

Curriculum of ALESSANDRO CHIASERA

Actual Title Researcher, 3rd Level
ID C.N.R. Number 10165
Institutional Istituto di Fotonica e Nanotecnologie IFN-CNR
address Sezione di Trento
 38050 Povo (Trento)

Summary	Page
Curriculum Vitae	2
Projects	3
h-index	4
Publications, didactical and scientific responsibility	4
Principal research activities and technical skills	5
Principal Collaborations	7
Brief overview of the research activity	8
Publication list	11

.....

Alessandro Chiasera



Curriculum of Alessandro Chiasera

Name, Surname	Alessandro Chiasera
Place and Date of birth	26-06-1977 Rovereto (Trento-Italy)
Actual Activity	CNR Researcher, 3rd Level from 03-04-2006
ID C.N.R. number	10165
Institutional Address	CNR-IFN UOS. Trento - Povo - Trento - Italia
01-09-1996	High school diploma on computer science with vote 60/60
20-09-2000	Degree in Physics at University of Trento, 110/110 with honors Thesis title: "Studio delle proprietà ottiche e spettroscopiche ad 1,5 μm in guide d'onda planari $\text{SiO}_2\text{-TiO}_2$ attivate Erblio prodotte per rf-sputtering su substrati silica-on-silicon."
17-12-2003	Ph.D. in Physics at University of Trento Thesis title: "Fabrication and characterization of optical planar waveguides activated by erbium ions for 1.5 μm applications."
01-01-2004/31-12-2005	Grant at the CNR-IFN Research subjects related to the activity of the laboratory for the Characterization and the Development of Materials for photonics and Optoelectronics (CSMFO Lab.) and in particular on the activity: "Sviluppo dei processi di fabbricazione per rf sputtering e sol-gel dip coating di amplificatori ottici su vetro per diramatori lossless e caratterizzazione delle loro proprietà ottiche, spettroscopiche e strutturali"
01-01-2006/31-03-2006	Grant at the study center "Enrico Fermi" Research subjects related to the project CNR-IFAC "Optical Microresonator" and related to the activity of the laboratory for the Characterization and the Development of Materials for photonics and Optoelectronics (CSMFO Lab.)
2001-2007	Assistant Professor on Physics at University of Trento, Faculty of engineering, Degree on telecommunications
03-04-2006	Researcher 3dr level fixed time position Art. 23 del DPR 171/91
01-10-2009	Researcher 3dr level CNR
21-02-2011/31-10-2011	Professor of Experimental physics advanced - sector FIS/01, At university of Trento faculty of science.
2012/2014	Assistant Professor of Experimental physics advanced - sector FIS/01, At university of Trento faculty of science.

Responsible of projects:

- a) CNR – GRICES 2007-2008. “Fabbricazione con tecniche sol-gel ed rf sputtering di cristalli fotonici basati su materiali dielettrici operativi nella banda C delle telecomunicazioni”
- b) Italian responsible of the joint project CNR – FCT 2009-2010. “Fabbricazione con tecniche sol-gel ed rf sputtering di guide di luce attive basate su vetri silicati per fotonica a 2 μm .”
- c) Italian responsible of the joint project CNR-CONICET 2011-2012. “Studio con spettroscopia positronica del ruolo dei difetti di tipo vacanza nella cinetica di assorbimento di idrogeno in Mg drogato Nb e nei processi di crescita di guide di luce per la fotonica.”
- d) Responsible of the unit IFN-CNR in the framework of the MaDEleNA project- “Developing and Studying novel intelligent nanoMaterials and Devices towards Adaptive Electronics and Neuroscience Applications” Grandi progetti 2012, Provincia autonoma di Trento Legge provinciale 2 agosto 2005, n. 14, articolo 22.

Key scientist in the projects:

- a) CNR-CNCPRST (2000-2003): “Sol-Gel-based waveguides for all-optical chemical and biochemical sensing. Sensors for water vapor”
- b) CNR-ICCTI (2001-2004): “Optical amplification in rare-earth doped glass integrated optical waveguides”
- c) CNR-CNRS (2002-2003) : “Improvement of the multi-target rf sputtering and sol-gel techniques for fabrication of Er^{3+} - Yb^{3+} silica-based photonic components operating in the C-telecommunication band”.
- d) MIUR-COFIN2002 (2002-2003): “Sol-gel synthesis, functionality and characterization of nanostructured molecular units in organic-inorganic hybrid materials for photonics applications”
- e) MIUR-COFIN2002 (2002-2003): “Nanostructured materials for integrated optics”
- f) NATO (2002-2003) “Optical and electrical properties of rare-earth activated a-C films”, SA(PST.CLG.978890)6607/FP
- g) MIUR-FIRB (2002-2006) “Miniaturized systems for electronics and photonics”.
- h) PAT 2004-2006 FAPVU “Fabbricazione di amplificatori ottici planari in vetro-ceramiche ultratrasparenti”
- i) Joint Research Program 2003-2006, India-Trento Bose-Romagnosi Program for Advanced Research. Project Title: “Research & Development of Active Bulk and Planar Waveguides based on Nanostructured Glassy Systems”.
- j) Progetto europeo INTAS 2004-2005. Titolo del progetto: “Mechanism of Optical Losses in Low Phonon Energy Glasses for Infrared Fibers”.
- k) Progetto CNR-CNRS 2004-2005 “Applicazione della tecnica PVD alla fabbricazione di vetroceramiche basate su vetri fluoro-zirconati, attivate con ioni di terre rare, operative come amplificatore ottico planare nella banda C delle telecomunicazioni”.
- l) Progetto MIUR-PRIN2004 “Vetri nanocompositi per la fotonica”
- m) Progetto CNR/GRICES 2005/2006 “Fabbricazione con tecniche sol-gel ed rf sputtering di

cristalli fotonici basati su materiali dielettrici operativi nella band C delle telecomunicazioni.”

- n) MIUR-PRIN 2005 (2006-2007): “Materiali ibridi organici/inorganici da assemblaggio di unità molecolari nanostrutturate per applicazioni multifotoniche”.
- o) Galileo project 2007 “Modeling and fabrication of innovative optical devices demonstrators for high-efficiency communication systems”.
- p) Ministero Affari Esteri “Significant bilateral research project” Italia-Vietnam “Synthesis and processing of nano-materials for sensing, optoelectronic and photonic applications” Ministero Affari Esteri Programma di collaborazione scientifica e tecnologica tra Italia e Vietnam per il periodo 2006-2008.
- q) PAT Post-Doc - FaStFAL “Fabbricazione di Strutture Dielettriche a Cristallo Fotonico Inverso per Azione Laser nella Regione Nir”, referente Dr. Andrea Chiappini (2007 – 2009);
- r) Scientific responsible in the *workpackages* “Sperimentazione” and “Integrazione su microcella” nel progetto HCSC “High Integration Solar Cell” – OPTOI (2006 – 2008), coordinator Optoelettronica Italia srl. And coordinator of the unit CNR-IFN Dr. Maurizio Ferrari.
- s) PAT “grandi progetti” NAoMI “Un approccio NAno-on-MiCro per un sistema di analisi multispettrale per test di proteine” Coordinator Andrea Canotti (Fondazione Bruno Kessler). CNR coordinator “Dipartimento Materiali e Dispositivi” Dr. Righini Giancarlo.
- t) ITPAR 2008-1011 project “Fabrication and Characterization of novel photonic crystal structures (polystyrene and polystyrene-silica) and Si/Ge quantum dots for photonics applications” India-Trento (Università degli Studi di Trento, Fondazione Bruno Kessler, Provincia Autonoma di Trento) Bose-Romagnosi Program for Advanced Research. Project Coordinators Prof. D. Narayana Rao, Prof. S. K. Ray, Prof. Lorenzo Pavesi, Dr. Maurizio Ferrari.
- u) Project ITPAR Phase 3rd

h-index:

14 [ISI-WEB December 2010]

16 [ISI-WEB September 2011]

19 [ISI-WEB October 2013]

