel Metamaterials in Photonics, pp. 63, Delphi, Greece, October 7-9, 2009.
- ✓ S. Selleri, A. Cucinotta, F. Poli, D. Passaro, "High brilliance fiber lasers for the scribing of photovoltaic modules", 11th International Conference on Transparent Optical Networks - ICTON 2009, Mo.B1.5, Island of São Miguel, Azores, Portugal, June 28 - July 2, 2009.
- ✓ S. Selleri, A. Cucinotta, F. Poli, D. Passaro, "Fibre a cristallo fotonico: applicazioni e prospettive", FOTONICA 2009, C3.1, Pisa, May 27-29, 2009.
- ✓ Federica Poli, Annamaria Cucinotta, Matteo Foroni, Stefano Selleri, "Finite-Element Based Photonic Crystal Fiber Analysis: From Solid to Hollow Core Fibers", IEEE Winter Topicals 2008, Nonlinear Photonics, Hilton Sorrento Palace, January 14-16, 2008.
- ✓ Federica Poli, Annamaria Cucinotta, Stefano Selleri, "Microstructured fibers: modelling, design and applications", Integrated Photonics and Nanophotonics Research and Applications, IPNRA 2008, Boston, July 13-16, 2008.
- ✓ Federica Poli, Annamaria Cucinotta, Davide Passaro, Stefano Selleri, "Doped fiber lasers: from telecom to industrial applications", International Conference on Transparent Optical Networks, ICTON 2008, Athens, July 13-16, 2008.

## Books and book chapters

Prof. Stefano Selleri authored monographs and textbooks at university level for students as well as research books in electromagnetics and photonics.

- ✓ Stefano Selleri, Luca Vincetti, Annamaria Cucinotta, "**Optical and Photonics Components**", Esculapio, ISBN-10: 8874889240 ISBN-13 978-8874889242, 2015.
- ✓ "**Optofluidics, Sensors and Actuators in Microstructured Optical Fibers**", Edited by Stavros Pissadakis and Stefano Selleri, Elsevier - Woodhead Publishing, 2015.
- ✓ Stefano Selleri, Luca Vincetti, Annamaria Cucinotta, "**Componenti Ottici e Fotonici**", Esculapio, ISBN 9788874885527, 2012.
- ✓ Federica Poli, Annamaria Cucinotta and Stefano Selleri, "**Photonic Crystal Fiber, Properties and Applications**", Springer, ISBN 978-1-4020-6325-1, 2007.

- ✓ Stefano Selleri is editor and translator of Fawwaz T. Ulaby, **“Fondamenti di Campi Elettromagnetici, Teoria ed Applicazioni”**, edited by McGraw-Hill, Milan 2006, the Italian Edition of Fawwaz T. Ulaby, **“Fundamentals of Applied Electromagnetics”**, Prentice Hall, Upper Saddle River, NJ 2004.
- ✓ Stefano Selleri, **“Propagazione Elettromagnetica Guidata”**, MUP, 2005, Parma, ISBN 88-7847-000-7.
- ✓ Stefano Selleri, Altaf Hussain Bouk, **“Propagazione Guidata”**, MUP, 2004, Parma, ISBN 88-7847-095-3.
- ✓ Stefano Selleri, **“Esercizi di Campi Elettromagnetici”**, Edizioni Santa Croce, 1997, Abbiategrosso (MI).

### Book chapter

- ✓ Roberto Corradini, Stefano Selleri, **“Photonic Crystal Fibers for Physical, Chemical and Biological Sensing”**, Chapter 11 in **“Photonic Bandgap Structures: A Novel Technological Platform for Physical, Chemical and Biological Sensing”**, e-book, Marco Pisco, Andrea Cusano and Antonello Cutolo editors, pp. 189-202, Bentham Science Publishers, 2012.
- ✓ Stefano Selleri, Carlo Fornaini, Annamaria Cucinotta, **“Laser Physics, Laser-Tissues Interactions and Laser Safety”**, Chapter 1 in **“Oral Laserology”**, Carlo Fornaini and Jean-Paul Rocca editors, pp. 1-19, EDlearning, 2015.

## Publications

Prof. Stefano Selleri is author of more than four hundred papers published on international journals or presented to international conferences. He is also author of more than one hundred national journal or conference papers. The H-index and the number of citations are as follows:

	H-index	Citations
Web of Science	26	2142
Scopus	29	2716
Google Scholar	33	3763

### International Journal Papers

1. J. Laegsgaard, F. Poli, A. Cucinotta, S. Selleri, "Thermo-optic instabilities in asymmetric dual-core amplifiers," *Journal of the Optical Society of America B: Optical Physics* vol. 37, n. 5, pp. 1494-1501 (2020).
2. L. Rosa, S.H. Pallangal, F. Poli, S. Selleri, and A. Cucinotta, "Mode phase variation and sensitivity to thermal load in three-core optical fibers," *J. Lightwave Technology*, vol. 38, no. 8, pp. 2400-2405 (2020).

3. M. Konstantaki, D. Skiani, D. Vurro, A. Cucinotta, S. Selleri, A. Secchi, S. Iannotta and S. Pissadakis, "Silk fibroin enabled optical fiber methanol vapor sensor", *Photonics Technology Letters*, vol. 32, n. 9, 1 May 2020, pp. 514-517 (2020).
4. Ruben Foresti, Stefano Rossi, Silvana Pinelli, Rossella, Alinovi, Matteo Barozzi, Corrado Sciancalepore, Maricla Galetti, Cristina Caffarra, Paola Lagonegro, Guido Scavia, Monica Mattarozzi, Maria Careri, Claudio Macaluso, Michele Miragoli, Stefano Selleri, "Highly-defined bioprinting of long-term vascularized scaffolds with Bio-Trap: complex geometry functionalization and process parameters with Computer Aided Tissue Engineering," *Materialia*, vol. 9, March 2020, 100560 (2020).
5. Ruben Foresti, Stefano Rossi, Silvana Pinelli, Rossella Alinovi, Corrado Sciancalepore, Nicola Delmonte, Stefano Selleri, Cristina Caffarra, Edoardo Raposio, Guido Macaluso, Claudio Macaluso, Antonio Freyrie, Michele Miragoli & Paolo Perini, "In-vivo vascular application via ultra-fast bioprinting for future 5D personalised nanomedicine," *Scientific Reports* 10, 3205 (2020).
6. A. Perveen, A.H.A. Lutey, L. Romoli, A. Cucinotta, S. Selleri, "Pulsed laser machining of high-performance engineering and biomedical alloys," *International Journal of Machining and Machinability of Materials* 22(2), 137-152 (2020).
7. F. Poli, J. Laegsgaard, A. Cucinotta, S. Selleri, "Thermal Effects on Modal Properties of Dual-Core Yb-Doped Fibers," *Journal of Lightwave Technology* vol. 37, n.4, pp. 1075-1083 (2109).
8. Jesper Laegsgaard, Federica Poli, Annamaria Cucinotta, Stefano Selleri, "Static and dynamic mode instabilities in dual-core fiber amplifiers," *Journal of the Optical Society of America B*, vol. 36, n. 3, pp. 757-767 (2019).
9. Alessandro Tonelli, Alessandro Candiani, Michele Sozzi, Andrea Zucchelli, Ruben Foresti, Chiara Dall'Àsta, Stefano Selleri, Annamaria Cucinotta, "The geek and the chemist: Antioxidant capacity measurements by DPPH assay in beverages using open source tools, consumer electronics and 3D printing," *Sensors and Actuators B: Chemical* 282, 559-566 (2019).
10. J. Laegsgaard, F. Poli, A. Cucinotta, S. Selleri, "Theory of thermo-optic instabilities in dual-core fiber amplifiers," *Optics Letters* 43(19), 4775-4778 (2018).
11. C. Fornaini, E. Merigo, F. Poli, J.-P. Rocca, S. Selleri, G. Lagori, A. Cucinotta, "Hard dental tissues laser welding: a new help for fractured teeth? A preliminary ex vivo study," *LASER THERAPY* 27(2), 105-110 (2018)
12. C. Fornaini, F. Poli, E. Merigo, N. Brulat-Bouchard, A. El Gamal, J-P. Rocca, S. Selleri, A. Cucinotta, "Disilicate Dental Ceramic Surface Preparation by 1070 nm Fiber Laser: Thermal and Ultrastructural Analysis," *Bioengineering* 51(1), 10 (2018).
13. C. Fornaini, E. Merigo, F. Poli, C. Cavatorta, J.P. Rocca, S. Selleri, A. Cucinotta, "Use of 1070 nm fiber lasers in oral surgery: preliminary ex vivo study with FBG temperature monitoring," *Laser Therapy* 27(1) (2018).
14. C. Molardi, F. Poli, L. Rosa, S. Selleri, A. Cucinotta, "Mode discrimination criterion for effective differential amplification in Yb-doped fiber design for high power operation", Vol. 25, *Optics Express* 25 (23), 29013-29025 (2017).
15. S. K. M. Al-Hayali, S. Selleri, A. H. Al-Janabi, "Dual-Wavelength Passively Q-Switched Ytterbium-Doped Fiber Laser Based on Aluminum Oxide Nanoparticle Saturable Absorbers," *Chinese Physics Letter* 34(11), 114201 (2017).
16. F. Poli, E. Coscelli, A. Cucinotta, S. Selleri, "Inner cladding influence on mode interaction in symmetry-free photonic crystal fibers under heat load," *Optical and Quantum Electronics* 49, 323 - 332 (2017).
17. Kundong Mo, Bo Zhai, Li Jianfeng, E. Coscelli, F. Poli, A. Cucinotta, S. Selleri, Chen Wei, Yong Liu, "Numerical investigation on broadband mid-infrared supercontinuum generation in chalcogenide suspended-core fibers," *Chinese Physics B* 26(5), 054216 (2017).



18. M. Barozzi, A. Manicardi, A. Vannucci, A. Candiani, M. Sozzi, M. Konstantaki, S. Pissadakis, R. Corradini, S. Selleri, A. Cucinotta, "Optical Fiber Sensors for Label-free DNA Detection", *Journal of Lightwave Technology*, vol. 35, no. 16, pp. 3461-3472 (2017) – Invited paper.
19. C. Fornaini, E. Merigo, M. Sozzi, J.P. Rocca, F. Poli, S. Selleri, A. Cucinotta, "Four different diode lasers comparison on soft tissues surgery: A preliminary ex vivo study", *Laser Therapy*, vol. 25, pp. 105 – 114 (2016).
20. L. Rosa, E. Coscelli, F. Poli, A. Cucinotta, S. Selleri, "Full-vector modeling of thermally-driven gain competition in Yb-doped reduced symmetry photonic-crystal fiber", *Optical and Quantum Electronics*, vol. 48, pp. 1 – 8 (2016).
21. E. Coscelli, R. Dauliat, F. Poli, D. Darwich, A. Cucinotta, S. Selleri, K. Schuster, A. Benoit, R. Jamier, P. Roy, F. Salin, "Analysis of the modal content into large-mode-area photonic crystal fibers under heat load," *IEEE J. of Selected Topics in Quantum Electronics* **22** (2) (2016).
22. L. Rosa, E. Coscelli, F. Poli, A. Cucinotta, S. Selleri, "Thermal modeling of gain competition in Yb-doped large-mode-area photonic-crystal fiber amplifier," *Optics Express* **23** (14), 18638-18644 (2015).
23. C. Molardi, X. Yu, H. K. Liang, Y. Zhang, C. W. Qiu, A. Cucinotta, S. Selleri, "Analysis of mid-infrared lasing in active random media," *Optics Express* **23** (9), 12286-12292 (2015).
24. E. Coscelli, F. Poli, J. Li, A. Cucinotta, S. Selleri, "Dispersion engineering of highly nonlinear chalcogenide suspended core fibers," *IEEE Photonics Journal* **7**(3), 2200408 (2015),
25. C. Molardi, X. Yu, H. K. Liang, Y. Zhang, A. Cucinotta, S. Selleri, "Modal analysis in 2D media with variable disorder," *Optics Express* **23** (3), 3681-3689 (2015).
26. A. Bertucci, A. Manicardi, A. Candiani, S. Giannetti, A. Cucinotta, G. Spoto, 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," *Biosensors and Bioelectronics* **63**, 248-254 (2015).
27. F. Poli, E. Coscelli, A. Cucinotta, S. Selleri, F. Salin, "Single-mode propagation in Yb-doped large mode area fibers with reduced cladding symmetry," *IEEE Photonics Technology Letters* **26** (21), 2454-2457 (2014).
28. E. Coscelli, C. Molardi, A. Cucinotta, S. Selleri, "Symmetry-free Tm-doped photonic crystal fiber with enhanced mode area," *IEEE Journal of Selected Topics in Quantum Electronics* **20** (5), 1-7 (2014).
29. M. Bravo, A. Candiani, A. Cucinotta, S. Selleri, M. Lopez-Amo, J. Kobelke, K. Schuster, "Remote PCF-based Multiplexing by using optical add-drop multiplexers," *Optics & Laser Technology* vol. 57 pp. 9-11 (2014).
30. E. Coscelli, C. Molardi, M. Masruri, A. Cucinotta, S. Selleri, "Thermally resilient Tm-doped large mode area photonic crystal fiber with symmetry-free cladding," *Optics Express* **22** (8), 9707-9714 (2014).
31. A. Candiani, A. Argyros, S. G. Leon-Saval, R. Lwin, S. Selleri, S. Pissadakis, "A loss-based, magnetic field sensor implemented in a ferrofluid infiltrated microstructured polymer optical fiber," *Applied Physics Letters* **104**, 111106-1 - 111106-6 (2014).
32. L.V. Nguyen, S. Giannetti, S. Warren-Smith, A. Cooper, S. Selleri, A. Cucinotta, T. Monro, "Genotyping single nucleotide polymorphisms using different molecular beacon multiplexed within a suspended core optical fiber", *Sensors*, vol. 14, pp. 14488 – 14499 (2014).
33. A. Bosio; M. Sozzi; D. Menossi; S. Selleri; A. Cucinotta; N. Romeo, "Polycrystalline CdTe thin film mini-modules monolithically integrated by fiber laser", *Thin Solid Films*, vol. 562, pp. 638 – 647 (2014).
34. A. Lutey, M. Sozzi, S. Carmignato, S. Selleri, A. Cucinotta, P. G. Molari, "Nanosecond and sub-nanosecond pulsed laser ablation of thin single and multi-layer packaging films," *Applied Surface Science* **285**, 300 - 308 (2013).

35. M. Sozzi, C. Fornaini, A. Cucinotta, E. Merigo, P. Vescovi, S. Selleri, "Dental ablation with 1064 nm, 500 ps, Diode pumped solid state laser: A preliminary study," *Laser Therapy* 22, 195 - 199 (2013).
36. A. Candiani, M. Bravo, S. Pissadakis, A. Cucinotta, M. Lopez-Amo and S. Selleri, "Magnetic field sensor based on backscattered intensity using ferrofluid," *IEEE Photonics Technology Letters*, Vol. 25, No. 15, pp. 1481-1484, 2013.
37. A. Candiani, A. Bertucci, S. Giannetti, M. Konstantaki, A. Manicardi, S. Pissadakis, A. Cucinotta, R. Corradini, S. Selleri, "Label-free DNA biosensor based on a peptide nucleic acid-functionalized microstructured optical fiber-Bragg grating," *Journal of Biomedical Optics* Vol. 18, No. 5, 057004, May 2013.
38. M. Fernandez-Vallejo, D. Monelli, D. Passaro, A. Cucinotta, S. Selleri and M. Lopez-Amo, "Dual Stage Ytterbium Doped Fiber Laser in MOPA Configuration," *the Open Optics Journal*, vol. 6, pp. 1-8, 2012.
39. E. Coscelli, F. Poli, T. T. Alkeskjold, M. Jørgensen, L. Leick, J. Broeng, A. Cucinotta, S. Selleri, "Thermal Effects on the Single-mode Regime of Distributed Modal Filtering Rod Fiber," *IEEE/OSA Journal of Lightwave Technology*, Vol. 30 No 22, pp. 3494-3499, 2012.
40. E. Coscelli, F. Poli, T. T. Alkeskjold, F. Salin, L. Leick, J. Broeng A. Cucinotta, S. Selleri, "Single-mode design guidelines for 19-cell double-cladding photonic crystal fibers", *IEEE J. Lightwave Technology*, Vol. 30 No. 12, pp. 1909-1914, 2012.
41. A. Candiani, M. Sozzi, A. Cucinotta, S. Selleri, R. Veneziano, R. Corradini, R. Marchelli, P. Childs, S. Pissadakis, "Optical fiber ring cavity sensor for label-free DNA detection", *IEEE Journal of Selected Topics in Quantum Electronics*, *IEEE Journal of Selected Topics in Quantum Electronics*, vol. 18, no. 3, pp. 1176-1183, 2012.
42. F. Poli, E. Coscelli, T. T. Alkeskjold, D. Passaro, A. Cucinotta, L. Leick, J. Broeng, S. Selleri, "Cut-off analysis of 19-cell Yb-doped double-cladding rod-type photonic crystal fibers," *Opt. Express* 19, pp. 9896-9907, 2011.
43. E. Coscelli, F. Poli, T. T. Alkeskjold, D. Passaro, A. Cucinotta, L. Leick, J. Broeng, S. Selleri, "Single-mode analysis of Yb-doped double-cladding distributed spectral filtering photonic crystal fibers," *Optics Express* vol. 18 n. 26, pp. 27197–27204, 2010.
44. M. Fernandez-Vallejo, S. Diaz, R. A. Perez-Herrera, D. Passaro, S. Selleri, M. A. Quintela, J. M. López Higuera, M. Lopez-Amo, "Resilient long-distance sensor system using a multiwavelength Raman laser," *Measurement Science and Technology*, vol. 21, p. 094017, 2010.
45. E. Coscelli, M. Sozzi, F. Poli, D. Passaro, A. Cucinotta, S. Selleri, R. Corradini, R. Marchelli, "Towards Highly Specific DNA Biosensor: PNA-Modified Suspended Core Photonic Crystal Fiber", *IEEE Journal of Selected Topics in Quantum Electronics*, vol. 16, n. 4, pp. 967-972. 2010.
46. F. Poli, J. Lægsgaard, D. Passaro, A. Cucinotta, S. Selleri, J. Broeng, "Suppression of higher-order modes by segmented core doping in rod-type photonic crystal fibers", *IEEE/OSA Journal of Lightwave Technology*, vol. 27, n. 22, pp. 4935-4942, November 2009.
47. K. Saitoh, Y. Tsuchida, L. Rosa, M. Koshiba, F. Poli, A. Cucinotta, S. Selleri, M. Pal and S. Bhadra, "Design of all-solid leakage channel fibers with large mode area and low bending loss", *Optics Express*, vol. 17, n. 6, pp. 4913-4919, March 2009.
48. F. Poli, A. Cucinotta, D. Passaro, S. Selleri, J. Lægsgaard, J. Broeng, "Single Mode Regime in Large Mode Area Rare-Earth Doped Rod-Type PCFs", *IEEE JSTQE – Special Issue on High Power Fiber Lasers*, vol. 15, n. 1, pp. 54 – 60, January/February 2009.
49. S. Selleri, A. Cucinotta, "Analysis and design of photonic crystal fibers: Solid and hollow core fibers through the finite element method", *International Journal for Computation and Mathematics in Electrical and Electronic Engineering*, vol. 27, n. 6, pp. 1227 – 1235, 2008.

50. L. Vincetti, M. Foroni, F. Poli, M. Maini, A. Cucinotta, S. Selleri, M. Zoboli, "Numerical Modeling of S Band EDFA based on Distributed Fiber Loss", *IEEE/OSA Journal of Lightwave Technology*, vol. 26, n. 14, pp. 2168-2174, July, 2008.
51. M. Foroni, D. Passaro, F. Poli, A. Cucinotta, S. Selleri, J. Lægsgaard, A. Bjarklev, "Guiding properties of silica/air hollow-core Bragg fibers", *IEEE/OSA Journal of Lightwave Technology*, vol. 26, n. 13, pp. 1877-1884, July, 2008.
52. D. Passaro, M. Foroni, F. Poli, A. Cucinotta, S. Selleri, J. Lægsgaard, A. Bjarklev, "All-silica hollow-core microstructured Bragg fibers for bio-sensor application", *IEEE Sensors Journal*, vol. 8, n. 7, pp. 1280-1286, July 2008.
53. M. Foroni, D. Passaro, F. Poli, A. Cucinotta, S. Selleri, J. Lægsgaard, A. Bjarklev, "Confinement loss spectral behavior in hollow-core Bragg fibers", *Optics Letters*, vol. 32, n. 21, pp. 3164-3166, November 1, 2007.
54. F. Poli, M. Foroni, A. Cucinotta, S. Selleri, "Spectral Behavior of Integrated Antiresonant Reflecting Hollow-Core Waveguides", *IEEE/OSA Journal of Lightwave Technology*, vol. 25, n. 9, pp. 2599-2604, September 2007.
55. M. Foroni, F. Poli, A. Cucinotta, S. Selleri, "Tunability of erbium-doped fiber ring laser based on bending loss of active fiber", *Electronics Letters*, vol. 43, n. 9, pp. 500-502, 26 April 2007.
56. M. Foroni, F. Poli, A. Cucinotta, S. Selleri, "All-silica double-pass S+C+L band EDFA", *Electronics Letters*, vol. 43, n. 6, pp. 21-22, 15 March 2007.
57. M. Foroni, F. Poli, A. Cucinotta, S. Selleri, "S-Band Depressed-Cladding Erbium-Doped Fiber Amplifier with Double-Pass Configuration", *Optics Letters*, vol. 31, n. 22, pp. 3228-3230, November 2006.
58. G. Tartarini, A. Lena, L. Rosa, S. Selleri, P. Faccin, E.M. Fabbri, "Harmonic and Intermodulation Distortion Modeling in IM-DD Multi-Band Radio over Fiber Links Exploiting Injection Locked Lasers", *Optical and Quantum Electronics*, vol. 38, n. 9-11, pp. 869-876, July 2006.
59. L. Vincetti, M. Maini, F. Poli, A. Cucinotta, S. Selleri, "Numerical Analysis of Hollow Core Photonic Band Gap Fibers with Modified Honeycomb Lattice", *Optical and Quantum Electronics*, vol. 38, n. 9-11, pp. 903-912, July 2006.
60. P. Bienstman, S. Selleri, L. Rosa, H.P. Uranus, W.C.L. Hopman, R. Costa, A. Melloni, L.C. Andreani, J.P. Hugonin, P. Lalanne, D. Pinto, S.S.A. Obayya, M. Dems, K. Panajotov, "Modelling leaky photonic wires: A mode solver comparison", *Optical and Quantum Electronics*, vol. 38, n. 9-11, pp. 731-759, July 2006.
61. L. Rosa, F. Poli, M. Foroni, A. Cucinotta, S. Selleri, "Polarization splitter based on a square-lattice photonic-crystal fiber", *Optics Letters*, vol. 31, n. 4, pp. 441-443, February 2006.
62. L. Vincetti, F. Poli, S. Selleri, "Confinement Loss and Nonlinearity Analysis of Air-Guiding Modified Honeycomb Photonic Bandgap Fibers", *IEEE Photonics Technology Letters*, vol. 18, n. 3, pp. 508-510, February 2006.
63. F. Poli, L. Rosa, M. Botticini, M. Foroni, A. Cucinotta, S. Selleri, "Multi-Pump Flattened-Gain Raman Amplifiers Based on Photonic-Crystal Fibers", *IEEE Photonics Technology Letters*, vol. 17, n. 12, pp. 2556-2558, December 2005.
64. M. Botticini, N. Burani, M. Foroni, F. Poli, S. Selleri, "All plastic optical fiber level sensor", *Microwave and Optical Technology Letters*, vol. 46, n. 6, pp. 520-522, September 2005.
65. L. Rosa, S. Selleri, F. Poli, "Design of photonic-crystal and wire waveguide interface", *IEEE/OSA Journal of Lightwave Technology*, vol. 23, n.9, pp. 2740-2745, September 2005.
66. F. Poli, M. Foroni, M. Botticini, M. Fuochi, N. Burani, L. Rosa, A. Cucinotta, S. Selleri, "Single-mode regime of square-lattice photonic crystal fibers", *Journal of Optical Society of America A*, vol. 22, pp. 1655-1661, August 2005.

67. F. Poli, F. Adami, M. Foroni, L. Rosa, A. Cucinotta, S. Selleri, "Optical parametric amplification in all-silica triangular-core photonic crystal fibers", *Applied Physics B*, vol. 81, pp. 251-255, 2005.
68. A.M. Apetrei, J.M. Moison, J.A. Levenson, M. Foroni, F. Poli, A. Cucinotta, S. Selleri, M. Legré, M. Wegmüller, N. Gisin, K. V. Dukel'skii, A. V. Khokhlov, V. S. Shevandin, Yu. N. Kondrat'ev, C. Sibilia, E. E. Serebryannikov, A. M. Zheltikov, "Electromagnetic field confined and tailored with a few air holes in a photonic-crystal fiber", *Applied Physics B*, vol. 81, pp. 409-414, 2005.
69. A. Cucinotta, F. Poli, S. Selleri, "Design of Erbium-doped Triangular Photonic Crystal Fiber Based Amplifiers", *IEEE Photonics Technology Letters*, vol. 16, pp. 2027-2029, September 2004.
70. M. Bottacini, F. Poli, A. Cucinotta, S. Selleri, "Modelling of Photonic Crystal Fiber Raman Amplifiers", *IEEE/OSA Journal of Lightwave Technology*, vol. 22, n.7, pp. 1707-1713, July 2004.
71. G. Chietera, A.H. Bouk, F. Poletti, F. Poli, S. Selleri, A. Cucinotta, "Numerical Design for Efficiently Coupling Conventional and Photonic Crystal Waveguides", *Microwave and Optical Technology Letters*, vol. 42, n. 3, pp. 196-199, August 2004.
72. F. Poli, A. Cucinotta, S. Selleri, A.H. Bouk, "Tailoring of flattened dispersion in highly nonlinear photonic crystal fibers", *IEEE Photonics Technology Letters*, vol. 16, n. 4, pp. 1065-1067, April 2004.
73. A.H. Bouk, A. Cucinotta, F. Poli, S. Selleri, "Dispersion properties of square-lattice photonic crystal fibers", *Opt. Express* 12, 941-946 (2004).
74. M. Fuochi, F. Poli, S. Selleri, A. Cucinotta, L. Vincetti, "Study of Raman Amplification Properties in Triangular Photonic Crystal Fibers", *IEEE/OSA Journal of Lightwave Technology*, vol. 21, pp. 2247-2254, October 2003.
75. F. Poli, A. Cucinotta, M. Fuochi, S. Selleri, L. Vincetti, "Characterization of microstructured optical fibers for wideband dispersion compensation", *JOSA A*, vol. 20, pp. 1958-1962, October 2003.
76. A. Bertolani, A. Cucinotta, S. Selleri, L. Vincetti, M. Zoboli, "Overview on finite-element time-domain approaches for optical propagation analysis", *Optical and Quantum Electronics*, vol. 35, pp. 1005-1023, September 2003.
77. A. Cucinotta, F. Poli, S. Selleri, L. Vincetti, M. Zoboli, "Amplification Properties of Er<sup>3+</sup> doped Photonic Crystal Fibers", *IEEE/OSA Journal of Lightwave Technology*, vol. 21, n. 3, pp. 782-788, March 2003.
78. D. Ferrarini, L. Vincetti, M. Zoboli, A. Cucinotta, S. Selleri, "Leakage properties of photonic crystal fibers", *Optics Express*, vol. 10, n. 23, pp. 1314-1319, November 2002.
79. A. Cucinotta, S. Selleri, L. Vincetti, M. Zoboli, "Holey Fiber Analysis through the Finite Element Method", *IEEE Photonics Technology Letters*, vol. 14, n. 11, pp. 1530-1532, November 2002.
80. A. Cucinotta, S. Selleri, L. Vincetti, M. Zoboli, "Perturbation Analysis of Dispersion Properties in Photonic Crystal Fibers through the Finite Element Method", *IEEE/OSA Journal of Lightwave Technology*, vol. 20, n. 8, pp.1433-1442, August 2002.
81. A. Cucinotta, S. Selleri, L. Vincetti, M. Zoboli, "Mesh Truncation in Finite Element Modal Analysis of Dielectric Waveguides", *Electromagnetics*, vol. 22, n. 4, pp. 331-343, May 1<sup>st</sup> 2002.
82. S. Selleri, L. Vincetti, M. Zoboli, "Truncation of Finite Element Mesh for Modal Analysis of Dielectric Waveguides", *Microwave and Optical Technology Letters*, vol. 32, n. 3, pp. 178-182, February 5<sup>th</sup>, 2002.
83. A. Cucinotta, S. Selleri, L. Vincetti, M. Zoboli, "Impact of the Cell Geometry on the Spectral Properties of Photonic Crystal Structures", *Applied Physics B*, vol.73, pp. 595-600, 2001.
84. S. Selleri, J. Petráček, "Modal analysis of rib waveguide through finite element and mode matching methods", *Optical and Quantum Electronics*, vol. 33, n. 4/5, pp. 373-386, April 2001.

85. S. Selleri, L. Vincetti, A. Cucinotta, M. Zoboli, "Complex FEM Modal Solver of Optical Waveguides with PML Boundary Conditions", *Optical and Quantum Electronics*, vol. 33, n. 4/5, pp. 359-371, April 2001.
86. S. Selleri, L. Vincetti, M. Zoboli, "Full-Vector Finite-Element Beam Propagation Method for Anisotropic Optical Device Analysis", *IEEE Journal of Quantum Electronics*, vol. 36, n. 12, pp. 1392-1401, December 2000.
87. L. Vincetti, A. Cucinotta, S. Selleri, M. Zoboli, "Three-Dimensional Finite-Element Beam Propagation Method: Assessments and Developments", *Journal of Optical Society of America A*, vol. 17, n. 6, pp. 1124-1131, June 2000.
88. S. Selleri, M. Zoboli, "Boundary conditions and use of symmetries in electromagnetic waveguide sparse matrix finite element method problems", *International Journal of Numerical Modelling: Electronic Networks, Devices and Fields*, vol. 13, n. 2-3, pp. 147-154, March-June 2000, Special Issue: "Finite Elements for Microwave Engineering", edited by P. Guillon, T. Itoh and G. Pelosi.
89. A. Cucinotta, G. Pelosi, S. Selleri, L. Vincetti, M. Zoboli, "Perfectly Matched Anisotropic Layers for Optical Waveguides Analysis through the Finite Element Beam Propagation Method", *Microwave and Optical Technology Letters*, vol. 23, n. 2, pp. 67-69, October 1999.
90. A. Cucinotta, S. Selleri, L. Vincetti, M. Zoboli, "Active Nonlinear Integrated Optical Devices: a Numerical Analysis", *Optical and Quantum Electronics*, vol. 31, n. 9/10, pp. 1073-1084, October 1999.
91. A. Cucinotta, S. Selleri, L. Vincetti, "Nonlinear Finite-Element Semivectorial Propagation Method for Three Dimensional Optical Waveguides", *IEEE Photonics Technology Letters*, vol. 11, n. 2, pp. 209-211, February 1999.
92. S. Selleri, L. Vincetti, A. Cucinotta, "Finite Element Method Resolution of Nonlinear Helmholtz Equation", *Optical and Quantum Electronics*, vol. 30, pp. 457-465, 1998.
93. A. Cucinotta, S. Selleri, L. Vincetti, M. Zoboli, "Numerical and Experimental Analysis of Erbium Doped Fiber Linear Cavity Laser", *Optics Communications*, vol. 156, pp. 264-270, November 1998.
94. E. Montanari, S. Selleri, L. Vincetti, M. Zoboli, "Finite-Element Full-Vectorial Propagation Analysis for Three Dimensional z-Varying Optical Waveguides", *IEEE/OSA Journal of Lightwave Technology*, vol. 16, n. 4, pp. 703-714, April 1998.
95. E. Montanari, S. Selleri, L. Vincetti, M. Zoboli, "Finite-Element Formulation for Full-Vectorial Propagation Analysis in Three Dimensional Optical Waveguides", *IEEE Photonics Technology Letters*, vol.9, n.9, pp.1244-1246, September 1997.
96. A. Cucinotta, S. Dallargine, S. Selleri, C. Zilioli, M. Zoboli, "Modeling of Erbium Doped Fiber Ring Laser", *Optics Communications*, vol.141, pp. 21-24, August 1997.
97. S. Selleri, M. Zoboli, "Performance Comparison of Finite Element Approaches for Electromagnetic Waveguides", *Journal of Optical Society of America A*, vol.14, n.7, pp.1460-1466, July 1997.
98. S. Selleri, M. Zoboli, "Stability Analysis of Nonlinear TE Polarized Waves in Multiple Quantum Well Waveguides", *IEEE Journal of Quantum Electronics*, QE-31, n.10, pp. 1785-1789, October 1995.
99. M. Montagna, S. Selleri, M. Zoboli, "Nonlinear Refractive Index in Erbium Doped Optical Amplifiers", *Optical and Quantum Electronics*, vol. 27, pp. 871-880, 1995.
100. S. Selleri, M. Zoboli, "An Improved Finite Element Method Formulation for the Analysis of Nonlinear Anisotropic Dielectric Waveguides", *IEEE Transactions on Microwave Theory and Techniques*, MTT-43, n.4, pp. 887-892, April 1995.
101. M. Zoboli, S. Selleri, "Analysis of Nonlinear Slab Waveguides through FEM Formulations" *Compele*, vol. 13, suppl. A, pp. 347-352, May 1994.