20 [ISI-WEB April 2014]

21 [ISI-WEB September 2014]

23 [ISI-WEB February 2015]

Publications, didactical and scientific responsibility

- 108 articles on International scientific ISI journal.
- 9 articles on International scientific not-ISI journal.
- 118 publications in proceedings of National and International congresses.
- 227 communications in National and International conferences.
- 2 other publications

- 2 chapter in books with International editor
- Various invited talk in national and international conferences.
- Organization of Seminars.
- Co examiner in 2 degree in physics, 1 PhD degree in material engineering, 1 PhD degree in physic in Italy.
- Component of various Organizing Committee of international and national congress and workshops.
- Component of 1 commission in a CNR examination.
- Assistant professor for the exam “fisica 1” at the University of Trento 2001-2007.
- Titular professor for the exam “Experimental Phisics Advanced” the University of Trento 2010-2011.
- Assistant professor for the exam “Experimental Phisics Advanced” the University of Trento 2011-2015.
- Internship tutor of students coming from the Institut Universitaire de Technologie - IUT Le Mans - France for the years 2011-2014.
- Internship tutor of students coming from high schools in the project FBK "Ricerca come mestiere" for the years 2011-2014
- SIOF (Società Italiana di Ottica e Fotonica) Member.
- Secretary of SIOF from 2009 to 2014
- Referee of some international journal (Applied Physics Letter, Optical Materials, Optics Letters, Journal of Sol-Gel Science and Technology, Journal of Luminescence, Journal of Physics D, Thin Solid Films, Physical Review B, Journal of Non-Crystalline Solids, Materials Chemistry and Physics).
- Responsible of the CNR procurement “Fotonica: Materiali, strutture e diagnostica” MD.P03.012 from September 2010.
- Responsible of the CNR Module “Sviluppo e diagnostica ottica e spettroscopica di materiali e strutture per la fotonica” MD.P03.012.001 from September 2010.
- Topical Editor (Integrated Optics) for Applied Optics ISSN: 1559-128X (print) from December 2014

Principal research activities

- Properties, structure and processing of glasses and films for photonic applications and modeling and interpretation of the related physicals phenomena.
- Massive glasses obtained by melting and sol-gel route activated with rare earth ions (local structure, crystallization, energy transfer processes, optical and spectroscopic properties).
- Optical planar waveguides obtained with various techniques (dip-coating, spin-coating, rf-sputtering, ion-exchange) activated with rare earth ions (local structure, crystallization, energy transfer processes, optical and spectroscopic properties).
- Nanostructured and composite materials as example with co-activation with metal nanoparticles (massive systems, films, planar waveguides, ultra-transparent glass-ceramics).
- Fabrication with sol-gel route and rf-sputtering technique and optical, structural and spectroscopic characterization of 1D photonic crystal and artificial opals.
- Spherical microresonators (fabrication, spectroscopic and morphologic characterization).

Technical skills and competences

- Standard and time resolved luminescence spectroscopy in the visible and NIR regions.
- Standard and low frequency inelastic Raman Spectroscopy and Brillouin spectroscopy.
- M-line spectroscopy and Raman, Brillouin and luminescence spectroscopy in waveguide configuration.
- Absorbance and reflectance at different angle measurements in the UV-VIS-NIR regions.
- Attenuation, amplification and signal enhancement measurements.
- Develop of models for the description of chemical-physical phenomena.
- Modeling of optical amplifiers in planar format and photonic crystals 1D and 3D.
- Fabrication and develop of glasses, planar waveguides and photonic crystals with sol-gel and rf-sputtering techniques.

Principal Collaborations

- **CNRS-LASIR** Laboratoire de Spectrochimie Infrarouge et Raman, Lille, Francia, Sylvia Turrel (Photorefractive Materials, non-conventional glasses).
- **CNRS-LPCML** Laboratoire de Physico-Chimie des Matériaux Luminescents, Lyon, France, Eugene Duval (Structural properties of glasses).
- Departamento de **Engenharia de Materiais**, Instituto Superior Técnico, Lisboa, Portugal, Almeida Rui (Sol-gel waveguides, rare earth and metallic nanoparticles codoped systems, non-conventional glasses).
- **Ecole Nationale Supérieure des Sciences Appliquées et de Technologies**, Lannion France, Feron Patrice (Integrated optics microlasers).
- Facoltà di Ingegneria - **Dip. Ingegneria dei Materiali Trento**, Sandra Dire (Development of optical sol-gel materials).
- **IFAC-CNR**, Istituto di Fisica Applicata Nello Carrara, Firenze, Righini Giancarlo C. (Waveguides by ion-exchange, gain measurements, modeling, non-conventional glasses).
- **IFN-CNR**, Roberta Ramponi (Channel waveguides fabrication).
- **Lab. des Fluorures CNRS, Université du Maine**, France, Le Mans, Brigitte Boulard, Claire Duverger (Non-conventional glasses).
- **Laboratory of Photonic Materials, Institute of Chemistry, UNESP**, Araraquara Brazil, Ribeiro Sidney (Glassceramic waveguides, nanophase materials and passive polymeric waveguides, non oxide glasses, opals).
- **Novel Photonic Glasses School of Mechanical Materials, Manufacturing Engineering and Management** University of Nottingham, Seddon B Angela (Glass Ceramics in non oxide glasses).
- **Politecnico Bari, Dip. Elettrotecnica ed Elettronica**, Francesco Prudenzeno, (Modeling of Planar Waveguides).
- Università d'Angers, Lab. **CNRS- POMA, Angers**, France, Andre Monteil ($\chi(3)$ measurements, modeling by molecular dynamics).
- **Università di Padova, Dip. Fisica**, Padova, Mazzoldi Paolo (Nanophase materials).
- **Università di Padova, Dipartimento di Ingegneria Meccanica Set. Materiali**, Martucci Alessandro (Sol-gel planar waveguides).
- **Università di Trento, Dipartimento di Fisica** (Giuglio Monaco, Caratterizzazione e Sviluppo di Materiali per la Fotonica e l'Optoelettronica).
- **Università di Venezia**, Gonella Francesco, (Metal nanoparticles and Waveguides by ion-exchange).
- **Università di Verona, Dip. Sci. e Tecnico**, Verona, Bettinelli Marco (Oxides glasses by melting).
- **Université Béni Mellal, Faculté des Sciences & Techniques**, Département de Physique Appliquée, Morocco, Adel Bouajaj (All-optical chemical and biochemical sensing).

Brief overview of the research activity

From the February 2000 I have studied the optical and spectroscopic properties and the development of materials with potential application in the sectors of the optics and photonics. My research topics are part of the research activities of the Characterization and Development of Materials for Photonics and Optoelectronics Laboratory (CSMFO Lab.) where I work since my degree. The research group CSMFO is coordinated by Dr. Maurizio Ferrari and is a unit of the Institute of Photonics and Optoelectronics (IFN) of the CNR and perform its activity in the framework of the Department “Materials and Devices”, project “Photonic Components and Systems” with the procurement which I am the responsible since the 2010 “Photonics: Materials, Structures and Diagnostic”. The research group has a great experience in the preparation of glassy materials for photonics and their characterization with various spectroscopic techniques such as resolved time luminescence and Raman spectroscopy. My competence have enriched the scientific and technical skill fund of the group by introducing and developing new protocols for the deposition and characterizations of materials fabricated by rf-sputtering and sol-gel techniques and extending these research line to the fabrication and diagnostic or nanostructured materials with applications in the photonics.

The principal research activities are:

- Properties, structure and processing of glasses and films for photonic applications and modeling and interpretation of the related physical phenomena.
- Massive glasses obtained by melting and sol-gel route activated with rare earth ions (local structure, crystallization, energy transfer processes, optical and spectroscopic properties).
- Optical planar waveguides obtained with various techniques (dip-coating, spin-coating, rf-sputtering, ion-exchange) activated with rare earth ions (local structure, crystallization, energy transfer processes, optical and spectroscopic properties).
- Nanostructured and composite materials as example with co-activation with metal nanoparticles (massive systems, films, planar waveguides, ultra-transparent glass-ceramics).
- Fabrication with sol-gel route and rf-sputtering technique and optical, structural and spectroscopic characterization of 1D photonic crystal and artificial opals.
- Spherical microresonators (fabrication, spectroscopic and morphologic characterization).