- 102.M. Zoboli, S. Selleri, "Finite Element Analysis of TE and TM Modes in Nonlinear Planar Waveguides", International Journal of Nonlinear Optical Physics, vol. 3, n.1, January 1994.
- 103.M. Zoboli, F. Di Pasquale, S. Selleri, "Full Vectorial and Scalar Solutions of Nonlinear Optical Fibers", Optics Communications, vol. 97, pp. 11-15, March 1993.

## International Conferences

- 104.L. Rosa, S. Mckee, L. Vincetti, F. Poli, S. Selleri, A. Cucinotta, "Thermo-optic effects in multicore fibers for high power lasers," SPIE Photonics Europe, March 29 - April 2, 2020, Strasbourg, France (Invited).
- 105.D. Skiani, M. Konstantaki, D. Vurro, A. Cucinotta, S. Selleri, S. Iannotta, S. Pissadakis, "Organic vapor optical fiber sensors based on silk fibroin transduction," SPIE Photonics Europe, March 29 - April 2, 2020, Strasbourg, France.
- 106.M. Barozzi, A. Candiani, M. Sozzi, A. Tonelli, A. Cucinotta, S. Selleri, "Cheap, Smart and Reliable Technology for Biosensors and Diagnostics Tools," Paper M3.1, 4th International Conference on Biophotonics - BioPhotonics 2019, September 15-18, 2019, Taipei, Taiwan (Invited).
- 107.R. Foresti, S. Rossi, S. Selleri, "Bio-Composite Materials: Nano-Functionalization of 4D Bio-Engineered Scaffold," Paper T4.3, 4th International Conference on Biophotonics - BioPhotonics 2019, September 15-18, 2019, Taipei, Taiwan.
- 108.S. Selleri, "Heat Load Effect in Coupled-Uncoupled Modes of Yb doped Multi-Core Fibers," Workshop on Laser Systems and Photonics, in the 55th International Conference on Microelectronics, Devices and Materials 25-27 September 2019, Bled, Slovenia (Invited).
- 109.S. Mckee, F. Poli, S. Selleri, A. Cucinotta, L. Rosa, L. Vincetti, "Guidance properties and thermal effects in 9-core Yb-doped fiber for high power applications," 5th International Forum on Research and Technologies for Society and Industry - IEEE RTSI 2019, September 9-12, 2019, Florence, Italy.
- 110.L. Rosa, S. Mckee, C. Molardi, F. Poli, S. Selleri, L. Vincetti, A. Cucinotta, "Phasing and Guidance Properties of Multi-Core Fibers under Heat Load," CLEO/Europe-EQEC 2019, Munchen, 23-27 June 2019, CJ-P.77.
- 111.F. Poli, J. Laegsgaard, A. Cucinotta, S. Selleri, "Modal Properties of Yb-Doped 4-Core Fibers under Heat Load," CLEO/Europe-EQEC 2019, Munchen, 23-27 June 2019.
- 112.S. Selleri, "Boosting accessibility of diagnostics tools for 3D printing, consumer electronics, digital imaging and open source software conversion," SPIE Optical Metrology 2019, Munchen, 23-27 June 2019, 11060-22 (Invited).
- 113.J. Lægsgaard, F. Poli, A. Cucinotta, S. Selleri, "Thermo-optic Mode Instabilities in Single- and Dual-core Amplifiers," Photonics & Electromagnetics Research Symposium - PIERS 2019, June 17-20, 2019, Rome, Italy.
- 114.S. Mckee, L. Rosa, F. Poli, S. Selleri, L. Vincetti, A. Cucinotta, "Electromagnetic Analysis of a 9-core Yb-doped Fiber for High Power Applications," Photonics & Electromagnetics Research Symposium - PIERS 2019, June 17-20, 2019, Rome, Italy.
- 115.K. Tragni, F. Poli, S. Selleri, A. Cucinotta, "Cooling System Impact on Temperature Distribution in Multi-core Photonic Crystal Fibers," Photonics & Electromagnetics Research Symposium - PIERS 2019, June 17-20, 2019, Rome, Italy.
- 116.J. Petracek, A. Cucinotta, F. Poli, S. Selleri, "Transverse Mode Instability in High-power Fiber Amplifiers through the Coupled Mode Theory," Photonics & Electromagnetics Research Symposium - PIERS 2019, June 17-20, 2019, Rome, Italy.

117. D. Vurro, G. Violakis, D. Skiani, M. Konstantaki, A. Cucinotta, S. Selleri, S. Iannotta, and S. Pissadakis, "Silk Fibroin Infiltrated Photonic Crystal Fibers," Photonics & Electromagnetics Research Symposium - PIERS 2019, June 17-20, 2019, Rome, Italy.
118. A. Cucinotta, F. Pasquali, M. Barozzi, A. Tonelli, A. Candiani, L. Vicetti, and S. Selleri, "Smartphone-based Approach for Colorimetric Dipstick Analysis", Photonics & Electromagnetics Research Symposium - PIERS 2019, June 17-20, 2019, Rome, Italy.
119. C. Molardi, S. H. Pallangal, L. Rosa, L. Vincetti, F. Poli, S. Selleri, A. Cucinotta, "Guidance properties and phase shift of a 9-core fiber amplifier for high power operation in presence of consistent thermal load," SPIE Photonics West 2019, February 2-7, 2019, San Francisco CA, USA.
120. S. Selleri, S.H. Pallangal, L. Vincetti, L. Rosa, F. Poli, A. Cucinotta, "Modal guidance and phase shift in thermally loaded multi-core fibers," International Conference on Fiber Optics and Photonics - PHOTONICS 2018, December 12-15, 2018, New Delhi, India, TE1-I2 (Invited).
121. J. Petracek, J. Laegsgaard, A. Cucinotta, F. Poli, S. Selleri, "Coupled-Mode Theories for Transverse Mode Instability in High-Power Fiber Amplifiers," International Conference on Fiber Optics and Photonics - PHOTONICS 2018, December 12-15, 2018, New Delhi, India, TP036.
122. Shahul H. Pallangal, Federica Poli, Stefano Selleri, Annamaria Cucinotta, "Thermal Dependence of Mode Properties in 16-Core Fibers for High Power Laser Operation," International Conference on Fiber Optics and Photonics - PHOTONICS 2018, December 12-15, 2018, New Delhi, India, TF1-C2.
123. Lorenzo Rosa, H. Mckee, F. Poli, S. Selleri, L. Vincetti, A. Cucinotta, "Thermally-Driven Mode Coupling in Multi-Core Optical Fibers," Advanced Photonics: OSA Optics & Photonics Congress, 2-5 July 2018, ETH Zurich, Switzerland.
124. C. Molardi, F. Poli, R. Dauliat, B. Leconte, D. Darwich, R. du Jeu, M.A. Malleville, R. Jamier, K. Tragni, A. Cucinotta, S. Selleri, P. Roy, "Design of an amplifier model accounting for thermal effect in fully aperiodic large pitch fibers," SPIE Photonics West 2018, January 27 - February 1, 2018, San Francisco CA, USA.
125. C. Fornaini, E. Merigo, F. Poli, J.-P. Rocca, S. Selleri, A. Cucinotta, "Ultrastructural analysis of dental ceramic surface processed by a 1070 nm fiber laser," *Laser Florence 2017: Advances in Laser Medicine*, November 9-11, 2017, Florence, Italy.
126. C. Molardi, F. Poli, K. Tragni, L. Rosa, J. Petráček, S. Selleri, A. Cucinotta, "Inner Cladding Influence on Amplification Properties in Fiber Amplifiers Based on Symmetry Free Design," 5th Workshop on Specialty Optical Fibers and Their Applications - WSOF 2017, October 11-13, 2017, Limassol, Cyprus.
127. C. Molardi, F. Poli, L. Rosa, A. Cucinotta, S. Selleri, "Mode evolution in heat-loaded Yb-doped microstructured fibers," 7th EOS Topical Meeting on Optical Microsystems (OμS'17), September 10-14, 2017, Anacapri, Island of Capri, Italy.
128. C. Molardi, L. Rosa, F. Poli, S. Selleri, A. Cucinotta, "Improved performances of photonic crystal fibers for high power laser operation," 3<sup>o</sup> International Forum on Research and Technologies for Society and Industry - IEEE RTSI 2017, September 11-13, 2017, Modena, Italy.
129. K. Tragni, C. Molardi, F. Poli, L. Rosa, A. Cucinotta, S. Selleri, "Thermal Induced Dynamics of Gain Competition in Yb-doped Symmetry-Free Photonic Crystal Fibers," URSI General Assembly Scientific Symposium - GASS 2017, August 19-26, 2017, Montreal, Canada.
130. C. Fornaini, F. Poli, E. Merigo, S. Selleri, A. Cucinotta, "Ultrastructural analysis of dental ceramic surface processed by a 1070 nm fiber laser," 3rd "PARMA" NANO-DAY, July 12-14, 2017, Parma, Italy.
131. C. Molardi, F. Poli, A. Cucinotta, S. Selleri, "Design of micro-structured fiber for improved high power laser operation," 3rd "PARMA" NANO-DAY, July 12-14, 2017, Parma, Italy.

132. L. Vincetti, C. Molardi, F. Giovanardi, F. Poli, S. Selleri, A. Cucinotta, "Photonic Crystal Fibers for Label-free DNA Detection", *Photonics@SG*, 31 July – 4 August 2017, Singapore.
133. Federica Poli, Carlo Molardi, Lorenzo Rosa, Annamaria Cucinotta, Stefano Selleri "Gain Competition in Yb-doped Symmetry-Free Photonic Crystal Fibers under severe heat load", *CJ-P37, CLEO/Europe-EQEC 2017*, Munich, Germany, 25-29 June 2017.
134. Carlo Fornaini, Federica Poli, Elisabetta Merigo, Stefano Selleri, Chiara Cavatorta, Annamaria Cucinotta, "1070 nm fiber laser and soft tissues oral surgery: ex vivo study with FBG temperature recording", *CL-P6, CLEO/Europe-EQEC 2017*, Munich, Germany, 25-29 June 2017.
135. F. POLI, E. COSCELLI, L. ROSA, A. CUCINOTTA, S. SELLERI, "Thermal effects and gain competition in Yb-doped large mode area fibers for high-power applications", *INTERNATIONAL CONFERENCE ON TRANSPARENT OPTICAL NETWORKS – ICTON 2016*, Trento, Italy, 10 – 14 July 2016.
136. E. Coscelli, F. Poli, L. Rosa, A. Cucinotta, S. Selleri, "Modelling of thermal effects and gain competition in Yb-doped large-mode-area photonic crystal fibers (invited paper)," *SPIE Photonics Europe 2016*, Brussels, Belgium, 9886-23.
137. C. Fornaini, E. Merigo, S. Selleri, A. Cucinotta, "Blue diode laser: a new approach in oral surgery?" *SPIE Photonics West 2016*, February 13-18, 2106, San Francisco CA, USA, 9692-13.
138. C. Fornaini, E. Merigo, S. Selleri, A. Cucinotta, "Radiation absorption in different kinds of tissue analysis: ex vivo study with supercontinuum laser source," *SPIE Photonics West 2016*, February 13-18, 2106, San Francisco CA, USA, 9706-43.
139. A. Cucinotta, S. Selleri, A. Tonelli, A. Candiani, M. Sozzi, "Field-portable and cost-effective devices for biological and chemical assays", *BioPhotonics 2015*, 20 – 22 May 2015, Florence, Italy.
140. K. Tragni, A. Cucinotta, S. Selleri, A. Tonelli, A. Candiani, M. Sozzi, "Development of a fluorescence - based optical sensor for nucleic acid detection", *BioPhotonics 2015*, 20 – 22 May 2015, Florence, Italy.
141. E. Coscelli, F. Poli, J. Li, A. Cucinotta, S. Selleri, "Highly nonlinear chalcogenide suspended-core fibers for applications in the mid-infrared (invited paper)," *SPIE Europe Optics and Optoelectronics 2015*, April 13-16, 2015, Prague, Czech Republic.
142. R. Dauliat, E. Coscelli, F. Poli, A. Benort, D. Darwich, R. Jamier, K. Schuster, S. Grimm, A. Cucinotta, S. Selleri, F. Salin, P. Roy, "Large mode area aperiodic fiber designs for robust singlemode emission under high thermal load," *SPIE Europe Optics and Optoelectronics 2015*, April 13-16, 2015, Prague, Czech Republic.
143. E. Coscelli, F. Poli, L. Rosa, A. Cucinotta, S. Selleri, "Modeling of single-mode regime in active large mode area photonic crystal fibers under severe heat load," *Optical Wave & waveguide Theory and Numerical Modelling*, April 17-18, 2015, London, UK.
144. L. Rosa, E. Coscelli, F. Poli, A. Cucinotta, S. Selleri, "Full-vector modeling of thermally-driven gain competition in Yb-doped large-mode-area photonic-crystal fiber," *Optical Wave & waveguide Theory and Numerical Modelling*, April 17-18, 2015, London, UK.
145. A. Candiani, M. Sozzi, A. Tonelli, A. Cucinotta, R. Corradini, S. Selleri, "Suspended core photonic crystal Fibers fluorescence sensor platform for nucleic acid detection," *SPIE Photonics West 2015*, February 7-12, 2015, San Francisco CA, USA, 9317-32.
146. Giuseppe Lagori, Elisabetta Merigo, Annamaria Cucinotta, Paolo Vescovi, Stefano Selleri, "M. Sozzi, C. Fornaini, G. Lagori, E. Merigo, A. Cucinotta, P. Vescovi, S. Selleri," *SPIE Photonics West 2015*, February 7-12, 2015, San Francisco CA, USA, 9306-7.
147. C. Molardi, H. Liang, X. Yu, A. Cucinotta, S. Selleri, Y. Zhang, "Modes analysis in random structures varying the disorder magnitude," *SPIE Photonics West 2015*, February 7-12, 2015, San Francisco CA, USA, 9357-42.



148. C. Fornaini, E. Merigo, M. Sozzi, A. Cucinotta, P. Vescovi, S. Selleri, "810 nm, 980 nm, 1470 nm and 1950 nm diode laser comparison: a preliminary ex vivo study on oral soft tissues," SPIE Photonics West 2015, February 7-12, 2015, San Francisco CA, USA, 9306-5.
149. F. Poli, E. Coscelli, A. Cucinotta, S. Selleri, F. Salin, "Yb-doped large mode area fibers with reduced cladding symmetry," SPIE Photonics West 2015, February 7-12, 2015, San Francisco CA, USA, 9344-3.
150. E. Coscelli, F. Poli, J. Li, A. Cucinotta, S. Selleri, "Chalcogenide suspended-core fibers for supercontinuum generation in the mid-infrared," SPIE Photonics West 2015, February 7-12, 2015, San Francisco CA, USA, 9347-59.
151. E. Merigo, M. Sozzi, T. Ciociola, S. Conti, C. Fornaini, S. Selleri, P. Vescovi, A. Cucinotta, "Photodynamic therapy: a synergy between light and colors," SPIE Photonics West 2015, San Francisco CA, USA, 9306-9.
152. A. Candiani, M. Sozzi, A. Cucinotta, S. Selleri, "Laser processing of mono- and multi-layer polymeric materials," General Assembly and Scientific Symposium (URSI GASS), 2014 XXXIth URSI, August 16-23, 2014, Beijing, China.
153. A. Candiani, E. Coscelli, F. Poli, C. Molardi, A. Cucinotta, S. Selleri, "Symmetry-free large-mode area rod-type photonic crystal fibers," General Assembly and Scientific Symposium (URSI GASS), 2014 XXXIth URSI, August 16-23, 2014, Beijing, China.
154. A. Candiani, A. Cucinotta, S. Selleri, "Photonic crystal fibers platform for biosensing applications," General Assembly and Scientific Symposium (URSI GASS), 2014 XXXIth URSI, August 16-23, 2014, Beijing, China.
155. A. Candiani, A. Cucinotta, S. Selleri, "Microstructured optical fibers for chemical and biological analysis," ICTON 2014, July 6-10, 2014, Graz, Austria, Mo.D5.2.
156. A. Cucinotta, E. Coscelli, F. Poli, S. Selleri, "Thermo-optical effects in large mode area photonic crystal fibers," ICTON 2014, July 6-10, 2014, Graz, Austria, We.A6.1.
157. M. Sozzi, D. Menossi, A. Bosio, A. Cucinotta, N. Romeo, S. Selleri, "Laser scribing of CIGS based thin films solar cells," CLEO:2014, June 8-13, 2014, San Jose CA, USA, JW2A.136.
158. E. Coscelli, C. Molardi, F. Poli, A. Cucinotta, S. Selleri, "Tm-doped Rod-type Photonic Crystal Fibers with Symmetry-Free Cladding," CLEO:2014, June 8-13, 2014, San Jose CA, USA, JTh2A.22.
159. E. Coscelli, C. Molardi, F. Poli, A. Cucinotta, S. Selleri, "Double-cladding photonic crystal fibers with reduced cladding symmetry for Tm-doped lasers," SPIE Photonics Europe, April 14-17, 2014, Brussels, Belgium, 9128-8.
160. A. Candiani, S. Giannetti, H. T. Salloom, M. Sozzi, A. K. Ahmad, A. Cucinotta, A. Hadi Al-Janabi, S. Selleri, "Hollow core photonic crystal fibers for biological recognition processes," SPIE Photonics Europe, April 14-17, 2014, Brussels, Belgium, 9128-4.
161. M. Sozzi, A. H. Lutey, A. Cucinotta, S. Selleri, P. G. Molari, "Laser processing of thin films for industrial packaging," SPIE Photonics Europe, April 14-17, 2014, Brussels, Belgium, 9135-33.
162. E. Coscelli, T. T. Alkeskjold, A. Cucinotta, S. Selleri, "Design of double-cladding large mode area all-solid photonic bandgap fibers," SPIE Photonics West 2014, 1-6 February, 2014, San Francisco CA, USA, 8961-14.
163. C. Molardi, E. Coscelli, A. Cucinotta, S. Selleri, "Thermo-optical effects in Tm-doped large mode area photonic crystal fibers," SPIE Photonics West 2014, 1-6 February, 2014, San Francisco CA, USA, 8961-97.
164. A. Candiani, Hussein T. Salloom, E. Coscelli, M. Sozzi, A. Manicardi, Ahmad K. Ahmad, A. Hadi Al-Janabi, R. Corradini, G. Picchi, A. Cucinotta, S. Selleri, "Bio-functionalized hollow core photonic crystal fibers for label-free DNA detection," SPIE Photonic West, February 1-6, 2014, San Francisco, CA, USA, 8938-26.

165. M. Masruri, L. Vincetti, C. Molardi, E. Coscelli, A. Cucinotta, S. Selleri, "Confinement loss scaling law analysis in tube lattice fibers for terahertz applications," SPIE Photonics West 2014, 1-6 February, 2014, San Francisco CA, USA, 8985-14.
166. A. Candiani, S. Giannetti, A. Bertucci, A. Manicardi, R. Corradini, M. Konstantaki, S. Pissadakis, A. Cucinotta, S. Selleri, "Biophotonics photonic crystal fibers platform for nanoparticle-enhanced DNA," The Second Biophotonics Conference, July 17-19, 2013, National Taiwan University, Taipei, Taiwan (INVITED PAPER).
167. A. Candiani, S. Giannetti, Hussein T. Salloom, M. Sozzi, A. Manicardi, A. Hadi Al-Janabi, R. Corradini, A. Cucinotta, S. Selleri, "Functionalized hollow core fibers for biosensing applications," EOS Topical Meetings, 12-14 September 2013, Capri, Italy.
168. A. Candiani, S. Giannetti, Hussein T. Salloom, M. Sozzi, A. Hadi Al-Janabi, A. Cucinotta, S. Selleri, "Nanoparticle enhanced fiber platform for biosensing applications," EOS Topical Meetings, 12-14 September 2013, Capri, Italy.
169. A. Candiani, S. Giannetti, A. Cucinotta, A. Bertucci, A. Manicardi, M. Konstantaki, W. Margulis, S. Pissadakis, R. Corradini, S. Selleri, "DNA biosensors implemented on PNA-functionalized microstructured optical fibers Bragg gratings," proc. SPIE Optics and Optoelectronics 2013, April 15-18, 2013, Prague, Czech Republic, paper 8775-1 (INVITED PAPER).
170. E. Coscelli, F. Poli, R. Mwad Naife, A. Cucinotta, H. Al-Janabi, S. Selleri, "Comparison of thermally-induced single-mode regime changes in Yb-doped large mode area photonic crystal fibers," proc. SPIE Optics and Optoelectronics 2013, April 15-18, 2013, Prague, Czech Republic, paper 8775-23.
171. E. Coscelli, F. Poli, T. Alkeskjold, M. Jørgensen, A. Cucinotta, S. Selleri, "Enhanced thermal-effect resilience in distributed modal filtering large mode area photonic crystal fibers," CLEO Europe - IQEC 2013, May 12-16, 2013, Munich, Germany, paper CJ-P.2 (568).
172. M. Sozzi, C. Fornaini, A. Cucinotta, E. Merigo, P. Vescovi, S. Selleri, "Dental Tissue Ablation by means of a Picoseconds Laser," CLEO Europe - IQEC 2013, May 12-16, 2013, Munich, Germany, paper CM-P.7 (141).
173. A. Candiani, S. Giannetti, A. Bertucci, R. Mwad Naife, H. Al-Janabi, M. Konstantaki, A. Cucinotta, S. Pissadakis, R. Corradini, S. Selleri, "PNA-modified photonic crystal fibers for DNA detection," CLEO Europe - IQEC 2013, May 12-16, 2013, Munich, Germany, paper CL-P.1 (214).
174. M. Sozzi, F. Manilia, R. Antezza, C. Catellani, A. Candiani, E. Coscelli, A. Cucinotta, S. Selleri, D. Menossi, A. Bosio, "Laser scribing integration of polycrystalline thin film solar cells," proc. SPIE Photonics West 2013, February 2-7, 2013, San Francisco CA, USA, paper 8608-29.
175. M. Sozzi, A. H. Lutey, K. Tragni, S. Carmignato, S. Selleri, A. Cucinotta, P. G. Molari, "Picosecond and nanosecond pulsed laser ablation of aluminium foil," Proc. of the ASME 2013 Manufacturing Science and Engineering Conference, MSEC 2013, June 10-14, 2013, Madison, USA.
176. A. H. Lutey, M. Sozzi, S. Selleri, A. Cucinotta, P. G. Molari, "Picosecond and nanosecond pulsed laser ablation of aluminium, polypropylene, polyethylene, and their thin film combinations," proc. SPIE Photonics West 2013, February 2-7, 2013, San Francisco CA, USA, paper 8608-03.
177. E. Coscelli, F. Poli, M. M. Jørgensen, T. T. Alkeskjold, L. Leick, J. Broeng, M. Sozzi, A. Candiani, A. Cucinotta, S. Selleri, "Thermal effect-resilient design of large mode area double-cladding Yb-doped photonic crystal fibers," proc. SPIE Photonics West 2012, February 2-7, 2013, San Francisco CA, USA, paper 8601-96.
178. 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," proc. SPIE Photonics West 2012, February 2-7, 2013, San Francisco CA, USA, paper 8576-13.

179. Y. Hernandez, E. Lotter, V. Bermudez, A. Bosio, F. Salin, M. Hueske, S. Selleri, A. Bertrand, C. Duterte, "Investigation of CIS/CIGS and CdTe solar cells scribing with high-power fibre short pulse lasers", Proceedings of SPIE - Photonics for Solar Energy Systems IV, Brussels, Belgium, 16-18 April 2012, Volume 8438.
180. M. Sozzi, C. Fornaini, A. Cucinotta, E. Merigo, P. Vescovi, S. Selleri, "Use of 1064 nm diode pumped solid state laser to ablate dental surfaces: preliminary "in vitro" study," Laser Florence 2012, November 9-10, 2012, Florence, Italy. A. Candiani, M. Sozzi, A. Cucinotta, S. Selleri, "Optical fiber grating devices for label-free DNA detection", EOS Annual Meeting 2012 - EOSAM 2012, TOM1 Biophotonics, 25 - 28 September 2012, Aberdeen, UK.
181. M. Sozzi, C. Catellani, A. Cucinotta, S. Selleri, D. Menossi, R. Dharmadasa, A. Bosio, "Laser micromachining of thin film materials", EOS Annual Meeting 2012 - EOSAM 2012, TOM7 Optical Systems for the Energy & Production Industries, 25 - 28 September 2012, Aberdeen, UK.
182. Enrico Coscelli, Federica Poli, Mette M. Jørgensen, Marko Laurila, Jesper Laegsgaard, Thomas T. Alkeskjold, Lasse Leick, Jes Broeng, Annamaria Cucinotta, Stefano Selleri, "Thermally-induced Changes in Distributed Modal Filtering Yb-doped Double Cladding Photonic Crystal Fibers", 5th EPS-QEOD EUROPHOTON CONFERENCE - Solid State, Fibre, and Waveguide Coherent Light Sources, 26-31 August 2012, Stockholm, Sweden.
183. S. Selleri, A. Bosio, A. Cucinotta, M. Sozzi, D. Menossi, Y. Hernandez, A. Bertrand, C. Duterte, "Optimization of pulsed fiber laser scribing for CdTe and CIGS solar cells," ICTON 2012, July 2-5, 2012, Coventry, UK (invited paper).
184. E. Coscelli, F. Poli, M. M. Jørgensen, M. Laurila, J. Lægsgaard, T. T. Alkeskjold, L. Leick, J. Broeng, A. Cucinotta, S. Selleri, "Thermal effects in Yb-doped double cladding distributed modal filtering rod-type fibers," ICTON 2012, July 2-5, 2012, Coventry, UK.
185. A. Candiani, M. Sozzi, A. Cucinotta, S. Selleri, "Optical fiber grating sensors for label-free DNA biosensing," NanoBio Europe 2012, 18 - 20 June 2012, Varese, Italy.
186. A. Candiani, A. Argyros, R. Lwin, S.G. Leon-Saval, G. Zito, S. Selleri, S. Pissadakis, "A magnetic field sensor based on a ferrofluid infiltrated PMMA-microstructured optical fibre," Specialty Optical Fibers & Applications - SOFOSA, 17 - 20 June 2012, SW1E.3, Colorado, USA.
187. A. Candiani, A. Argyros, R. Lwin, S.G. Leon-Saval, G. Zito, S. Selleri, S. Pissadakis "A grating-less in-fibre magnetometer realised in a polymer-MOF infiltrated using ferrofluid," SPIE Photonics Europe 2012, paper 8426-13, Bruxelles, Belgium. -BEST STUDENT PAPER AWARD-
188. A. Candiani, M. Sozzi, A. Cucinotta, S. Selleri, R. Veneziano, R. Corradini, R. Marchelli, P. Childs, S. Pissadakis, "Label-free DNA biosensor based on double tilted fiber Bragg grating," proc. SPIE Photonics West 2012, January 21-26, 2012, San Francisco, CA, USA, paper 8218-23.
189. S. Petersen, M M. Jørgensen, E. Coscelli, F. Poli, S. Selleri, M. Laurila, T. T. Alkeskjold, J. Lægsgaard, "Ytterbium-doped large-mode-area photonic crystal fiber amplifier with gain shaping for use at long wavelengths," SPIE Photonics West 2012, January 21-26, San Francisco, CA, USA, 2012, paper 8237-132.
190. F. Poli, E. Coscelli, T. T. Alkeskjold, A. Cucinotta, S. Selleri, L. Leick, J. Broeng, "Avoided-crossing based modal cut-off analysis of 19-cell double-cladding photonic crystal fibers," proc. SPIE Photonics West 2012, January 21-26, 2012, San Francisco, CA, USA, paper 8237-110.
191. E. Coscelli, F. Poli, S. Petersen, T. T. Alkeskjold, A. Cucinotta, S. Selleri, L. Leick, J. Broeng, "Anti-symmetric hybrid photonic crystal fibers with enhanced filtering and bending properties," proc. SPIE Photonics West 2012, January 21-26, 2012, San Francisco, CA, USA, paper 8237-129.
192. S. Selleri, "Microstructured and standard optical fibers for the detection of relevant components in biological fluids", Micro- and nano-photonic materials and devices, Trento, Italy, 16-18 January 2012, (Invited).

193. M. Sozzi, A. Candiani, A. Cucinotta, R. Veneziano, R. Corradini, R. Marchelli, P. Childs, S. Pissadakis, S. Selleri, "Label-free DNA sensor based on a Double Tilted Fiber Bragg Gratings", 4th International Workshop on Multianalyte Biosensing Devices, September 7-8, 2011, Athens, Greece
194. E. Coscelli, F. Poli, S. Petersen, T. T. Alkeskjold, A. Cucinotta, S. Selleri, L. Leick, J. Broeng, "Bending properties of anti-symmetric hybrid photonic crystal fibers," proc. IQEC/CLEO Pacific Rim 2011, August 28 - September 2, 2011, Sidney, Australia.
195. S. Selleri, "Optical fiber platform for the detection of biological components", Nanophotonics for sensing & nonlinear optics: Next generation photonic materials, structures & devices, 24-26th August 2011, Serafino, McLaren Vale, South Australia.
196. A. Candiani, M. Sozzi, A. Cucinotta, S. Selleri, R. Veneziano, R. Corradini, R. Marchelli, P. Childs, S. Pissadakis, "Fiber Bragg gratings for label-free detection of biomolecules," Nanophotonics for sensing & nonlinear optics: Next generation photonic materials, structures & devices, 24-26th August 2011, Serafino, McLaren Vale, South Australia.
197. S. Selleri, "Biosensor optical fiber platform for the detection of relevant components in biological fluids", 14th International SAOT Workshop on "Fiber Lasers, Sensors and Materials", July 27th -29th, 2011 in Reichenschwand, Germany (Invited).
198. 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 gratings for label-free DNA detection," 2011 International Workshop on Biophotonics, June 8-10, 2011, Parma, Italy, paper We2.4.
199. M. Sozzi, E. Coscelli, F. Poli, A. Cucinotta, R. Corradini, R. Marchelli, M. Konstantaki, S. Pissadakis, S. Selleri, "Long period grating-based fiber optic sensor for label-free DNA detection," 2011 International Workshop on Biophotonics, June 8-10, 2011, Parma, Italy, paper We2.2. E. Coscelli, F. Poli, D. Passaro, A. Cucinotta, S. Selleri, T. T. Alkeskjold, L. Leick, J. Broeng, "Single-Mode Regime of Large Mode Area Double Cladding Photonic Crystal Fibers," CLEO Europe, May 22-26, 2011, Munich, Germany, paper CJ.P.20.
200. 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, May 22-26, 2011, Munich, Germany, paper JSIV1.2.
201. Y. Hernandez, A. Bertrand, S. Selleri, F. Salin, L. Leick, M. Hueske, R. Petkovsek, F. Ferrario, N. Lichtenstein, "Recent progress on the ALPINE (Advanced Lasers for Photovoltaic INDUSTRIAL processing Enhancement) FP7 integrated project," Fiber Laser Application - FILAS 2011, February 16, 2011, Istanbul, Turkey, paper FThB1.
202. E. Coscelli, F. Poli, T. T. Alkeskjold, D. Passaro, A. Cucinotta, S. Selleri, L. Leick, J. Broeng, "Single-mode regime of 19-cell Yb-doped double-cladding photonic crystal fibers," SPIE Photonics West 2011, January 22-27, 2011, San Francisco (CA), United States, paper 7914-67.
203. F. Poli, E. Coscelli, T. T. Alkeskjold, D. Passaro, A. Cucinotta, S. Selleri, L. Leick, J. Broeng, "Hybrid large mode area photonic crystal fiber for distributed spectral filtering and single-mode operation," SPIE Photonics West 2011, January 22-27, 2011, San Francisco (CA), United States, paper 7914-61.
204. M. Sozzi, A. Cucinotta, R. Corradini, R. Marchelli, M. Konstantaki, S. Pissadakis, S. Selleri, "Modification of a long-period grating based fiber optic for DNA biosensing," SPIE Photonics West 2011, January 22-27, 2011, San Francisco (CA), United States, paper 7894-20.
205. S. Selleri, "Recent status and prospects of EU-funded ALPINE project," SPIE Photonics West 2011, January 22-27, 2011, San Francisco (CA), United States, paper 7921-26 (invited).
206. F. Poli, E. Coscelli, D. Passaro, A. Cucinotta, T. T. Alkeskjold, L. Leick, J. Broeng, S. Selleri, "Effective area of a bent polarizing double-clad Yb-doped photonic crystal fiber," IEEE Photonics Society Winter Topical Meetings 2011, January 10-12, 2011, Keystone (CO), United States, paper MD 3.3.