Specific Techniques:

- Standard and time resolved luminescence spectroscopy in the visible and NIR regions.
- Standard and low frequency inelastic Raman Spectroscopy and Brillouin spectroscopy.
- M-line spectroscopy and Raman, Brillouin and luminescence spectroscopy in waveguide configuration.
- Absorbance and reflectance at different angle measurements in the UV-VIS-NIR regions.
- Attenuation, amplification and signal enhancement measurements.
- Develop of models for the description of chemical-physical phenomena.
- Modeling of optical amplifiers in planar format and photonic crystals 1D and 3D.
- Fabrication and develop of glasses, planar waveguides and photonic crystals with sol-gel and rf-sputtering techniques.

Keywords:

Fabrication

- Optimization of the fabrication processes, with rf sputtering technique and sol-gel deposition techniques, for the control of the reliability and repeatability of processes, for the reduction of propagation losses and, in general, to improve the optical properties and spectroscopic properties of the various systems produced;
- Growth by sol-gel of ultra-transparent glass ceramics, glasses, waveguides in the planar format on different substrates, in particular, silica-on-silicon and v-SiO₂, activated with rare earth ions;
- Growth by rf sputtering of rare-earth activated planar waveguides on different substrates, in particular, silica-on-silicon and v-SiO₂;
- Preparation of Photonic Band Gap (PBG) structures and 1 D photonic crystals, through various deposition protocols (sol-gel, sputtering RF) or through chemical and physical processes, starting from colloidal solutions of nanoparticles;
- Manufacture of microspheres and their coating with active films by sol-gel;

Materials

- Silica modified glasses
- Fluoride glasses
- Telluride glasses
- Inorganic-organic hybrid materials
- IR Glasses
- Ultra-transparent Glassceramics

Activations

- Rare earth ions, metallic nanoparticles and semiconductor quantum dots including co-doping

Characterization

- Study of the optical properties by m-line spectroscopy, loss, and transmission and reflection of the structural and spectroscopic properties via Raman spectroscopy, luminescence and Brillouin
- Modeling of the structure, the physical mechanisms and architecture of the devices

Develop

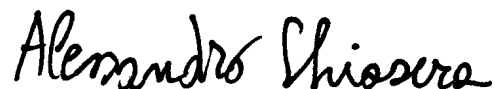
- Amplifiers in integrated optics, lossless splitter for applications in the telecom bands. In particular, S, C, L.
- Ultratransparent active and passive Glassceramics.
- Up-conversion operating systems.
- Dielectric PBG structures
- Active and passive spherical microresonators
- All-optical sensors of chemical species

Training activities

As researcher in the research group CSMFO, I am active on the organization of seminars and national and international conferences in the field of physics and materials science for photonics. Thanks to the close collaboration with the Department of Physics, University of Trento, the research group is involved in the training of specialist thesis and first level, as well as in PhD thesis in Physics and Engineering of Materials. I have put a lot of care in training young people interested in entering the world of research by helping them to gain experience in the field of materials synthesis by sol-gel and rf sputtering, in the optical and spectroscopic techniques for the characterization and understanding of the physical mechanisms. Young researchers are strongly encouraged to play an active role in the transfer of knowledge by exchanging information and expertise with colleagues and meeting specialists in different fields related to the research. In particular young researchers enrich their expertise dealing with complex problems, such as materials science applied to photonics, finding the appropriate experimental solutions and acquiring the necessary theoretical basis. On this basis, young scientists are trained, prepared and highly motivated, able to work successfully in a research group.

.....

Alessandro Chiasera



PUBLICATION LIST

Of	Alessandro Chiasera
Actual Title	Researcher, 3rd Level
ID C.N.R. Number	10165
Institutional address	Istituto di Fotonica e Nanotecnologie IFN-CNR Sezione di Trento 38123 Povo (Trento)

The list of publications has been divided as follows:

Publications verified by an Editorial Committee (ISI Journals)	From pag. 12 to pag. 27
Publications verified by an Editorial Committee (not ISI Journals)	From pag. 27 to pag. 28
Publications in congress proceedings	From pag. 29 to pag. 49
Other publications	pag. 50
Chapters and articles in book with international publishing house	pag. 51
List of communications in national or international conferences	From pag. 52 to pag 86

Publications verified by an Editorial Committee (ISI Journals)

- 1 R. Rolli, M. Montagna, A. Chiasera, G.C. Righini, S. Pelli, A. Jha, V.K. Tikhomirov, S.A. Tikhomirova, A. Monteil, S. Chaussedent, M. Ferrari
“A comparative study of the spectroscopic properties at 1.5 μm of erbium-activated fluoride and tellurite glasses”
Philosophical Magazine B 82 (2002) pp. 573-585.
doi: 10.1080/13642810110085226
- 2 R.R. Gonçalves, G. Carturan, L. Zampedri, M. Ferrari, M. Montagna, A. Chiasera, G.C. Righini, S. Pelli, S.J.L. Ribeiro, and Y. Messaddeq
“Sol-gel Er-doped $\text{SiO}_2\text{-HfO}_2$ planar waveguides: a viable system for 1.5 μm application.”
Applied Physics Letters 81 (2002) pp. 28-30.
doi: 10.1063/1.1489477
- 3 R.R. Gonçalves, M. Ferrari, A. Chiasera, M. Montagna, E.A. Morais, L.V.A. Schalvi, C.V. Santilli, Y. Messaddeq, and S.J.L. Ribeiro
“Planar Waveguides based on Nanocrystalline and Er^{3+} doped SnO_2 ”
Journal of Metastable and Nanocrystalline Materials 14 (2002) pp. 107-110.
- 4 N. Chiodini, A. Paleari, G. Spinolo, A. Chiasera, M. Ferrari, G. Brambilla, E.R. Taylor
“Photosensitive erbium doped tin-silicate glasses”
Journal of Non-Crystalline Solids 311 (2002) pp. 217-222.
doi: 10.1016/S0022-3093(02)01419-9
- 5 A.M. Baranov, V.V. Sleptov, A.A. Nefedov, A.E. Varfolomeev, S.S. Franchenko, L. Calliari, G. Speranza, M. Ferrari, A. Chiasera
“Erbium photoluminescence in hydrogenated amorphous carbon”
Physica Status Solidi (b) 234 (2002) R1-R3.
doi:10.1002/1521-3951(200211)234:2<R1::AID-PSSB99991>3.0.CO;2-6
- 6 G.C. Righini, S. Pelli, M. Ferrari, C. Armellini, L. Zampedri, C. Tosello, S. Ronchin, R. Rolli, E. Moser, M. Montagna, A. Chiasera, and S.J.L. Ribeiro
“Er-doped silica-based waveguides prepared by different techniques: rf-sputtering, sol-gel and Ion-exchange”
Optical and Quantum Electronics 34 (2002) pp. 1151-1166.
doi: 10.1023/A:1021338906917
- 7 A. Chiasera, M. Montagna, R. Rolli, S. Ronchin, L. Zampedri, S. Pelli, G.C. Righini, R.R. Gonçalves, Y. Messaddeq, S.J.L. Ribeiro, C. Armellini, M. Ferrari
“ $\text{Er}^{3+}/\text{Yb}^{3+}$ co-activated silica-alumina monolithic xerogels”
Journal of Sol-Gel Science and Technology 26 (2003) pp. 943-946.
doi: 10.1023/A:1020744926382