- 207.S. Selleri "Microstructured optical fibers exploitation: from photovoltaics to biosensing," IEEE Photonics Society Winter Topical Meetings 2011, January 10-12, 2011, Keystone (CO), United States (invited).
- 208.S. Selleri, A. Cucinotta, F. Poli, "Active photonic crystal fiber amplifiers and lasers", The 9th International Conference on Optical Communications and Networks (ICOON2010), 24-27 October 2010, Nanjing, China (invited).
- 209.E. Coscelli, F. Poli, D. Passaro, A. Cucinotta, S. Selleri, C. B. Olausson, L. Leick, J. Broeng, "Bending-induced single-mode behaviour of a polarizing double-clad Yb-doped photonic crystal fiber," European Conference on Optical Communication - ECOC2010, September 19-23, 2010, Turin, Italy.
- 210.L. Rosa, K. Saitoh, M. Koshiba, M. Pal, M. Paul, D. Ghosh, T. Mahanty, S. Bhadra, L. Vincetti, S. Selleri, "Realistic Squared-Rods Circular F-Doped Large-Mode-Area Leakage Channel Fibers with Low Bending Loss", Integrated Photonics Research, Silicon and Nano Photonics (IPR), July 25-28, 2010, Monterey, California, USA.
- 211.A. Cucinotta, S. Selleri, "Yb-doped Photonic Crystal Fibers for the Scribing of Photovoltaic Modules", Photoluminescence in rare earths: Photonic Materials and Devices (PRE'10), April 28-30, 2010, Firenze, Italy.
- 212.E. Coscelli, F. Poli, D. Passaro, A. Cucinotta, S. Selleri, R. Corradini, R. Marchelli, "DNA-recognition by peptide nucleic acid-modified PCFs: from models to real samples", Photonics Europe 2010, April 12-16, 2010, Bruxelles, Belgium.
- 213.E. Coscelli, F. Poli, D. Passaro, A. Cucinotta, S. Selleri, "Guiding properties of kagome-lattice hollow-core fibers", Photonics Europe 2010, April 12-16, 2010, Bruxelles, Belgium.
- 214.F. Poli, E. Coscelli, D. Passaro, A. Cucinotta, S. Selleri, J. Lægsgaard, J. Broeng, "Higher-order mode suppression in rod-type photonic crystal fibers with sectioned doping and enlarged core", Photonics Europe 2010, April 12-16, 2010, Bruxelles, Belgium.
- 215.L. Rosa, K. Saitoh, M. Koshiba, F. Poli, A. Cucinotta, S. Selleri, L. Vincetti, M. Pal, M. Paul, D. Ghosh, S. Badra, "Octagonal large-mode-area leakage channel with reduced bending loss," OFC/NFOEC 2010, March 21-25, 2010, San Diego (CA), United States.
- 216.S. Selleri, A. Cucinotta, F. Poli, D. Passaro, "Yb-doped Rod-type Photonic Crystal Fibers for High Brilliance Lasers", ICO Photonics Conference on Emerging Trends & Novel Metamaterials in Photonics, pp. 63, October 7-9, 2009, Delphi, Greece (invited).
- 217.D. Passaro, M. Fernandez, R. Perez-Herrera, C. Elosua, C. Bariain, S. Selleri, M. Lopez-Amo, "Intensity sensors multiplexing using a multiwavelength ring fiber laser with hybrid serial-tree configuration", 20th International Conferennze on Optical Fiber Sensors - OFS-20, OF101-64, October 5-9, 2009, Edinburgh, UK.
- 218.M. Fernandez, S. Diaz, R. Perez-Herrera, D. Passaro, S. Selleri, M. Quintela, J.M. Lopez Higuera, M. Lopez-Amo, "Resilient long-distance sensor system using a multiwavelength Raman laser", 20th International Conferennze on Optical Fiber Sensors - OFS-20, OF101-69, October 5-9, 2009, Edinburgh, UK.
- 219.E. Coscelli, M. Sozzi, F. Poli, D. Passaro, A. Cucinotta, S. Selleri, R. Corradini, R. Marchelli, "Towards biosensing with suspended core photonic crystal fiber", 3rd EOS Topical Meeting on Optical Microsystems (O $\mu$ S'09), paper 2270, 27-30 September 2009, Capri, Italy.
- 220.S. Selleri, A. Cucinotta, F. Poli, D. Passaro, "Photonic Crystal Fiber Lasers for the Scribing of Photovoltaic Modules", 1st EOS Topical Meeting on Lasers 2009, TML 2165, 27-30 September 2009, Capri, Italy.
- 221.S. Selleri, "ALPINE - Advanced Lasers for Photovoltaic Industrial Processing Enhancement", 24th European Photovoltaic Solar Energy Conference, 3BV.5.97, 21-25 September 2009, Hamburg, Germany.
- 222.F. Poli, J. Lægsgaard, D. Passaro, A. Cucinotta, S. Selleri, J. Broeng, "Sectioned Core Doping Effect on Higher-Order Mode Amplification in Yb-Doped Rod-Type Photonic Crystal Fibers", European Conference on Optical Communication - ECOC2009, P.1.15, September 20-24, 2009, Vienna, Austria.

223. S. Selleri, A. Cucinotta, F. Poli, D. Passaro, "High brilliance fiber lasers for the scribing of photovoltaic modules", 11th International Conference on Transparent Optical Networks - ICTON 2009, Mo.B1.5, June 28 - July 2, 2009, Island of Sao Miguel, Azores, Portugal (invited).
224. D. Passaro, S. Selleri, M. Fernandez-Vallejo, R.A. Perez-Herrera, C.E. Aguado, C. Barriain, M. Lopez-Amo, "Stable Four-Wavelength Ring Resonator with Hybrid Serial-Tree Configuration for Sensing Applications", 11th International Conference on Transparent Optical Networks - ICTON 2009, Th.B2.4, June 28 - July 2, 2009, Island of Sao Miguel, Azores, Portugal. Stefano Selleri, Enrico Coscelli, Federica Poli, Davide Passaro, Annamaria Cucinotta, "Sensing through suspended solid core photonic crystal fiber", CLEO/Europe-EQEC, Paper CH1.4, 14-19 June 2009, ICM Munich, Germany.
225. J. Lægsgaard, F. Poli, D. Passaro, A. Cucinotta, S. Selleri, J. Broeng, "Single-mode amplification in Yb-doped rod-type photonic crystal fibers for high brilliance lasers", CLEO/Europe-EQEC, Paper CJ.P.22, 14-19 June 2009, ICM Munich, Germany.
226. F. Poli, D. Passaro, A. Cucinotta, S. Selleri, J. Lægsgaard, J. Broeng, "Yb-doped rod-type photonic crystal fibers for single-mode amplification", CLEO/IQEC 2009, Paper JThE74, May 31 - June 5, 2009, Baltimore, Maryland, USA.
227. S. Selleri, A. Cucinotta, F. Poli, D. Passaro, "Air-suspended solid core fibers for sensing", European Optics & Optoelectronics Symposium, SPIE-EOO, Paper 7356-61, 20-23 April 2009, Prague, Czech Republic.
228. F. Poli, D. Passaro, A. Cucinotta, S. Selleri, "Dynamic behaviour of an Ytterbium-doped rodlike PCF laser", European Optics & Optoelectronics Symposium, SPIE-EOO, Paper 7357-12, 20-23 April 2009, Prague, Czech Republic.
229. F. Poli, D. Passaro, A. Cucinotta, S. Selleri, "Guiding and amplification properties of rod-type photonic crystal fibers with sectioned core doping", European Optics & Optoelectronics Symposium, SPIE-EOO, Paper 7357-23, 20-23 April 2009, Prague, Czech Republic.
230. F. Poli, D. Passaro, A. Cucinotta, S. Selleri, J. Lægsgaard, J. Broeng, "Guided mode gain competition in Yb-doped rod-type photonic crystal fibers", OFC2009, JThA7, March 24-26, 2009, San Diego, California, USA.
231. F. Poli, L. Vincetti, D. Passaro, A. Cucinotta, S. Selleri, L. Rosa, K. Saitoh, Y. Tsuchida, S.K. Varshney and M. Koshiba, "Fundamental and High-Order Mode Bending Loss in Leakage Channel Fibers", European Conference on Optical Communication - ECOC2008, P.1.6, September 21-25, 2008, Brussels, Belgium.
232. F. Poli, A. Cucinotta, D. Passaro, S. Selleri, J. Lægsgaard, J. Broeng, "Guided mode cutoff in rare-earth doped rod-type PCFs", European Conference on Optical Communication - ECOC2008, P.1.7, September 21-25, 2008, Brussels, Belgium.
233. L. Rosa, K. Saitoh, Y. Tsuchida, S.K. Varshney, M. Koshiba, F. Poli, D. Passaro, A. Cucinotta, S. Selleri, L. Vincetti, "Single-Mode Large-Mode-Area Leakage Channel Fibers with Octagonal Symmetry", Integrated Photonics and Nanophotonics Research and Applications Topical Meeting – IPNRA 2008, IWB3, July 13-16, 2008, Boston, USA.
234. A. Cucinotta, F. Poli, D. Passaro, S. Selleri, "Microstructured Fibers: Modelling, Design and Applications", Integrated Photonics and Nanophotonics Research and Applications Topical Meeting – IPNRA 2008, IWB1, July 13-16, 2008, Boston, USA (invited).
235. F. Poli, D. Passaro, A. Cucinotta, S. Selleri, L. Vincetti, L. Rosa, K. Saitoh, Y. Tsuchida, S.K. Varshney, and M. Koshiba, "Polygonal Large-Mode-Area Leakage Channel Fibers with Reduced Mode Distortion", First Mediterranean Photonics Conference, June 25-28, 2008, Ischia, Italy.
236. S. Selleri, F. Poli, "Doped Fiber Lasers: from Telecom to Industrial Applications", 10th International Conference on Transparent Optical Networks - ICTON 2008, June 22-26, 2008, Athens, Greece (invited).

237. F. Poli, S. Selleri, "Single Air-Hole Ring Polygonal Photonic Crystal Fibers with Reduced Bending Loss and Field Distortion", 10th International Conference on Transparent Optical Networks - ICTON 2008, June 22-26, 2008, Athens, Greece.
238. M. Foroni, D. Passaro, F. Poli, A. Cucinotta, S. Selleri, J. Lægsgaard, A. Bjarklev, "Tailoring of the Transmission Window in Realistic Hollow-Core Bragg Fibers", OFC2008, JWA7, February 24-28, 2008, San Diego, California, USA.
239. F. Poli, A. Cucinotta, M. Foroni, S. Selleri, "Finite-Element Based Photonic Crystal Fiber Analysis: From Solid to Hollow Core Fibers", IEEE-LEOS Winter Topicals 2008 Nonlinear Photonics - Photonic Crystal Fibers: Technology and Applications, Sorrento, Italy, January 14-16, 2008 (invited).
240. D. Passaro, M. Foroni, F. Poli, A. Cucinotta, S. Selleri, J. Lægsgaard, A. Bjarklev, "Bio-Sensor based on a Hollow-Core Bragg Fiber", IEEE-LEOS Winter Topicals 2008 Nonlinear Photonics - Photonic Crystal Fibers: Technology and Applications, Sorrento, Italy, January 14-16, 2008.
241. M. Foroni, F. Poli, D. Passaro, A. Cucinotta, S. Selleri, J. Lægsgaard, A. Bjarklev, "Fundamental and higher-order mode confinement loss spectrum in realistic air-silica hollow-core Bragg fibers", European Conference on Optical Communication - ECOC2007, pp. 139-140, September 16-20, 2007, Berlin, Germany.
242. M. Foroni, F. Poli, D. Passaro, A. Cucinotta, S. Selleri, J. Lægsgaard, A. Bjarklev, "Influence of the cross-section geometry on hollow-core Bragg fiber guiding properties", Integrated Photonics and Nanophotonics Research and Applications Topical Meeting – IPNRA 2007, ITuH1, July 8-11, 2007, Salt Lake City, Utah, USA.
243. M. Foroni, F. Poli, A. Cucinotta, S. Selleri, "Spectral Behavior and Guided-to-Surface Mode Transition of Arch-Shaped Hollow-Core Waveguides", Integrated Photonics and Nanophotonics Research and Applications Topical Meeting – IPNRA 2007, IWA5, July 8-11, 2007, Salt Lake City, Utah, USA.
244. D. Passaro, M. Foroni, F. Poli, A. Cucinotta, S. Selleri, J. Lægsgaard, A. Bjarklev, "Hollow-core Bragg-fiber as a bio-sensor", Third European Workshop on Optical Fiber Sensors – EWOFs 2007, Post deadline paper, July 4-6, 2007, Napoli, Italy.
245. L. Rosa, D. Passaro, S. Selleri, G. Tartarini, P. Faccin, E.M. Fabbri, "Simulation and Measurement of Intermodulation Induced by Chirp-Dispersion Interaction in Radio-over-Fiber Systems", IASTED International Conference on Antennas, Radar and Wave Propagation – ARP 2007, pp. 46-51, Montreal, Canada, May 30 – June 1, 2007.
246. L. Rosa, A. Cucinotta, S. Selleri, M.J. Arpaio, G. Napoli, "Design, Realization and Measurement of a UWB Radar Patch Array Antenna", IASTED International Conference on Antennas, Radar and Wave Propagation – ARP 2007, pp. 218-222, Montreal, Canada, May 30 – June 1, 2007.
247. F. Poli, M. Foroni, S. Busanelli, A. Cucinotta, S. Selleri, "Surface Modes in Antiresonant Reflecting Optical Waveguides with Rectangular Hollow Core", European Conference on Integrated Optics - ECIO'07, ThG21, April 25–27, 2007, Copenhagen, Denmark.
248. S. Selleri, F. Poli, M. Foroni, A. Cucinotta, "Simultaneous liquid level and refractive index measurements with a POF-based sensor", Optics and Optoelectronics – Optical Sensor - SPIE-OO 2007, paper 6585-55, 16–19 April 2007, Prague, Czech Republic.
249. S. Selleri, F. Poli, M. Foroni, A. Cucinotta, "Surface Mode Free and Highly Birefringent Single-Mode Hollow Core Photonic Bandgap Fibers", Optics and Optoelectronics – Photonic Crystal Fibers - SPIE-OO 2007, paper 6588-27, 16–19 April 2007, Prague, Czech Republic.
250. S. Selleri, F. Poli, M. Foroni, D. Giovannelli, A. Cucinotta, J.B. Jensen, J. Lægsgaard, A. Bjarklev, G. Vienne, C. Jakobsen, J. Broeng, "Analysis of the dependence of the guided-mode field distribution on the silica bridges in hollow-core Bragg fibers", Optics and Optoelectronics – Photonic Crystal Fibers - SPIE-OO 2007, paper 6588-29, 16–19 April 2007, Prague, Czech Republic.

251. F. Poli, M. Foroni, D. Giovanelli, A. Cucinotta, S. Selleri, J.B. Jensen, J. Lægsgaard, A. Bjarklev, G. Vienne, C. Jakobsen, J. Broeng, "Silica Bridge Impact on Hollow-Core Bragg Fiber", OFC2007, OML8, March 25-29, 2007, Anaheim, California, USA.
252. M. Foroni, F. Poli, A. Cucinotta, S. Selleri, "S Band Erbium-Doped Fiber Ring Laser Tunable through the Active Fiber Bending Losses", OFC2007, JThA, March 25-29, 2007, Anaheim, California, USA.
253. L. Rosa, S. Selleri, G. Tartarini, E.M. Fabbri, P. Faccin, "Intermodulation Distortion Modelling in IM-DD Multi-Band Radio over Fibre Links", International Topical Meeting on Microwave Photonics - MWP 2006, October 3-6, 2006, Grenoble, France.
254. L. Rosa, S. Selleri, G. Tartarini, P. Faccin, E.M. Fabbri, "Distortion Performance Prediction in Multi-band "Radio over Fiber" Systems Exploiting Direct Laser Modulation", European Microwave Week 2006 - EUMC, September 10-15, 2006, Manchester, UK.
255. P. Gaboardi, L. Rosa, A. Cucinotta, S. Selleri, "Patch Array Antenna for UWB Radar Applications", European Microwave Week 2006 - EuRAD, September 10-15, 2006, Manchester, UK.
256. M. Foroni, L. Ruggeri, F. Poli, A. Cucinotta, S. Selleri, "S+C+L Band Double-Pass EDFA", Optical Amplifiers and Their Applications Topical Meeting – OAA and Coherent Optical Technologies and Applications Topical Meeting - COTA, JWB44, June 25-30, 2006, Whistler, British Columbia, Canada.
257. M. Foroni, L. Ruggeri, F. Poli, A. Cucinotta, S. Selleri, "Multiwavelength EDF Ring Laser Tunable through the Bending Losses of a Depressed-Cladding Fiber", Optical Amplifiers and Their Applications Topical Meeting – OAA and Coherent Optical Technologies and Applications Topical Meeting - COTA, JWB41, June 25-30, 2006, Whistler, British Columbia, Canada.
258. M. Foroni, L. Ruggeri, F. Poli, P. Gaboardi, A. Cucinotta, S. Selleri, "Tunability of a Single Frequency EDF Ring Laser Based on the Bending Losses of a Depressed-Cladding Fiber", Optical Amplifiers and Their Applications Topical Meeting – OAA and Coherent Optical Technologies and Applications Topical Meeting - COTA, JWB10, June 25-30, 2006, Whistler, British Columbia, Canada.
259. M. Foroni, L. Ruggeri, F. Poli, A. Cucinotta, S. Selleri, "S+C+L Double Pass EDF Amplifier, Amplified Spontaneous Emission Source and Multiwavelength Ring Laser", 8th International Conference on Transparent Optical Networks - ICTON 2006, June 18-22, 2006, Nottingham, United Kingdom.
260. M. Foroni, F. Poli, A. Cucinotta, S. Selleri, "Scanning Near-Field Microscopy of Photonic Crystal Fibers", 8th International Conference on Transparent Optical Networks - ICTON 2006, June 18-22, 2006, Nottingham, United Kingdom.
261. F. Poli, M. Foroni, L. Rosa, A. Cucinotta, S. Selleri, "Square-lattice photonic crystal fiber cutoff properties", 8th International Conference on Transparent Optical Networks - ICTON 2006, June 18-22, 2006, Nottingham, United Kingdom.
262. L. Vincetti, M. Maini, L. Rosa, F. Poli, M. Foroni, A. Cucinotta, S. Selleri, "Modified honeycomb photonic bandgap fiber effectively single-mode regime: a numerical analysis", 8th International Conference on Transparent Optical Networks - ICTON 2006, June 18-22, 2006, Nottingham, United Kingdom.
263. L. Rosa, M. Foroni, F. Poli, A. Cucinotta, S. Selleri, "Effect of hole diameter inaccuracy on tapers between photonic-crystal and wire waveguides", Integrated Photonics Research and Applications Topical Meeting – IPRA 2006, IWCS5, April 24-26, 2006, Uncasville, Connecticut, USA.
264. M. Foroni, F. Poli, L. Rosa, A. Cucinotta, S. Selleri, R. Buczynski, P. Szarniak, D. Pysz, R. Stepien, P. Wasylczyk, "Highly birefringent photonic crystal fiber made of silicate glass", Integrated Photonics Research and Applications Topical Meeting – IPRA 2006, Postdeadline Paper IWD3, April 24-26, 2006, Uncasville, Connecticut, USA.