- 8 L. Zampedri, F. Visintainer, C. Tosello, S. Ronchin, R. Rolli, M. Montagna, A. Chiasera, G.C. Righini, S. Pelli, A. Monteil, C. Duverger, M. Ferrari, C. Armellini
“Erbium-activated silica-titania planar waveguides”
Journal of Sol-Gel Science and Technology 26 (2003) pp. 1033-1036.
doi: 10.1023/A:1020734018629
- 9 Ana C. Marques, Rui M. Almeida, Alessandro Chiasera, and Maurizio Ferrari
“Reversible Photoluminescence quenching in Er³⁺-doped silica-titania planar waveguides prepared by sol-gel”
Journal of Non-Crystalline Solids 322 (2003) pp. 272-277.
doi: 10.1016/S0022-3093(03)00214-X
- 10 R.R. Gonçalves, G. Carturan, L. Zampedri, M. Ferrari, A. Chiasera, M. Montagna, G.C. Righini, S. Pelli, S.J.L. Risiero, Y. Messaddeq
“Infrared-to-visible CW frequency upconversion in erbium activated Silica-Hafnia waveguides prepared by sol-gel route”
Journal of Non-Crystalline Solids 322 (2003) pp. 306-310.
doi: 10.1016/S0022-3093(03)00220-5
- 11 A. D’Orazio, M. De Sario, L. Mescia, V. Petruzzelli, F. Prudenzano, A. Chiasera, M. Montagna, C. Tosello, M. Ferrari
“Design of Er³⁺-doped SiO₂-TiO₂ planar waveguide”
Journal of Non-Crystalline Solids 322 (2003) pp. 278-283.
doi: 10.1016/S0022-3093(03)00215-1
- 12 A. Chiasera, C. Tosello, E. Moser, M. Montagna, R. Belli, R.R. . Gonçalves, G.C. Righini, S. Pelli, A. Chiappini, L. Zampedri, M. Ferrari
“Er³⁺/Yb³⁺-activated silica-titania planar waveguides for EDPWAs fabricated by rf sputtering”
Journal of Non-Crystalline Solids 322 (2003) pp. 289-294.
doi: 10.1016/S0022-3093(03)00217-5
- 13 A. Martucci, A. Chiasera, M. Montagna, M. Ferrari
“Erbium doped GeO₂-TiO₂ sol-gel waveguides”
Journal of Non-Crystalline Solids 322 (2003) pp. 295-299.
doi: 10.1016/S0022-3093(03)00218-7
- 14 A.Chiasera, M. Montagna, F. Rossi, M.Ferrari
“Brillouin scattering in planar waveguides. I. Numerical model”
Journal of Applied Physics 94 (2003) pp. 4876-4881.
doi: 10.1063/1.1607519

- 15 A. Chiasera, M. Montagna, E. Moser, F. Rossi, C. Tosello, M. Ferrari, L. Zampedri, S. Caponi, R.R. Gonçalves, S. Chaussedent, A. Monteil, D. Fioretto, G. Battaglin, F. Gonella, P. Mazzoldi, G.C. Righini
 “Brillouin scattering in planar waveguides. II. Experiments”
 Journal of Applied Physics 94 (2003) pp. 4882-4889.
 doi: 10.1063/1.1607520
- 16 G.C. Righini, M. Brenci, A. Chiasera, M. Ferrari, M. Montagna, G. Nunzi Conti, S. Pelli
 “Ion-Exchange Processes in Active Glasses: Spectroscopic and Structural Characterization”
 Glass Science and Technology 76 Suppl. C2 (2003) pp. 29-34.
- 17 A. Chiasera, M. Montagna, C. Tosello, S. Pelli, G.C. Righini, M. Ferrari, L. Zampedri, A. Monteil, P. Lazzeri
 “Enhanced spectroscopic properties at 1.5 μm in $\text{Er}^{3+}/\text{Yb}^{3+}$ -activated silica-titania planar waveguides fabricated by rf-sputtering”
 Optical Materials 25 (2004) pp. 117-122.
 doi: 10.1016/S0925-3467(03)00259-3
- 18 C. Bullen, P. Mulvaney, C. Sada, M. Ferrari, A. Chiasera, A. Martucci
 “Incorporation of highly luminescent semiconductor quantum dot in $\text{ZrO}_2\text{-SiO}_2$ hybrid sol-gel glass film”
 J. Mat. Chemistry, 14 (2004) pp. 1112-1116.
- 19 M. Montagna, A. Chiasera, E. Moser, F. Visintainer, M. Ferrari, L. Zampedri, R.R. Gonçalves, S.J.L. Ribeiro, A. Martucci, M. Guglielmi, M. Ivanda, and R.M. Almeida
 “Nucleation and crystallization of titania nanoparticles in silica titania planar waveguides: a study by low frequency Raman scattering”
 Materials Science Forum , Advanced Materials Forum, 455-456 (2004) pp.520-526.
- 20 R.M. Almeida, A.C. Marques, S. Pelli, G.C. Righini, A. Chiasera, M. Mattarelli, M. Montagna, C. Tosello, R.R. Gonçalves, H. Portales, S. Chaussedent, M. Ferrari, L. Zampedri
 “Spectroscopic assessment of silica-titania and silica-hafnia planar waveguides”
 Philosophical Magazine, 84 (2004) pp. 1659-1666.
 doi: 10.1080/14786430310001644459
- 21 F. Riboli, D. Navarro-Urrios, A. Chiasera, N. Daldosso, L. Pavesi, C. J. Oton, J. Heitmann, L.X. Yi, R. Scholz, M. Zacharias
 “Birefringence in Optical Waveguides Made by Silicon Nanocrystal Superlattices”
 Applied Physics Letters, 85 (2004) pp. 1268-1270.
 doi: 10.1063/1.1779969

- G. Speranza, L. Calliari, M. Ferrari, A. Chiasera, K. Tran Ngoc, A.M. Baranov, V.V. Sleptsov, A.A. Nefedov, A.E. Varfolomeev, S.S. Fanchenko
- 22 “Erbium-doped thin amorphous carbon films prepared by mixed CVD-sputtering”
Applied Surface Science, 238 (2004) pp. 117–120.
doi: 10.1016/j.apsusc.2004.05.191
- A. Monteil, S. Chaussedent, G. Alombert-Goget, M. Gaumer, J. Obriot, S.J.L. Ribeiro, Y. Messaddeq, A. Chiasera, M. Ferrari
- 23 “Clustering of rare earth in glasses, aluminium effect: experiments and modelling”
Journal of Non-Crystalline Solids, 348 (2004) pp. 44-50.
doi: 10.1016/j.jnoncrysol.2004.08.124
- M. Mattarelli, V. Tikhomirov, A. B. Seddon, M. Montagna, E. Moser, A. Chiasera, S. Chaussedent, G. Nunzi Conti, S. Pelli, G.C. Righini, L. Zampedri, M. Ferrari
- 24 “Tm³⁺-activated transparent oxy-fluoride glass ceramics: structural and spectroscopic properties.”
Journal of Non-Crystalline Solids, 345&356 (2004) pp. 354-358.
doi: 10.1016/j.jnoncrysol.2004.08.043
- L. Zampedri, G. C. Righini, H. Portales, S. Pelli, G. Nunzi Conti, M. Montagna, M. Mattarelli, R.R. Gonçalves, M. Ferrari, A. Chiasera, M. Bouazaoui, C. Armellini
- 25 “Sol-Gel-Derived Er-activated SiO₂-HfO₂ Planar Waveguides for 1.5 μm application”
Journal of Non-Crystalline Solids, 345&356 (2004) pp. 580-584.
doi: 10.1016/j.jnoncrysol.2004.08.088
- S. Pelli, M. Bettinelli, M. Brenci, R. Calzolari, A. Chiasera, M. Ferrari, G. Nunzi Conti, A. Speghini, L. Zampedri, J. Zheng, and G. C. Righini
- 26 “Erbium Doped Silicate Glasses for Integrated Optical Amplifiers and Lasers”
Journal of Non-Crystalline Solids 345&346 (2004) pp.372-376.
doi: 10.1016/j.jnoncrysol.2004.08.046
- R.M. Almeida, A.C. Marques, R. Cabeça, L. Zampedri, A. Chiasera, M. Ferrari
- 27 “Photoluminescence of erbium-doped silicate sol-gel planar waveguides”
Journal of Sol-Gel Science and Technology 31 (2004) pp. 317-322.
doi: 10.1023/B:JSST.0000048010.74400.f0
- C. Armellini, A. Chiasera, S. Dirè, M. Ferrari, A. Martucci, M. Mattarelli, M. Montagna, E. Moser, S. Pelli, G.C. Righini, G. D. Soraru, L. Zampedri
- 28 “Photoluminescence excitation spectroscopy of Er³⁺/Yb³⁺ co-activated silica-alumina monolithic xerogels”
Journal of Sol-Gel Science and Technology 32 (2004) pp. 267-271.
doi: 10.1007/s10971-004-5800-x

- D. Navarro-Urrios, F. Riboli, M. Cazzanelli, A. Chiasera, N. Daldosso, L. Pavesi, C.J. Oton, J. Heitmann, L.X. Yi, R. Scholz, M. Zacharias
29 “Birefringence characterization of mono-dispersed silicon nanocrystals planar waveguides”
Optical Materials 27 (2005) pp. 763-768.
doi: 10.1016/j.optmat.2004.08.011
- S. Sebastiani, A. Chiasera, M. Ferrari, G. Nunzi Conti, S. Pelli, C. Tosello, G. C. Righini
30 “Characterization of a highly photorefractive RF-sputtered SiO₂-GeO₂ waveguide”
Optics Express 13 (2005) pp. 1696-1701.
doi: 10.1364/OPEX.13.001696
- L. Zampedri, C. Tosello, H. Portales, M. Montagna, M. Mattarelli, A. Chiappini, G. C. Righini, S. Pelli, G. Nunzi Conti, M. Martino, S. Portal, A. C. Marques, R. M. Almeida, Y. Jestin, M. Ferrari, A. Chiasera
31 “Spectroscopic assessment of rare-earth activated planar waveguides and microcavities”
Applied Surface Science 248 (2005) pp. 3-7.
doi: 10.1016/j.apsusc.2005.03.022
- H. Portales, M. Mattarelli, M. Montagna, A. Chiasera, M. Ferrari, A. Martucci, P. Mazzoldi, S. Pelli, G. C. Righini
32 “Investigation of the role of silver on spectroscopic features of Er³⁺-activated Ag-exchanged silicate and phosphate glasses”
Journal of Non-Crystalline Solids 351 (2005), pp. 1738-1742.
doi: 10.1016/j.jnoncrysol.2005.04.006
- G. Alombert-Goget, N. Gaumer, J. Obriot, S. Chaussedent, A. Monteil, H. Portales, A. Chiasera, M. Ferrari
33 “Aluminum effect on photoluminescence properties of sol-gel-derived silicate glasses activated by rare-earth ions”
Journal of Non-Crystalline Solids 351 (2005), pp. 1754-1758.
doi: 10.1016/j.jnoncrysol.2005.04.009
- M. Mattarelli, A. Chiappini, M. Montagna, A. Martucci, A. Ribaud, M. Guglielmi, M. Ferrari, A. Chiasera
34 “Optical Spectroscopy of TeO₂-GeO₂ glasses activated with Er³⁺ and Tm³⁺ ions”
Journal of Non-Crystalline Solids 351 (2005), pp. 1759-1763.
doi: 10.1016/j.jnoncrysol.2005.04.010
- M. Mattarelli, M. Montagna, L. Zampedri, A. Chiasera, M. Ferrari, G.C. Righini, L.M. Fortes, M.C. Gonçalves, L.F. Santos, R.M. Almeida
35 “Self-absorption and radiation trapping in Er³⁺-doped TeO₂-based glasses.”
Europhysics Letter 71 (2005), pp. 394–399.
doi: 10.1209/epl/i2005-10092-4

- 36 A.C. Marques, R. Cabeça, R.M. Almeida, L. Zampedri, A. Chiasera, and M. Ferrari
“The effect of TiO₂ on the structure and spectroscopic properties of silica-hafnia based sol-gel waveguides”
Glass Technology 46 (2005), pp. 50-54.
- 37 A. Chiasera, M. Ferrari, M. Mattarelli, M. Montagna, S. Pelli, H. Portales, G.C. Righini
“Assessment of spectroscopic properties of erbium ions in silicate and phosphate glasses after silver exchange”
Optical Materials 27 (2005), pp. 1743- 1747.
doi: 10.1016/j.optmat.2004.11.044
- 38 G. C. Righini, C. Arnaud, S. Berneschi, M. Bettinelli, M. Brenci, A. Chiasera, P. Feron, M. Ferrari, M. Montagna, G. Nunzi Conti, S. Pelli, H. Portales, C. Siligardi, A. Speghini, L. Zampedri
“Integrated optical amplifiers and microspherical lasers based on erbium-doped oxide glasses”
Optical Materials 27 (2005), pp. 1711-1717.
doi: 10.1016/j.optmat.2004.11.041
- 39 C. Duverger-Arfulso, B. Boulard, Y. Jestin, M. Ferrari, A. Chiasera
"Influence of PrCl₃/PrF₃ on the optical and spectroscopic properties of fluorogallate and fluoro-gallo-indate glasses"
Optical Materials 28 (2006), pp. 441-447.
doi: 10.1016/j.optmat.2005.04.004
- 40 G. Speranza, S.N.B. Bhaktha, A. Chiappini, A. Chiasera, M. Ferrari, C. Goyes, Y. Jestin, M. Mattarelli, L. Minati, M. Montagna, G. Nunzi Conti, S. Pelli, G.C. Righini, C. Tosello, K.C. Vishunubhatla.
"Nanocomposite Er-Ag silicate glasses"
Journal of Optics A: Pure and Applied Optics 8 (2006), pp. S450-S454.
doi: 10.1088/1464-4258/8/7/S21
- 41 S.N.B. Bhaktha, B. Boulard, S. Chaussedent, A. Chiappini, A. Chiasera, E. Duval, C. Duverger, S. Etienne, M. Ferrari, Y. Jestin M. Mattarelli, M. Montagna, A. Monteil, E. Moser, H. Portales, K.C. Vishunubhatla
“Erbium-activated modified silica glasses with high ⁴I_{13/2} luminescence quantum yield”
Optical Materials 28 (2006), pp. 1325-1328.
doi: 10.1016/j.optmat.2006.02.018
- 42 G. Nunzi Conti, A. Chiasera, L. Ghisa, S. Berneschi, M. Brenci, Y. Dumeige, S. Pelli, S. Sebastiani, P. Feron, M. Ferrari, and G.C. Righini
“Spectroscopic and lasing properties of Er³⁺-doped glass microspheres”
J. Non-Crystalline Solids 352 (2006), pp. 2360-2363.
doi: 10.1016/j.jnoncrysol.2006.01.089