265. P. Bienstman, S. Selleri, H.P. Uranus, W. Hopman, A. Melloni, R. Costa, L.C. Andreani, P. Lalanne, J.P. Hugonin, D. Pinto, S.S.A. Obayya, "Modelling lossy photonic wires: a mode solver comparison", XV Workshop on Optical Waveguide Theory and Numerical Modeling, April 20 -21, 2006, Varese, Italy.
266. Giovanni Tartarini, Lorenzo Rosa, Stefano Selleri, Pier Faccin, Enrico Maria Fabbri, "Numerical Approaches for the Analysis of Injection Locked Lasers", XV Workshop on Optical Waveguide Theory and Numerical Modeling, April 20 -21, 2006, Varese, Italy.
267. Federica Poli, Matteo Foroni, Lorenzo Rosa, Annamaria Cucinotta, Stefano Selleri, "Square-lattice photonic crystal fiber cut-off analysis", XV Workshop on Optical Waveguide Theory and Numerical Modeling, April 20 -21, 2006, Varese, Italy.
268. Lorenzo Rosa, Federica Poli, Matteo Foroni, Annamaria Cucinotta, Stefano Selleri "Impairment of Photonic-Crystal Waveguide Taper due to Hole Inaccuracy", XV Workshop on Optical Waveguide Theory and Numerical Modeling, April 20 -21, 2006, Varese, Italy.
269. Stefano Selleri, Annamaria Cucinotta, Federica Poli, Matteo Foroni, Moreno Maini, Luca Vincetti, "Numerical Model of a S-band depressed cladding EDFA", XV Workshop on Optical Waveguide Theory and Numerical Modeling, April 20 -21, 2006, Varese, Italy.
270. Claudia Gazzetti, Moreno Maini, Luca Vincetti, Stefano Selleri, Annamaria Cucinotta, Federica Poli, "Numerical Analysis of Hollow Core Photonic Band Gap Fibers with Modified Honeycomb Lattice", XV Workshop on Optical Waveguide Theory and Numerical Modeling, April 20 -21, 2006, Varese, Italy.
271. M. Foroni, F. Poli, L. Ruggeri, S. Selleri, A. Cucinotta, P. Vavassori, "From S- to C-band amplification in a depressed-cladding EDFA", Photonics Europe 2006, April 3-7, 2006, Strasbourg, France.
272. M. Foroni, M. Bottacini, F. Poli, A. Cucinotta, S. Selleri, "Low-cost Level and Pressure Plastic Optical Fiber Sensor", Photonics Europe 2006, April 3-7, 2006, Strasbourg, France.
273. Przemyslaw Szarniak, Matteo Foroni, Ryszard Buczynski, Dariusz Pysz, Piotr Wasylczyk, Stefano Selleri, Ryszard Stepien, "Nonlinear photonic crystal fiber with high birefringence made of silicate glass", Photonics Europe 2006, April 3-7, 2006, Strasburgo, France.
274. M. Foroni, L. Ruggeri, F. Poli, P. Gaboardi, A. Cucinotta, S. Selleri, "40 dB gain S-band depressed-cladding EDFA with double-pass configuration", Optical Fiber Communications Conference - OFC2006, OWI37, March 5-10, 2006, Anaheim, California, USA.
275. F. Poli, M. Foroni, A. Cucinotta, L. Ruggeri, L. Rosa, S. Selleri, " Tunability of the gain spectrum in an erbium-doped fiber with depressed-cladding", Optical Fiber Communications Conference - OFC2006, OWI23, March 5-10, 2006, Anaheim, California, USA.
276. F. Poli, M. Foroni, A. Cucinotta, S. Selleri, P. Vavassori, "Single-stage S-band depressed-cladding EDFA with bending loss ASE suppression", European Conference on Optical Communication - ECOC2005, September 25-29, 2005, Glasgow, Scotland.
277. Stefano Selleri, Annamaria Cucinotta, Federica Poli, Matteo Foroni, Lorenzo Rosa, "Optical parametric amplification in dispersion-flattened highly nonlinear photonic crystal fibers", International Congress on Optics and Optoelectronics – SPIE-COO 2005, 28 August – 2 September 2005, Warsaw, Poland.
278. Stefano Selleri, Annamaria Cucinotta, Michele Bottacini, Federica Poli, Matteo Foroni, "Gain Flatness in Photonic Crystal Fiber Raman Amplifier", International Congress on Optics and Optoelectronics – SPIE-COO 2005, 28 August – 2 September 2005, Warsaw, Poland.
279. Stefano Selleri, Annamaria Cucinotta, Matteo Foroni, Federica Poli, Michele Bottacini, "New design of single-mode large-mode-area photonic crystal fibers", International Congress on Optics and Optoelectronics – SPIE-COO 2005, 28 August – 2 September 2005, Warsaw, Poland.

280. Paolo Vavassori, Matteo Foroni, Federica Poli, Annamaria Cucinotta, Stefano Selleri, "S-band EDFA with ASE suppression induced by bending loss of depressed-cladding active fiber", Optical Amplifier and their Applications - OSA Topical Meeting, August 7-10, 2005, Budapest, Hungary.
281. Lorenzo Rosa, Federica Poli, Matteo Foroni, Simone Bertolaccini, Annamaria Cucinotta, Stefano Selleri, "Polarization selective coupling in three-core holey fibers", 7th International Conference on Transparent Optical Networks – ICTON 2005, July 3-7, 2005, Barcelona, Spain.
282. Lorenzo Rosa, Federica Poli, Matteo Foroni, Stefano Selleri, "In- and out- coupling of light in photonic crystal and conventional dielectric waveguides of arbitrary width", 7th International Conference on Transparent Optical Networks – ICTON 2005, July 3-7, 2005, Barcelona, Spain.
283. Matteo Foroni, Federica Poli, Letizia Ruggeri, Stefano Selleri, Annamaria Cucinotta, Paolo Vavassori, "Bending influence on depressed-cladding EDFA gain spectrum", 7th International Conference on Transparent Optical Networks – ICTON 2005, July 3-7, 2005, Barcelona, Spain.
284. S. Selleri, L. Vincetti, F. Poli, A. Cucinotta, M. Foroni, "Air-guiding photonic crystal fibers with modified honeycomb lattice", IEEE/LEOS Workshop on Fibres and Optical Passive Components – WFOPC 2005, June 22-24, 2005, Palermo, Italy.
285. M. Foroni, F. Poli, L. Rosa, A. Cucinotta, S. Selleri, "Cut-off properties of large-mode-area photonic crystal fibers", IEEE/LEOS Workshop on Fibres and Optical Passive Components – WFOPC 2005, June 22-24, 2005, Palermo, Italy.
286. L. Vincetti, F. Poli, A. Cucinotta, S. Selleri, "Wide bandgap air-guiding modified honeycomb", CLEO Europe 2005, 12-17 June 2005, Munich.
287. M. Foroni, M. Bottacini, F. Poli, S. Selleri, A. Cucinotta, "Effective area measurement of photonic crystal fibers through Scanning Near-Field Optical Microscope", ICONIC 2005, June 8-10, 2005, Barcellona, Spagna.
288. M. Foroni, M. Bottacini, F. Poli, S. Selleri, A. Cucinotta, "Scanning Near-Field Optical Microscope for characterization of Single Mode Fibers", Optical Fibre Sensors Conference OFS-17, May 23-27, 2005, Bruges, Belgio.
289. M. Bottacini, S. Selleri, F. Poli, A. Cucinotta, M. Foroni, "Impact of Background Losses on Photonic Crystal Fiber Raman Amplifier", Laser and Electro-Optics Society Annual Meeting - LEOS 2004, November 7-11, 2004, Puerto Rico.
290. S. Selleri, F. Poli, A. Cucinotta, "Raman Gain Coefficient of Solid-Core Honeycomb Photonic Crystal Fibers", Laser and Electro-Optics Society Annual Meeting - LEOS 2004, November 7-11, 2004, Puerto Rico.
291. S. Selleri, L. Rosa, F. Poli, A. Cucinotta, "Photonic Crystal Fiber Based Polarization Splitter", Laser and Electro-Optics Society Annual Meeting - LEOS 2004, November 7-11, 2004, Puerto Rico.
292. F. Poli, A. Cucinotta, S. Selleri, "Numerical modelling of thulium doped tellurite fiber amplifiers", Progress in Electromagnetics Research Symposium - PIERS 2004, March 28-31, 2004, Pisa, Italy.
293. M. Bottacini, F. Poli, A. Cucinotta, S. Selleri, A.H. Bouk, "Effective area tailoring in triangular photonic crystal fibers", Progress in Electromagnetics Research Symposium - PIERS 2004, March 28-31, 2004, Pisa, Italy.
294. G. Chietera, A. Cucinotta, F. Poli, S. Selleri, A.H. Bouk, "Design of efficient tapers for photonic crystal waveguides", Progress in Electromagnetics Research Symposium - PIERS 2004, March 28-31, 2004, Pisa, Italy.
295. M. Fuochi, F. Poli, S. Selleri, A. Cucinotta, "Photonic Crystal Fibers for Raman Amplification", Progress in Electromagnetics Research Symposium - PIERS 2003, October 13-16, 2003, Honolulu, Hawaii, USA.

296. M. Fuochi, F. Poli, S. Selleri, A. Cucinotta, "Dispersion and Dispersion Slope Compensation through Photonic Crystal Fibers", Progress in Electromagnetics Research Symposium - PIERS 2003, October 13-16, 2003, Honolulu, Hawaii, USA.
297. A. Cucinotta, F. Poli, S. Selleri, "Dual-Pumping Scheme for Efficient Thulium-Doped Tellurite Fiber Amplifiers", European Conference on Optical Communication - ECOC2003, September 21-25, 2003, Rimini, Italy.
298. M. Fuochi, F. Poli, S. Selleri, A. Cucinotta, L. Vincetti, "Raman Amplification Properties of Silica and Tellurite Photonic Crystal Fibers", European Conference on Optical Communication - ECOC2003, September 21-25, 2003, Rimini, Italy.
299. F. Poli, A. Cucinotta, M. Fuochi, S. Selleri, L. Vincetti, "Dispersion and Nonlinear Properties of Triangular Photonic Crystal Fibers with Large Air-Holes and Small Pitch", European Conference on Optical Communication - ECOC2003, September 21-25, 2003, Rimini, Italy.
300. L. Vincetti, D. Ferrarini, M. Zoboli, A. Cucinotta, F. Poli, S. Selleri, "Leakage Losses in Photonic Band Gap Fibers", European Conference on Optical Communication - ECOC2003, September 21-25, 2003, Rimini, Italy.
301. P. Corradi, M.M. Sisto, A. Cucinotta, S. Selleri, "Development of a low cost scanning near-field optical microscope for the characterization of surface emitting lasers", ICONIC 2003, 18-20 giugno 2003, Ruen, France.
302. A. Bertolani, A. Cucinotta, M. Fuochi, F. Poli, S. Selleri, L. Vincetti, M. Zoboli, "Numerical Analysis of Lithium-Niobate Electro-Optical Modulators through a Full-Vectorial Three-Dimensional Finite Element based Beam Propagation Method", Workshop on Optical Waveguide Theory and Numerical Modeling, pp. 142-145, April 4 – 5, 2003, Praha.
303. A. Cucinotta, S. Selleri, L. Vincetti, M. Zoboli, "Finite Element Analysis of Optical Notch Filters based on Photonic Crystals", European Conference on Integrated Optics - ECIO'03, April 2 – 4, 2003, Praha.
304. A. Cucinotta, F. Poli, S. Selleri, "Gain characteristics of thulium-doped tellurite fiber amplifiers by dual-wavelength (800nm + 1064 nm) pumping", Optical Fiber Communications Conference - OFC2003, FB1, March 23-28, 2003, Atlanta, Georgia, USA.
305. D. Ferrarini, L. Vincetti, M. Zoboli, A. Cucinotta, F. Poli, S. Selleri, "Leakage Losses in Photonic Crystal Fibers", Optical Fiber Communications Conference - OFC2003, FI5, , March 23-28, 2003, Atlanta, Georgia, USA.
306. S. Selleri, A. Cucinotta, F. Poli, L. Vincetti, M. Zoboli, "Amplification Properties of Erbium Doped Photonic Cristal Fibers", European Conference on Optical Communication - ECOC2002, September 8-12, 2002, Copenhagen, Denmark.
307. A. Cucinotta, S. Selleri, L. Vincetti, M. Zoboli, "Photonics Cristal Fibers: Perturbation Analysis of Polarization and Dispersion Properties", Optical Fiber Communications Conference - OFC2002, ThS2, March 19-21, 2002, Anaheim, California, USA.
308. A. Cucinotta, S. Selleri, L. Vincetti, M. Zoboli, "Photonic Crystals: Analysis and Design Approaches Based on the Finite Element Method", 10<sup>th</sup> European Conference on Integrated Optics - ECIO'01, April 4-6, 2001, Paderborn, Germany.
309. A. Cucinotta, S. Selleri, L. Vincetti, M. Zoboli, "Open Waveguide Boundary Conditions for Finite Element Modal Analysis", Integrated Photonics Research Topical Meeting, IThB, July 12-15, 2000, Quebec, Canada.
310. A. Cucinotta, S. Selleri, L. Vincetti, M. Zoboli, "Anisotropic and magneto-optic waveguide numerical analysis", Integrated Photonics Research Topical Meeting, IThB, July 12-15, 2000, Quebec, Canada.
311. S. Selleri, L. Vincetti, M. Zoboli, "Mesh Truncation in Finite Element Modal Analysis of Dielectric Waveguides", "5th International Workshop on Finite Elements for Microwave Engineering", Boston, June 8-9, 2000.

- 312.C. Catelli, S. Selleri, M. Zoboli, "The use of symmetry boundary conditions in electromagnetic waveguide problems described by sparse matrix finite element method", 4th International Workshop on Finite Elements for Microwave Engineering, Poitiers, France, July 10-11, 1998.
- 313.A. Cucinotta, S. Selleri, L. Vincetti, "Nonlinear Helmholtz Equation Resolution through the Finite Element Method", Integrated Photonics Research Topical Meeting, March 30 – April 1, 1998, Victoria, Canada.
- 314.A. Cucinotta, S. Selleri, L. Vincetti, "Finite-Element Semivectorial Beam Propagation Method for Nonlinear Integrated Optical Devices", Integrated Photonics Research Topical Meeting, March 30 – April 1, 1998, Victoria, Canada.
- 315.A. Cucinotta, E. Montanari, S. Selleri, L. Vincetti, M. Zoboli, "Finite-Element Full-Vectorial Propagation Analysis for Three Dimensional Anisotropic Waveguides", International Conference on Electromagnetics in Advanced Applications (ICEAA), Torino, Italy, September 15-18, 1997.
- 316.S. Selleri, M. Zoboli, "A Comparison of Vector Finite Element Formulations for Waveguide Analysis", Software for Electrical Engineering Analysis and Design, ELECTROSOFT 96, San Miniato (Pisa), Italy, May 1996.
- 317.M. Zoboli, S. Selleri, F. Di Pasquale, "Design of Optical Devices through the Finite Element Method", Optical Design for Photonics, First Topical Meeting, March 15-19, 1993, Palm Springs, California.
- 318.F. Di Pasquale, S. Selleri, M. Zoboli, "The modes of a Waveguide Directional Coupler", International Conference "From Galileo's "occhialino" to optoelectronics: frontiers of optical systems and materials", Padova, Italy, 9-12 June, 1992.