- G. Nunzi Conti, A. Chiasera, M. Brenci, M. Ferrari, S. Pelli, S. Sebastiani, C. Tosello, and G. C. Righini
 43 “Er³⁺/Yb³⁺-codoped silica-germania sputtered films: structural and spectroscopic characterization”
 J. Non-Crystalline Solids 352 (2006), pp.2585-2588.
 doi: 10.1016/j.jnoncrysol.2006.01.091
- M. Mattarelli, S. Sebastiani, M. Brenci, R. Calzolari, A. Chiasera, M. Ferrari, M. Montagna, G. Nunzi Conti, S. Pelli, and G.C. Righini
 44 “Characterization of erbium doped lithium niobate crystals and waveguides”
 Optical Materials 28 (2006), pp. 1292-1295.
 doi: 10.1016/j.optmat.2006.01.030
- S. Sebastiani, G.C. Righini, S. Pelli, G. Nunzi Conti, M. Brenci, C. Tosello, A. Chiasera, and M. Ferrari.
 45 “UV photo-imprinting of channel waveguides on active SiO₂-GeO₂ RF-sputtered thin films”
 Applied Physics Letters 89 (2006) pp. 121102-1 – 121101-3.
 doi: 10.1063/1.2355472
- M. Mattarelli, M. Montagna, F. Rossi, A. Chiasera and M. Ferrari
 46 “Mechanism of low-frequency Raman scattering from the acoustic vibrations of dielectric nanoparticles”
 Physical Review B 74 (2006) pp. 153412/1 - 153412/4.
 doi: 10.1103/PhysRevB.74.153412
- A. Chiasera, R. Belli, S.N.B. Bhaktha, A. Chiappini, M. Ferrari, Y. Jestin, E. Moser, G.C. Righini, C. Tosello
 47 “High quality factor Er³⁺-activated dielectric microcavity fabricated by rf-sputtering”
 Applied Physics Letters 89 (2006) pp. 171910-1 – 171910-3.
 doi: 10.1063/1.2364841
- Luís M. Fortes, Luís F. Santos, M. Clara Gonçalves, Rui M. Almeida, M. Mattarelli, M. Montagna, A. Chiasera, M. Ferrari, A. Monteil, S. Chaussedent, and G.C. Righini
 48 “Er³⁺ ion dispersion in tellurium oxychloride glasses.”
 Optical Materials 29 (2007) pp. 503-509.
 doi: 10.1016/j.optmat.2005.10.008
- M. Mattarelli, M. Montagna, K. Vishnubathla, A. Chiasera, M. Ferrari, G.C. Righini
 49 “Mechanisms of silver to erbium energy transfer in silicate glasses”
 Physical Review B 75 (2007) pp. 125102-1 – 125102-6.
 doi: 10.1103/PhysRevB.75.125102

- 50 M. Mattarelli, M. Montagna, E. Moser, K.C. Vishnubhatla, C. Armellini, A. Chiasera, M. Ferrari, G. Speranza, M. Brenci, G. Nunzi Conti, G.C. Righini
“Silver to erbium energy transfer in phosphate glasses”
Journal of Non-Crystalline Solids 353 (2007) pp. 498–501.
doi: 10.1016/j.jnoncrysol.2006.10.017
- 51 A. Chiappini, C. Armellini, A. Chiasera, M. Ferrari, Y. Jestin, M. Mattarelli, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini, M. Clara Gonçalves, Rui M. Almeida
“Design of photonic structures by sol gel-derived silica nanospheres”
Journal of Non-Crystalline Solids 353 (2007) pp. 674–678.
doi: 10.1016/j.jnoncrysol.2006.10.034
- 52 L. Minati, G. Speranza, M. Ferrari, Y. Jestin, A. Chiasera
“X-Ray Photoelectron Spectroscopy of Er³⁺ Activated Silica Hafnia Waveguides”
Journal of Non-Crystalline Solids 353 (2007) pp. 502–505.
doi: 10.1016/j.jnoncrysol.2006.10.018
- 53 Y. Jestin, C. Armellini, A. Chiappini, A. Chiasera, M. Ferrari, C. Goyes, M. Mattarelli, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, R. Retoux, G.C. Righini, G. Speranza
“Erbium activated HfO₂ based glass-ceramics waveguides for photonics”
Journal of Non-Crystalline Solids 353 (2007) pp. 494–497.
doi: 10.1016/j.jnoncrysol.2006.10.016
- 54 Rui M. Almeida, A. C. Marques, A. Chiasera, A. Chiappini, M. Ferrari
“Er³⁺/Yb³⁺-doped photonic crystal microcavities prepared by sol-gel”
Journal of Non-Crystalline Solids 353 (2007) pp. 490–493.
doi: 10.1016/j.jnoncrysol.2006.10.015
- 55 G.C. Righini, C. Armellini, S.N.B. Bhaktha, M. Brenci, I. Cacciari, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, E. Moser, G. Nunzi Conti, S. Pelli, C. Tosello.
“Rare-earth-doped silica-based glasses for photonic applications.”
Journal of Non-Crystalline Solids 353 (2007) 753–756
- 56 M. Ivanda, K. Furić, S. Musić, M. Ristić, M. Gotić, D. Ristić, A.M. Tonejc, I. Djerdj, M. Mattarelli, M. Montagna, F. Rossi, M. Ferrari, A. Chiasera, Y. Jestin, G. C. Righini, W. Kiefer, R.R. Gonçalves
“Low Wavenumber Raman Scattering of Nanoparticles and Nanocomposite Materials”
Journal Of Raman Spectroscopy 38 (2007) pp. 647–659.
doi: 10.1002/jrs.1723

- J. Jasieniak, J. Pacifico, R. Signorini, A. Chiasera, M. Ferrari, A. Martucci, and P. Mulvaney
57 "Luminescence and Amplified Stimulated Emission in CdSe–ZnS-Nanocrystal-Doped TiO₂ and ZrO₂ Waveguides"
Advanced Functional Materials 17 (2007) pp. 1654–1662.
doi: 10.1002/adfm.200600955
- Y. Jestin, C. Armellini, A. Chiasera, A. Chiappini, M. Ferrari, E. Moser, R. Retoux, G.C. Righini
58 "Low optical loss Er³⁺-activated glass-ceramics planar waveguides"
Applied Physics Letters 91 (2007) pp. 071909-1 – 071909-3.
doi: 10.1063/1.2771537
- F. Prudenzano, L. Mescia, A. D’Orazio, M. De Sario, V. Petruzzelli, A. Chiasera, M. Ferrari
59 "Optimization and Characterization of Rare-Earth-Doped Photonic-Crystal-Fiber Amplifier Using Genetic Algorithm"
Journal of Lightwave Technology 25 (2007) pp. 2135-2142.
doi: 10.1109/JLT.2007.901331
- G.C. Righini, C. Armellini, A. Chiasera, Y. Jestin, M. Ferrari, A. Chiappini, M. Montagna, C. Arfuso Duverger, P. Féron, S. Berneschi, M. Brenci, G. Nunzi Conti, S. Pelli, C. Gonçalves, R.M. Almeida
60 "Er³⁺ -activated sol-gel silica derived spherical microresonators"
Glass Technology - European Journal of Glass Science & Technology Part A 48 (2007) pp. 200-203.
- C. Armellini, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, M. Mortier, E. Moser, R. Retoux, and G. C. Righini,
61 "Rare Earth-Activated Silica-Based Nanocomposites"
Journal of Nanomaterials 2007 Article ID 84745, 6 pages.
- R. R. Gonçalves, Y. Messaddeq, A. Chiasera, Y. Jestin, M. Ferrari, S.J.L. Ribeiro
62 "Erbium-activated silica-zirconia planar waveguides prepared by sol-gel route",
Thin Solid Films 516 (2008) pp. 3094-3097.
doi: 10.1016/j.tsf.2007.07.183
- A. Peled, A. Chiasera, M. Nathan, M. Ferrari, S. Ruschin
63 "Monolithic rare-earth doped sol-gel tapered rib waveguide laser"
Applied Physics Letters 92 (2008) pp. 221104-1 - 221104-3.
doi: 10.1063/1.2936961

- A. Monteil, M. El-Jouad, G. Alombert-Goget, S. Chaussedent, N. Gaumer, A. Mahot, A. Chiasera, Y. Jestin, and M. Ferrari
64 “Relationship between structure and optical properties in rare-earth-doped hafnium and silicon oxides: modeling and spectroscopic measurements”
Journal of Non-Crystalline Solids 354 (2008) pp. 4719-4722.
doi: 10.1016/j.jnoncrysol.2008.04.047
- S. N. B. Bhaktha, F. Beclin, M. Bouazaoui, B. Capoen, A. Chiasera, M. Ferrari, C. Kinowski, G. C. Righini, O. Robbe, S. Turrell
65 “Enhanced fluorescence from Eu^{3+} in low-loss silica glass-ceramic waveguides with high SnO_2 content”
Applied Physics Letters 93 (2008) pp. 211904-1 - 211904-3.
doi: 10.1063/1.3037224
- Jacek Jasieniak, Cinzia Sada, Alessandro Chiasera, Maurizio Ferrari, Alessandro Martucci, and Paul Mulvaney.
66 “Sol-gel based vertical optical microcavities with quantum dot defect layers”
Advanced Functional Materials 18 (2008) pp. 3772-3779.
doi: 10.1002/adfm.200800784
- D. Ristic, M. Ivanda, K. Furic, U.V. Desnica, M. Buljan, M. Montagna, M. Ferrari, A. Chiasera, Y. Jestin
67 “Raman scattering on quadrupolar vibrational modes of spherical nanoparticles”
Journal of Applied Physics 104 (2008) pp. 073519-1 - 073519-7.
doi: 10.1063/1.2981083
- C. Armellini, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, E. Moser, G. Nunzi Conti, S. Pelli, A. Quandt, G.C. Righini, C. Tosello
68 “ Er^{3+} - activated nanocomposite photonic glasses and confined structures”
Optical Materials 31 (2009) pp. 1071-1074.
doi: 10.1016/j.optmat.2007.12.017
- Dario Buso, Gioia Della Giustina, Giovanna Brusatin, Massimo Guglielmi, Alessandro Martucci, Alessandro Chiasera, Maurizio Ferrari, and Filippo Romanato
69 “Patterning of Sol–Gel Hybrid Organic–Inorganic Film Doped with Luminescent Semiconductor Quantum Dots”
J. Nanosci. Nanotechnol. 9 (2009) pp. 1858-1864.
doi: 10.1166/jnn.2009.373
- Giancarlo C. Righini, Franco Cosi, Gualtiero Nunzi Conti, Stefano Pelli, Silvia Soria, Enrico Moser, Yoann Jestin, Maurizio Ferrari, Patrice Féron, Alessandro Chiasera, Andrea Chiappini, and Cristina Armellini
70 “Photonic properties and applications of glass micro- and nanospheres”
Physica Status Solidi A 206 (2009) pp 898-903.
doi: 10.1002/pssa.200881335

- G. Speranza, L. Minati, A. Chiasera, A. Chiappini, Y. Jestin, M. Ferrari, and G.C. Righini
- 71 "Structural investigation of photonic materials at the nano-level using XPS"
 Journal of Non-Crystalline Solids 355 (2009) pp. 1157-1159.
 doi: 10.1016/j.jnoncrysol.2008.11.042
- G. Speranza, L. Minati, A. Chiasera, M. Ferrari, G.C. Righini, and G. Ischia
- 72 "Quantum confinement and matrix effects in silver exchanged sodalime glasses"
 J. Phys. Chem. C, 113 (2009), pp 4445-4450.
 doi: 10.1021/jp810317q
- A. Chiasera, C. Armellini, S.N.B. Bhaktha, A. Chiappini, Y. Jestin, M. Ferrari, E. Moser, A. Coppa, V. Foglietti, P.T. Huy, K. Tran Ngoc, G. Nunzi Conti, S. Pelli, G.C. Righini, and G. Speranza
- 73 "Er³⁺/Yb³⁺ - activated silica-hafnia planar waveguides for photonics fabricated by rf-sputtering"
 Journal of Non-Crystalline Solids 355 (2009) pp. 1176-1179.
 doi: 10.1016/j.jnoncrysol.2008.11.039
- A. Chiappini, C. Armellini, A. Chiasera, M. Ferrari, R. Guider, Y. Jestin, L. Minati, E. Moser, G. Nunzi Conti, S. Pelli, R. Retoux, G.C. Righini, G. Speranza
- 74 "Preparation and characterization of ZnO particles embedded in organic-inorganic planar waveguide by sol-gel route",
 Journal of Non-Crystalline Solids 355 (2009) pp. 1132-1135.
 doi: 10.1016/j.jnoncrysol.2009.01.050
- A. Chiappini, C. Armellini, A. Chiasera, M. Ferrari, L. Fortes, M. Clara Gonçalves, R. Guider, Y. Jestin, R. Retoux, G. Nunzi Conti, S. Pelli, Rui M. Almeida, G.C. Righini
- 75 "An alternative method to obtain direct opal photonic crystal structures"
 Journal of Non-Crystalline Solids 355 (2009) pp. 1167-1170.
 doi: 10.1016/j.jnoncrysol.2009.01.054
- A. Chiappini, C. Armellini, A. Chiasera, Y. Jestin, M. Ferrari, E. Moser, G. Nunzi Conti, S. Pelli, R. Retoux, G.C. Righini
- 76 "Er³⁺-activated sol-gel silica confined structures for photonic applications"
 Optical Materials 31 (2009) pp. 1275-1279.
 doi: 10.1016/j.optmat.2008.10.026
- Y.G. Boucher, A. Chiasera, M. Ferrari, G.C. Righini
- 77 "Extended transfer matrix modeling of an erbium-doped cavity with SiO₂/TiO₂ Bragg reflectors"
 Optical Materials 31 (2009) pp. 1306-1309.
 doi: 10.1016/j.optmat.2008.10.028

- 78 M. C. Gonçalves, L. M. Fortes, R. M. Almeida, A. Chiasera, A. Chiappini, M. Ferrari
 "3-D rare earth-doped colloidal photonic crystals"
Optical Materials 31 (2009) pp. 1315–1318.
 doi: 10.1016/j.optmat.2008.10.030
- 79 C. Goyes, M. Ferrari, C. Armellini, A. Chiasera, Y. Jestin, G. C. Righini, F. Fonthal, E. Solarte
 "CO₂ laser annealing on erbium-activated glass–ceramic waveguides for photonics"
Optical Materials 31 (2009) pp. 1310–1314.
 doi: 10.1016/j.optmat.2008.10.005
- 80 S. Torrenço, L. Minati, M. Filippi, A. Miotello, M. Ferrari, A. Chiasera, E. Vittone, A. Pasquarelli, M. Dipalo, E. Kohn, G. Speranza
 "XPS and UPS investigation of the diamond surface oxidation by UV irradiation"
Diamond & Related Materials 18 (2009) pp. 804–807.
 doi: 10.1016/j.diamond.2009.02.003
- 81 G.C. Righini, S. Berneschi, G. Nunzi Conti, S. Pelli, E. Moser, R. Retoux, P. Féron, R.R. Gonçalves, G. Speranza, Y. Jestin, M. Ferrari, A. Chiasera, A. Chiappini, and C. Armellini
 "Er³⁺-doped silica-hafnia films for optical waveguides and spherical resonators"
Journal of Non-Crystalline Solids 355 (2009) pp. 1853-1860.
 doi: 10.1016/j.jnoncrysol.2008.12.022
- 82 K.C. Vishnubhatla, S. Venugopal Rao, R. Sai Santosh Kumar, R. Osellame, S.N.B. Bhaktha, S. Turrell, A. Chiappini, A. Chiasera, M. Ferrari, M. Mattarelli, M. Montagna, R. Ramponi, G.C. Righini, and D. Narayana Rao
 "Femtosecond laser direct writing of gratings and waveguides in high quantum efficiency erbium-doped Baccarat glass"
Journal of Physics D: Applied Physics 42 (2009) 205106 (7pp)
 doi:10.1088/0022-3727/42/20/205106
- 83 Yann G. Boucher, Alessandro Chiasera, Maurizio Ferrari, Giancarlo C. Righini
 "Photoluminescence spectra of an optically pumped erbium-doped microcavity with SiO₂/TiO₂ distributed Bragg reflectors"
Journal of Luminescence 129 (2009) pp. 1989-1993
 doi:10.1016/j.jlumin.2009.04.085
- 84 Alessandro Chiasera, Yannik Dumeige, Patrice Féron, Maurizio Ferrari, Yoann Jestin, Gualtiero Nunzi Conti, Stefano Pelli, Silvia Soria, and Giancarlo C. Righini.
 "Spherical whispering-gallery-mode microresonators"
Laser & Photonics Reviews 4 (2010) pp. 457-482
 doi: 10.1002/lpor.200910016 [IF 2008 4.357]