## National Journal Papers

- 319.L. Rosa, A. Cucinotta, D. Ferrarini, M. Maini, F. Poli, S. Selleri, L. Vincetti, M. Zoboli, A.H. Bouk, "Study of photonic-crystal based photonic components employing the Finite Element Method", Proceedings of "Fondazione Giorgio Ronchi", n. 1-2, pp. 360-375, January-April 2004.
- 320.A. Cucinotta, M. Fuochi, F. Poli, S. Selleri, "Amplificatori ottici in fibra drogata con tulio per amplificazione in banda S", Alta Frequenza, 2004.
- 321.A. Cucinotta, S. Selleri, L. Vincetti, M. Zoboli, "Analisi numerica di guide magneto-ottiche", Proceedings of "Fondazione Giorgio Ronchi", n. 4-5, pp. 947-955, July-October 2001.
- 322.A. Cucinotta, S. Selleri, L. Vincetti, M. Zoboli, "Numerical Analysis of Erbium Doped Waveguide Linear Cavity Lasers", Proceedings of "Fondazione Giorgio Ronchi", n. 3-4, pp. 449-453, May-August 1999.
- 323.R. Di Muro, S. Selleri, L. Vincetti, "Propagatore Non Parassiale Basato sul Metodo degli Elementi Finiti", Proceedings of "Fondazione Giorgio Ronchi", n. 4, pp. 449-461, July-August 1997.
- 324.A. Cucinotta, R. Di Muro, S. Selleri, C. Zilioli, "Modellizzazione e Caratterizzazione di Amplificatori Ottici in Seconda Finestra", Proceedings of "Fondazione Giorgio Ronchi", n. 4, pp. 435-447, July-August 1997.
- 325.M. Zoboli, S. Selleri, F. Di Pasquale, "Analisi di Guide Dielettriche Non Lineari col Metodo degli Elementi Finiti Vettoriale", Alta Frequenza Rivista di Elettronica, n. 5, vol. 4, pp. 439-445, September-October 1992.

## National Conferences

- 326.L. Rosa, F. Poli, S. Selleri, L. Vincetti, A. Cucinotta, "Multi-Core Optical Fibers for High Power Lasers," XXII Riunione Nazionale di Elettromagnetismo, 3-6 September 2018, Cagliari.

327. K. Tragni, C. Molardi, F. Poli, R. Dauliat, B. Leconte, D. Darwich, R. du Jeu, M.A. Malleville, S. Selleri, P. Roy, A. Cucinotta, "Analysis of the Thermal Effects on a Fully Aperiodic Large Pitch Fiber Amplifier", XXII Riunione Nazionale di Elettromagnetismo, 3-6 September 2018, Cagliari.
328. F. Biasion, M. Barozzi, F. Pasquali, A. Tonelli, S. Selleri, "A General Purpose Approach for Dipstick Analysis using Smartphones and Colorimetric Equalization Chart," XXII Riunione Nazionale di Elettromagnetismo, 3-6 September 2018, Cagliari.
329. K. Tragni, C. Molardi, F. Poli, R. Dauliat, B. Leconte, D. Darwich, R. du Jeu, M.A. Malleville, R. Jamier, S. Selleri, P. Roy, A. Cucinotta, "Fully Aperiodic Large Pitch Fiber Amplifiers Subject to Thermal Load," Fotonica 2018, May 23-25, 2018, Lecce.
330. L. Rosa, H. McKee, F. Poli, S. Selleri, L. Vincetti, A. Cucinotta, "Thermal Mode Coupling in Multi-Core Optical Fibers," Fotonica 2018, May 23-25, 2018, Lecce
331. F. Bissoli, F. Poli, A. Cucinotta, S. Selleri, "Picosecond Laser Scribing of CIGS Solar Cells", FOTONICA 2017, Padova, May 3-5, 2017.
332. C. Fornaini, F. Poli, E. Merigo, S. Selleri, A. Cucinotta, "1070 nm Fiber Laser for Dental Ceramic Surface Processing: Ultrastructural Analysis", FOTONICA 2017, Padova, May 3-5, 2017.
333. F. Poli, C. Molardi, L. Rosa, A. Cucinotta, S. Selleri, "Thermal Dynamics of Yb-Doped Amplifier Based on Symmetry-Free Photonic Crystal Fiber", FOTONICA 2017, Padova, May 3-5, 2017.
334. K. Tragni, A. Cucinotta, S. Selleri, "Lighting Technologies and Computer Vision Algorithms Applied to Ovens: a Preliminary Study", FOTONICA 2017, Padova, May 3-5, 2017.
335. M. Barozzi, A. Tonelli, A. Zaccarelli, A. Grazioli, M. Sozzi, A. Candiani, A. Cucinotta, S. Selleri, "We-Lab: Challenging an Educational Tool in Real Diagnostic Applications", FOTONICA 2017, Padova, May 3-5, 2017.
336. M. Arpaio, S. Selleri, "A centralized ADS-B system for en-route and low level coverage", XXI Riunione Nazionale di Elettromagnetismo, RINEm 2016, September 12-14, 2016 Parma, Italy.
337. C. Molardi, X. Yu, H.K. Liang, A. Cucinotta, S. Selleri, "Influence of disorder on lasing onset in planar media", XXI Riunione Nazionale di Elettromagnetismo, RINEm 2016, September 12-14, 2016 Parma, Italy.
338. C. Fornaini, F. Poli, E. Merigo, M. Valentini, L. Romoli, F. Bondioli, S. Selleri, A. Cucinotta, "Di-Silicate dental ceramic surface preparation by fiber laser: ultrastructural analysis", XXI Riunione Nazionale di Elettromagnetismo, RINEm 2016, September 12-14, 2016 Parma, Italy.
339. F. Poli, G. Ciletti, E. Coscelli, A. Cucinotta, S. Selleri, "Influence of inner cladding geometry on symmetry-free photonic crystal fiber properties under severe heat load", XXI Riunione Nazionale di Elettromagnetismo, RINEm 2016, September 12-14, 2016 Parma, Italy.
340. M. Barozzi, S. K. M. Al-Hayali, A. Candiani, A. Vannucci, A. H. Al-Janabi, A. Cucinotta, S. Selleri, "Fiber-based biosensor for DNA detection" XXI Riunione Nazionale di Elettromagnetismo, RINEm 2016, September 12-14, 2016 Parma, Italy.
341. E. Coscelli, F. Poli, A. Cucinotta, S. Selleri, "Tailoring of Dispersion Properties in Chalcogenide Suspended Core Fibers for Mid-Infrared Nonlinear Applications," Fotonica 2015, May 6-8, 2015, Torino, C6.4.
342. L. Rosa, E. Coscelli, F. Poli, A. Cucinotta, S. Selleri, "Thermal Gain Competition Full-Vector Modeling in Large-Mode-Area Yb-Doped Photonic-Crystal Fiber," Fotonica 2015, May 6-8, 2015, Torino, P2.9.
343. A. Candiani, A. Cucinotta, S. Selleri, "DNA biosensor implemented on functionalized optical fibers Bragg gratings," XX RiNEm, September 15-18, 2014, Padova, Italy.

344. E. Coscelli, C. Molardi, F. Poli, A. Cucinotta, S. Selleri, "Photonic crystal fibers with reduced cladding symmetry for high power lasers," XX RiNEm, September 15-18, 2014, Padova, Italy, S2.3.
345. M. Masruri, L. Vincetti, A. Cucinotta, S. Selleri, "Confinement loss scaling law analysis in tube lattice fibers," XX RiNEm, September 15-18, 2014, Padova, Italy, S2.4.
346. E. Coscelli, F. Poli, A. Cucinotta, S. Selleri, "All-solid photonic bandgap fiber with microstructured cladding," XX RiNEm, September 15-18, 2014, Padova, Italy, P.29.
347. M. Sozzi, A. Lutey, S. Selleri, A. Cucinotta, "Processing of thin-film materials by means of ns and ps laser radiation," XX RiNEm, September 15-18, 2014, Padova, Italy, P.32.
348. A. Candiani, A. Cucinotta, S. Selleri, V. Melissinaki, S. Pissadakis, "Fabry-Perrot magnetic field microsensor fabricated on the endface of an SMF-28," Fotonica 2014, May 12-14. 2014, Naples.
349. M. Masruri, A. Cucinotta, S. Selleri, L. Vincetti, "Circular tube lattice fibers for terahertz applications," Fotonica 2014, May 12-14. 2014, Naples, A7.6.
350. E. Coscelli, C. Molardi, F. Poli, A. Cucinotta, S. Selleri, "Symmetry-free designs of rod-type PCFs for high-power applications," Fotonica 2014, May 12-14. 2014, Naples, P1.12.
351. M. Sozzi, A. Cucinotta, S. Selleri, C. Fornaini, E. Merigo, P. Vescovi, "1064nm 500 ps DPSS laser soft tissue ablation," Fotonica 2014, May 12-14. 2014, Naples, P2.18.
352. R. M. Ibrahim, A. A. Al-Derganzly, E. Di Fina, A. Candiani, A. Cucinotta, S. Selleri, "Microstructured optical fiber biosensor for DNA detection," Fotonica 2014, May 12-14. 2014, Naples, P2.47.
353. A. Candiani, S. Giannetti, Hussein T. Salloom, M. Sozzi, A. Hadi Al-Janabi, A. Cucinotta, S. Selleri, "DNA detection based on functionalized hollow core fibers," Secondo Workshop Gruppo Biosensori Ottici e Biofotonica della Società Italiana di Ottica e Fotonica, 19-20 Settembre 2013, Sestri Levante.
354. A. Candiani, S. Giannetti, Hussein T. Salloom, M. Sozzi, A. Hadi Al-Janabi, A. Cucinotta, S. Selleri, "Photonic platform based on functionalized microstructured optical fiber for DNA detection," Secondo Workshop Gruppo Biosensori Ottici e Biofotonica della Società Italiana di Ottica e Fotonica, 19-20 Settembre 2013, Sestri Levante.
355. M. Masruri, C. Molardi, A. Cucinotta, S. Selleri, "Design and Analysis of Large Pitch Fibers for Single Mode Operation", FOTONICA 2013, C4.2, 21-23 maggio 2013, Milano.
356. M. Sozzi, A. Cucinotta, S. Selleri, C. Fornaini, E. Merigo, P. Vescovi, "Preliminary study of dental surface ablation by means of a solid-state ps laser", FOTONICA 2013, C3.6, 21-23 maggio 2013, Milano.
357. A. Candiani, A. Cucinotta and S. Selleri, "Backscattered power using ferrofluid for magnetic field measurements" FOTONICA 2013, P23, 21-23 maggio 2013, Milano.
358. M. Sozzi, A. Lutey, A. Cucinotta, P. G. Molari, S. Selleri, "Laser ablation of Aluminum and Mono-layer and Composite Plastic Materials", FOTONICA 2013, P11, 21-23 maggio 2013, Milano.
359. E. Coscelli, F. Poli, A. Cucinotta, S. Selleri, "Comparison of thermally induced waveguide changes in large mode area double cladding photonic crystal fibers", FOTONICA 2013, C4.3, 21-23 maggio 2013, Milano.
360. A. Candiani, S. Giannetti, A. Cucinotta, S. Selleri, "PNA-Modified Photonic Crystal Fiber Bragg Grating Platform for Specific DNA Detection", FOTONICA 2013, A2.3, 21-23 maggio 2013, Milano.
361. A. Bertucci, A. Manicardi, E. Cavatorta, A. Candiani, M. Sozzi, A. Cucinotta, S. Giannetti, S. Selleri, R. Corradini, "Development of new tools for highly specific nucleic acid detection: PNA-modified photonic crystal fibers and PNA-based switching probes," XII Giornata della Chimica dell'Emilia Romagna, 17 dicembre 2012 (BEST POSTER)

362. A. Bertucci, A. Manicardi, E. Cavatorta, A. Candiani, M. Sozzi, A. Cucinotta, S. Selleri, R. Corradini, "A biophotonic approach for DNA detection: PNA-modified photonic crystal fibers combined with oligonucleotide-functionalized gold nanoparticles (ON-AuNPs)," XXXIV Convegno della Divisione di Chimica Organica, P042, Sept. 10-14, 2012, Pavia. A. Candiani, M. Sozzi, A. Cucinotta, R. Veneziano, R. Corradini, R. Marchelli, P. Childs, S. Pissadakis, S. Selleri, "DNA Biosensor Based on a Double Tilted Fiber Bragg Grating", XIX Riunione Nazionale di Elettromagnetismo, September 10-14, 2012, Roma.
363. Rosa Ana Perez-Herrera, Enrico Coscelli, Michele Sozzi, Annamaria Cucinotta, Stefano Selleri, Manuel Lopez-Amo, "Yb-doped Photonic Crystal Fiber Laser", XIX Riunione Nazionale di Elettromagnetismo, September 10-14, 2012, Roma.
364. E. Coscelli, F. Poli, A. Cucinotta, S. Selleri, "Air-Hole Ring Influence on the Cut-off Properties of 19-Cell Double-Cladding Photonic Crystal Fibers", XIX Riunione Nazionale di Elettromagnetismo, September 10-14, 2012, Roma.
365. M. Sozzi, C. Catellani, A. Cucinotta, S. Selleri, D. Menossi, R. Dharmadasa, A. Bosio, N. Romeo, "Laser Scribing Integration of Polycrystalline Thin Film Solar Cells", XIX Riunione Nazionale di Elettromagnetismo, September 10-14, 2012, Roma.
366. C. Catellani, M. Sozzi, A. Cucinotta, S. Selleri, D. Menossi, A. Bosio, N. Romeo, "Integrazione mediante Laser Scribing di celle solari a film sottili policristallini," FOTONICA 2012, B7.4, May 15-17, 2012, Firenze.
367. F. Poli, E. Coscelli, A. Cucinotta, S. Selleri, "Enhanced filtering and bending properties of asymmetric hybrid photonic crystal fibers," FOTONICA 2012, B3.2, May 15-17, 2012, Firenze.
368. E. Coscelli, F. Poli, A. Cucinotta, S. Selleri, "Design guidelines for single-mode 19-cell Yb-doped double-cladding photonic crystal fibers," FOTONICA 2012, P30, May 15-17, 2012, Firenze.
369. A. Candiani, A. Argyros, R. Lwin, S. Leon-saval, G. Zito, S. Selleri, S. Pissadakis, "An in-fiber magnetometer utilizing a polymeric-MOF infiltrated by a ferrofluid," FOTONICA 2012, B6.4, May 15-17, 2012, Florence.
370. A. Candiani, A. Argyros, R. Lwin, S. Leon-saval, G. Zito, S. Selleri, S. Pissadakis, "An in-fiber magnetometer implemented in a polymeric-MOF utilizing ferrofluid," Convegno Nazionale Sensori, O24, February 15-17, 2012, Rome.
371. A. Candiani, M. Sozzi, A. Cucinotta, S. Selleri, R. Veneziano, R. Corradini, R. Marchelli, P. Childs, S. Pissadakis, "Optical fiber sensor for Dna detection based on double-tilted Bragg grating," Convegno Nazionale Sensori, O34, February 15-17, 2012, Rome.
372. M. Sozzi, A. Cucinotta, S. Selleri, R. Corradini, R. Marchelli, M. Konstanki, S. Pissadakis, "Sensore in fibra ottica per DNA con reticoli a passo lungo," C3.3, May 9-11, 2011, Genova.
373. D. Passaro, G. Brunelli, E. Coscelli, F. Poli, A. Cucinotta, S. Selleri, "Sviluppo sperimentale di uno stadio di preamplificazione per un laser in fibra drogata con Itterbio ad alta potenza," P.19, FOTONICA 2011, P.12, May 9-11, 2011, Genova.
374. F. Poli, E. Coscelli, D. Passaro, A. Cucinotta, S. Selleri, T.T. Alkeskjold, L. Leick, J. Broeng, "Area efficace in fibre a cristallo fotonico polarizzanti drogate con Itterbio sottoposte a Bending," FOTONICA 2011, P.12, May 9-11, 2011, Genova.
375. E. Coscelli, F. Poli, D. Passaro, A. Cucinotta, S. Selleri, T.T. Alkeskjold, L. Leick, J. Broeng, "Birifrangenza di una fibra a cristallo fotonico ibrida con proprietà di filtraggio spettrale distribuito," FOTONICA 2011, P.11, May 9-11, 2011, Genova.
376. F. Poli, E. Coscelli, D. Passaro, A. Cucinotta, S. Selleri, "Accoppiamento tra modi guidati e di cladding in fibre a cristallo fotonico polarizzanti", FOTONICA 2010, P2.23, May 25-27, 2010, Pisa (invited).
377. F. Poli, E. Coscelli, D. Passaro, A. Cucinotta, S. Selleri, "Gain filtering dei modi di ordine superiore in fibre a cristallo fotonico rod-type drogate con itterbio", FOTONICA 2010, P2.22, May 25-27, 2010, Pisa.

- 378.E. Coscelli, F. Poli, D. Passaro, M. Sozzi, A. Cucinotta, S. Selleri, C. Lantano, R. Corradini, R. Marchelli "Analisi del DNA tramite biosensori in fibra microstrutturata", FOTONICA 2010, C3.2, May 25-27, 2010, Pisa.
- 379.E. Coscelli, M. Sozzi, D. Passaro, F. Poli, A. Cucinotta, S. Selleri, C. Lantano, R. Corradini, R. Marchelli, "Sviluppo di un biosensore in fibra a cristallo fotonico per il riconoscimento di sequenze di DNA", XVIII Riunione Nazionale di Elettromagnetismo, September 6-10, 2010, Benevento.
- 380.E. Coscelli, F. Poli, D. Passaro, A. Cucinotta, S. Selleri, "Lunghezze d'onda di risonanza e anti-crossing in fibre a cristallo fotonico con reticolo kagome", XVIII Riunione Nazionale di Elettromagnetismo, September 6-10, 2010, Benevento.
- 381.S. Selleri, A. Cucinotta, F. Poli, D. Passaro, E. Coscelli, "Il progetto europeo ALPINE", XVIII Riunione Nazionale di Elettromagnetismo, September 6-10, 2010, Benevento.
- 382.D. Passaro, F. Poli, A. Cucinotta, S. Selleri, "Laser in fibra ad anello multiwavelength con configurazione ibrida Serial-Tree per il monitoraggio della temperatura", FOTONICA 2009, C4.6, Pisa, May 27-29, 2009.
- 383.S. Selleri, A. Cucinotta, F. Poli, D. Passaro, "Fibre a cristallo fotonico: applicazioni e prospettive", FOTONICA 2009, C3.1, Pisa, May 27-29, 2009 (invited). F. Poli, D. Passaro, A. Cucinotta, S. Selleri, L. Rosa, L. Vincetti, "Fibre Large Mode Area Leakage Channel Poligonali a Dispersione Modale Ridotta", XVII Riunione Nazionale di Elettromagnetismo, September 15-19, 2008, Lecce.
- 384.D. Passaro, F. Poli, A. Cucinotta, S. Selleri, "Studio della Finestra di Trasmissione nelle Hollow-Core Bragg Fiber", XVII Riunione Nazionale di Elettromagnetismo, September 15-19, 2008, Lecce.
- 385.F. Poli, D. Passaro, A. Cucinotta, S. Selleri, "Fibre a Cristallo Fotonico Rod-Type Drogate con Itterbio per Applicazioni ad Alta Potenza", XVII Riunione Nazionale di Elettromagnetismo, September 15-19, 2008, Lecce.
- 386.F. Poli, D. Passaro, E. D\_Elia, R. Pecori, A. Cucinotta, S. Selleri, "Studio della Dinamica di Amplificatori in Fibra Drogata con Itterbio per Laser ad Alta Potenza", XVII Riunione Nazionale di Elettromagnetismo, September 15-19, 2008, Lecce.
- 387.S. Selleri, A. Cucinotta, F. Poli, M. Foroni, D. Passaro, "Analisi di fibre a cristallo fotonico basata sul metodo degli elementi finiti: dal core solido al guidaggio in aria", Terza Giornata di Studio – Il Metodo degli Elementi Finiti nelle Applicazioni dell'Ingegneria Elettrica e dell'Informazione, Roma 14 dicembre 2007.
- 388.F. Poli, M. Foroni, S. Busanelli, A. Cucinotta, S. Selleri, "Studio di modi superficiali in guide d'onda a cavità antirisonante con core rettangolare cavo", FOTONICA 2007, pp. 489-492, Mantova, May 21-23, 2007.
- 389.F. Poli, M. Foroni, D. Giovanelli, A. Cucinotta, S. Selleri, "Influenza dei ponti in silice sulle proprietà di guidaggio delle fibre di Bragg con core cavo", FOTONICA 2007, pp. 449-452, Mantova, May 21-23, 2007.
- 390.M. Foroni, F. Poli, A. Cucinotta, S. Selleri, "Laser ad anello in fibra drogata con erbio tunabile mediante le perdite di curvatura", FOTONICA 2007, pp. 461-464, Mantova, May 21-23, 2007.
- 391.L. Rosa, D. Passaro, S. Selleri, G. Tartarini, P. Faccin, E.M. Fabbri, "Simulazione e misura dell'intermodulazione prodotta dall'interazione tra frequency chirp e dispersione in sistemi Radio.over-Fiber a modulazione diretta", FOTONICA 2007, pp. 131-134, Mantova, May 21-23, 2007.
- 392.L. Vincetti, M. Maini, M. Zoboli, M. Foroni, F. Poli, A. Cucinotta, S. Selleri, "Modello numerico di EDFAs per banda S basati su fibre ottiche con cladding depresso", FOTONICA 2007, pp. 465-468, Mantova, May 21-23, 2007.
- 393.M. Foroni, F. Poli, L. Ruggeri, A. Cucinotta, S. Selleri, "Amplificatore basato sulle perdite di curvatura di una fibra drogata con erbio a cladding depresso", XVI Riunione Nazionale di Elettromagnetismo, September 18-21, 2006, Genova.



394. A. Lena, G. Tartarini, L. Rosa, S. Selleri, E.M. Fabbri, P. Faccin, "Modellizzazione di laser injection locked per applicazioni radio over fiber", XVI Riunione Nazionale di Elettromagnetismo, September 18-21, 2006, Genova.
395. L. Vincetti, M. Maini, M. Zoboli, S. Selleri, A. Cucinotta, F. Poli, M. Foroni, "Modello numerico di EDFAs per banda S basati su fibre ottiche con cladding depresso", XVI Riunione Nazionale di Elettromagnetismo, September 18-21, 2006, Genova.
396. L. Rosa, M. Foroni, F. Poli, S. Selleri, A. Cucinotta, M. Maini, L. Vincetti, G. Borsari, M. Zoboli, "Fibre a cristallo fotonico solid-core e air-guiding: analisi e progetto tramite il metodo degli elementi finiti", XVI Riunione Nazionale di Elettromagnetismo, September 18-21, 2006, Genova.
397. F. Poli, M. Foroni, A. Cucinotta, S. Selleri, "Sensori di livello in fibra ottica plastica", Elettroottica 2006, Frascati (Roma), June 6-8, 2006 – ENEA C.R. Frascati.
398. Foroni, F. Poli, M. Bottacini, A. Cucinotta, S. Selleri, "Misura di area efficace in fibre a cristallo fotonico mediante tecnica SNOM", FOTONICA 05, Trani, May 30 – June 1, 2005.
399. L. Rosa, S. Selleri, F. Poli, A. Cucinotta, "Studio di interfacce per l'accoppiamento tra guide dielettriche e guide a cristallo fotonico", FOTONICA 05, May 30 – June 1, 2005, Trani.
400. M. Fuochi, A.H. Bouk, F. Poli, N. Burani, A. Cucinotta, S. Selleri, "Fibre a cristallo fotonico con elevata resistenza alle perdite per curvatura", FOTONICA 05, May 30 – June 1, 2005, Trani.
401. F. Poli, M. Bottacini, M. Foroni, N. Burani, M. Fuochi, L. Rosa, A. Cucinotta, S. Selleri, "Analisi del regime di monomodalità per fibre a cristallo fotonico con reticolo quadrato", FOTONICA 05, May 30 – June 1, Trani, 2005.
402. F. Poli, A. Cucinotta, S. Selleri, "Progetto di amplificatori in fibra ottica a cristallo fotonico con basse perdite di accoppiamento", XV Riunione Nazionale di Elettromagnetismo, September 13-16, 2004, Cagliari.
403. M. Bottacini, F. Poli, M. Foroni, A. Cucinotta, S. Selleri, "Modellizzazione di amplificatori Raman con fibre ottiche a cristallo fotonico", XV Riunione Nazionale di Elettromagnetismo, September 13-16, 2004, Cagliari.
404. M. Foroni, M. Bottacini, F. Poli, S. Selleri, A. Cucinotta, "Sviluppo di un microscopio ottico a scansione di campo vicino per la caratterizzazione di fibre a cristallo fotonico", XV Riunione Nazionale di Elettromagnetismo, September 13-16, 2004, Cagliari.
405. S. Ghidoni, L. Rosa, F. Poli, S. Selleri, A. Cucinotta, A.H. Bouk, "Splitter di polarizzazione in fibra ottica a cristallo fotonico", XV Riunione Nazionale di Elettromagnetismo, September 13-16, 2004, Cagliari.
406. F. Poli, A. Cucinotta, M. Fuochi, S. Selleri, "Progetto di fibre a cristallo fotonico per la compensazione della dispersione", FOTONICA 03, Riva del Garda, April 7-9, 2003.
407. M. Fuochi, F. Poli, A. Cucinotta, S. Selleri, "Studio delle proprietà Raman in fibre a cristallo fotonico con reticolo triangolare", FOTONICA 03, Riva del Garda, April 7-9, 2003.
408. A. Cucinotta, M. Fuochi, F. Poli, S. Selleri, "Amplificatori ottici in fibra drogata con tulio per amplificazione in banda S", FOTONICA 03, Riva del Garda, April 7-9, 2003.
409. P. Corradi, A. Cucinotta, S. Selleri, "Sviluppo di un microscopio ottico a scansione di campo vicino per lo studio di laser con emissione superficiale", FOTONICA 03, Riva del Garda, April 7-9, 2003.
410. A. Cucinotta, M. Fuochi, N. Tosi, S. Selleri, "Amplificatori Ottici in Fibra Drogata con Tullio", XIV Riunione Nazionale di Elettromagnetismo, September 16-19, 2002, Ancona.
411. M. Fuochi, A. Bononi, D. Pontiroli, J.S. Tassè, S. Selleri, A. Cucinotta, "Studio e Caratterizzazione Sperimentale di Transitori in Amplificatori Raman", XIV Riunione Nazionale di Elettromagnetismo, September 16-19, 2002, Ancona.

- 412.A. Cucinotta, F. Poli, S. Selleri, L. Vincetti, M. Zoboli, "Analisi delle Proprietà di Amplificazione di Fibre a Cristallo Fotonico Drogate con Erblio", XIV Riunione Nazionale di Elettromagnetismo, September 16-19, 2002, Ancona.
- 413.A. Cucinotta, S. Selleri, L. Vincetti, M. Zoboli, "Studio di un Filtro Notch a Cristallo Fotonico mediante il Metodo degli Elementi Finiti", XIV Riunione Nazionale di Elettromagnetismo, September 16-19, 2002, Ancona.
- 414.A. Cucinotta, S. Selleri, L. Vincetti, "Caratterizzazione di vetri tellurati per amplificatori ottici in banda L", FOTONICA 01, Ischia, May 23-25, 2001.
- 415.A. Cucinotta, S. Selleri, L. Vincetti, M. Zoboli, "FE-TD per la Propagazione di Segnali a Larga Banda", Giornata di Studio: il metodo degli elementi finiti nelle applicazioni dell'ingegneria elettrica e dell'informazione, Cassino, April 19-20, 2001.
- 416.A. Cucinotta, S. Selleri, L. Vincetti, M. Zoboli, "Analisi numerica di guide magneto-ottiche", XIII Riunione Nazionale di Elettromagnetismo, Como, September 25-28, 2000.
- 417.A. Cucinotta, S. Selleri, L. Vincetti, M. Zoboli, "Analisi numerica di guide aperte: il problema della finestra di calcolo", XIII Riunione Nazionale di Elettromagnetismo, Como, September 25-28, 2000.
- 418.A. Bononi, L. Potì, G. Ghizzoni, A. Cucinotta, S. Selleri, L. Vincetti, M. Zoboli, "Studio della dinamica del guadagno negli amplificatori in fibra: stato dell'arte e prospettive", FOTONICA 99, Trento, June 2-4, 1999.
- 419.A. Cucinotta, S. Selleri, L. Vincetti, M. Zoboli, "Condizioni al contorno in sistemi algebrici derivanti da formulazioni variazionali di problemi differenziali", XII Riunione Nazionale di Elettromagnetismo, Cetraro, September 28 - October 1, 1998.
- 420.A. Cucinotta, F. Montanari, S. Selleri, L. Vincetti, M. Zoboli, "Propagatore per mezzi attivi e non lineari", XII Riunione Nazionale di Elettromagnetismo, Cetraro, September 28 - October 1, 1998.
- 421.A. Cucinotta, S. Selleri, L. Vincetti, M. Zoboli, "Analisi numerica di laser lineari in guide drogate con erblio", XII Riunione Nazionale di Elettromagnetismo, Cetraro, September 28 - October 1, 1998.
- 422.E. Montanari, S. Selleri, L. Vincetti, M. Zoboli, "Propagatore Vettoriale per Guide Dielettriche Tridimensionali", FOTONICA 97, Roma, May 20-23, 1997.
- 423.A. Cucinotta, S. Dallargine, S. Selleri, C. Zilioli, M. Zoboli, "Modellizzazione di Laser ad Anello in Fibra Drogata", FOTONICA 97, Roma, May 20-23, 1997.
- 424.S. Selleri, L. Vincetti, M. Zoboli, "Propagatore Non Parassiale per Guide Ottiche Fortemente Guidanti e Variabili Longitudinalmente", XI Riunione Nazionale di Elettromagnetismo, Firenze, October 1-4, 1996.
- 425.P. Regnani, S. Selleri, C. Zilioli, M. Zoboli, "Modellizzazione di Amplificatori Ottici in Seconda Finestra", XI Riunione Nazionale di Elettromagnetismo, Firenze, October 1-4, 1996.
- 426.A. Cucinotta, C. Ferrari, S. Selleri, M. Zoboli, "Accoppiatori Ottici Drogati con Erblio", XI Riunione Nazionale di Elettromagnetismo, Firenze, October 1-4, 1996.
- 427.M. Zoboli, S. Selleri, S. Dallargine, "Modellizzazione di Laser ad Anello", FOTOMODEL II, Fermo (AP), Italia, April 23-24, 1996.
- 428.M. Meliga, P. Cavazzini, S. Selleri, M. Zoboli, "Modellizzazione di Diodi Laser a Ridge Sepolto", X Riunione Nazionale di Elettromagnetismo, Cesena (Fo), September 21-23, 1994.
- 429.R. Di Muro, M. Montagna, S. Selleri, M. Zoboli, "Analisi di un accoppiatore Ottico a Tre Nuclei Non Lineare", X Riunione Nazionale di Elettromagnetismo, Cesena (Fo), September 21-23, 1994.
- 430.R. Di Muro, M. Montagna, S. Selleri, M. Zoboli, "Metodi "Step by Step" e "Split Step" Applicati all' Analisi di Guide Non Lineari", X Riunione Nazionale di Elettromagnetismo, Cesena (Fo), September 21-23, 1994.

- 431.R. Di Muro, M. Montagna, S. Selleri, M. Zoboli, "Una Formulazione Efficiente del Metodo degli Elementi Finiti Vettoriale per l'Analisi di Guide Dielettriche", X Riunione Nazionale di Elettromagnetismo, Cesena (Fo), September 21-23, 1994.
- 432.R. Di Muro, M. Montagna, S. Selleri, M. Zoboli, "Modellizzazione di Dispositivi Ottici Lineari", Giornata di Studio FOTOMODEL: Modellizzazione di Dispositivi Fotonici, February 24, 1994, Dipartimento di Ingegneria dell'Informazione, Università di Parma, Parma.
- 433.G. Di Maio, F. Di Pasquale, M. Montagna, S. Selleri, M. Zoboli, "Il Metodo delle Linee come Solutore del Problema Elettromagnetico in Guide Dielettriche", IX Riunione Nazionale di Elettromagnetismo, Assisi, October 5-8, 1992.
- 434.R. Di Muro, F. Di Pasquale, M. Montagna, S. Selleri, M. Zoboli, "Un Solutore per Matrici Sparse Complesse nell'Analisi di Guide d' Onda Dielettriche col Metodo degli Elementi Finiti", IX Riunione Nazionale di Elettromagnetismo, Assisi, October 5-8, 1992.
- 435.F. Di Pasquale, M. Montagna, S. Selleri, M. Zoboli, "Modeling Erbium-Doped Glass Waveguide Amplifiers", IX Riunione Nazionale di Elettromagnetismo, Assisi, October 5-8, 1992.
- 436.F. Di Pasquale, S. Selleri, M. Zoboli, "L'Iterazione dei Sottospazi Applicata al Metodo degli Elementi Finiti nella Risoluzione di Guide d' Onda Dielettriche", I Congresso Nazionale della SIMAI Società Italiana di Matematica Applicata e Industriale, Firenze, Palazzo dei Congressi, June 1-5, 1992.