- Luca Minati, Giorgio Speranza, Ilaria Bernagozzi, Simona Torrenzo, Laura Toniutti, Barbara Rossi, Maurizio Ferrari, Alessandro Chiasera.
- 85 “Investigation on the Electronic and Optical Properties of Short Oxidized Multi Walled Carbon Nanotubes”
The Journal of Physical Chemistry C 114 (2010) pp 11068-11073
doi: 10.1021/jp101868s
- L. Minati, G. Speranza, S. Torrenzo, L. Toniutti, C. Migliaresi, D. Maniglio, M. Ferrari, A. Chiasera
- 86 “Investigation of thiol-functionalized carbon nanotubes on gold surfaces”
Surface Science 604 (2010) pp. 1414-1419.
doi:10.1016/j.susc.2010.05.002
- S. Berneschi, S. Soria, G.C. Righini, G. Alombert-Goget, A. Chiappini, A. Chiasera, Y. Jestin, M. Ferrari, S. Guddala, E. Moser, S.N.B. Bhaktha, B. Boulard, C. Duverger
- 87 Arfuso, S. Turrell
“Rare-earth-activated glass–ceramic waveguides”
Optical Materials 32 (2010) pp. 1644-1647.
doi:10.1016/j.optmat.2010.04.035
- G. Alombert-Goget, C. Armellini, S. Berneschi, A. Chiappini, A. Chiasera, M. Ferrari, S. Guddala, E. Moser, S. Pelli, D.N. Rao, G.C. Righini
- 88 "Tb³⁺/Yb³⁺ co-activated Silica-Hafnia glass ceramic waveguides"
Optical Materials 33 (2010) pp. 227–230.
doi:10.1016/j.optmat.2010.09.030
- M.C. Goncalves, L.M. Fortes, R.M. Almeida, A. Chiasera, A. Chiappini, M. Ferrari, S. Bhaktha
- 89 “Photoluminescence in Er³⁺/Yb³⁺-doped silica-titania inverse opal structures”
Journal of Sol-Gel Science and Technology 55 (2010) pp. 52-58.
doi: 10.1007/s10971-010-2212-y
- A. Antonello, M. Guglielmi, V. Bello, G. Mattei, A. Chiasera, M. Ferrari, A. Martucci
- 90 “Titanate Nanosheets as High Refractive Layer in Vertical Microcavity Incorporating Semiconductor Quantum Dots”
Journal Of Physical Chemistry C 114 (2011) pp. 18423-18428.
doi: 10.1021/jp106951y
- D. Ristic, V. Holy, M. Ivanda, M. Marcius, M. Buljan, O. Gamulin, K. Furic, M Ristic, S. Music, M. Mazzola, A. Chiasera, M. Ferrari, G.C. Righini
- 91 “Surface characterization of thin silicon-rich oxide films”
Journal Of Molecular Structure 993 (2011) pp. 214-218.
doi: 10.1016/j.molstruc.2010.11.066

- A. Chiasera, G. Alombert-Goget, M. Ferrari, S. Berneschi, S. Pelli, B. Boulard, C. Arfuso Duverger
- 92 “Rare earth-activated glass-ceramic in planar format”
Optical Engineering 50 (2011) pp. 071105.
doi: 10.1117/1.3559211
- L. Minati, G. Speranza, I. Bernagozzi, S. Torrenzo, A. Chiasera, M. Ferrari
- 93 “Luminescent short thiol-functionalized multi-wall carbon nanotubes”
Diamond And Related Materials 20 (2011) pp. 1046-1049
doi: 10.1016/j.diamond.2011.06.013.
- A. Antonello, G. Brusatin, M. Guglielmi, V. Bello, G. Perotto, G. Mattei, M. Maiwald, V. Zollmer, A. Chiasera, M. Ferrari, A. Martucci
- 94 “Novel multifunctional nanocomposites from titanate nanosheets and semiconductors quantum dots”
Optical Materials 33 (2011) pp. 1839-1846
doi: 10.1016/j.optmat.2011.02.027
- Nadia G. Boetti, Joris Lousteau, Alessandro Chiasera, Maurizio Ferrari, Emanuele Mura, Gerardo C. Scarpignato, Silvio Abrate, Daniel Milanese
- 95 “Thermal stability and spectroscopic properties of erbium-doped niobic-tungsten-tellurite glasses for laser and amplifier devices”
Journal of Luminescence 132 (2012) pp. 1265-1269
doi:10.1016/j.jlumin.2011.12.057
- B. Dieudonné, B. Boulard, G. Alombert-Goget, Y. Gao, A. Chiasera, S. Varas, M. Ferrari
- 96 “Pr³⁺-Yb³⁺-codoped lanthanum fluorozirconate glasses and waveguides for visible laser emission”
Journal of Non-Crystalline Solids 358 (2012) pp. 2695-2700.
DOI: 10.1016/j.jnoncrysol.2012.06.030
- S. Valligatla, A. Chiasera, S. Varas, N. Bazzanella, D.N. Rao, G.C. Righini, M. Ferrari
- 97 “High quality factor 1-D Er³⁺-activated dielectric microcavity fabricated by RF-sputtering”
Optics Express 20 (2012) pp. 21214-21222.
DOI: 10.1364/OE.20.021214
- D. Ristić, M. Ivanda, K. Furić, A. Chiasera, E. Moser, M. Ferrari
- 98 “Thermal decomposition of silicon-rich oxides deposited by the LPCVD method”
Croatica Chemica Acta 85 (2012) pp. 91-96.
DOI: 10.5562/cca1969

- Z. Tijanić, D. Ristić, M. Ivanda, I. Bogdanović-Radović, M. Marciuš, M. Ristić, O. Gamulin, S. Musić, K. Furić, A. Chiasera, M. Ferrari, G.C. Righini
 99 "Low temperature deposition of SiN x thin films by the LPCVD method"
 Croatica Chemica Acta 85 (2012) pp. 97-100.
 DOI: 10.5562/cca1970
- J. Lousteau, N.G. Boetti, A. Chiasera, M. Ferrari, S. Abrate, G. Scarciglia, A. Venturello, D. Milanese
 100 "Er³⁺ and Ce³⁺ Codoped Tellurite Optical Fiber for Lasers and Amplifiers in the Near-Infrared Wavelength Region: Fabrication, Optical Characterization, and Prospects"
 IEEE Photonics Journal 4 (2012) pp. 192-204
 DOI: 10.1109/JPHOT.2011.2181974
- C. Ferrante, E. Pontecorvo, G. Cerullo, A. Chiasera, G. Ruocco, W. Schirmacher, T. Scopigno
 101 "Acoustic dynamics of network-forming glasses at mesoscopic wavelengths"
 Nature Communication 4 (2013) pp 17993/1 – 17993/6
 DOI: 10.1038/ncomms2826
- A. Chiasera, C. Macchi, S. Mariazzi, S. Valligatla, L. Lunelli, C. Pederzoli, D.N. Rao, A. Somoza, R.S. Brusa, and M. Ferrar
 102 "CO₂ Laser irradiation of GeO₂ planar waveguide fabricated by rf-sputtering"
 Optical Materials Express 3 (2013) pp. 1561-1570
 DOI: 10.1364/OME.3.001561
- B. Dieudonné, B. Boulard, G. Alombert-Goget, A. Chiasera, Y. Gao, S. Kodjikian, M. Ferrari
 103 "Up- and down-conversion in Yb³⁺–Pr³⁺ co-doped fluoride glasses and glass ceramics"
 Journal of Non-Crystalline Solids 377 (2013) pp. 105–109
 DOI: 10.1016/j.jnoncrysol.2012.12.025
- B. Boulard, B. Dieudonné, Y. Gao, A. Chiasera, M. Ferrari
 104 "Up-conversion visible emission in rare-earth doped fluoride glass waveguides"
 Optical Engineering (2014), vol 53; pp. 071814-1/6
 ISSN: 0091-3286, doi: 10.1117/1.OE.53.7.071814.
- A. Lukowiak, A. Chiappini, A. Chiasera, D. Ristic, I. Vasilchenko, C. Armellini, A. Carpentiero, S. Varas, G. Speranza, S. Taccheo, S. Pelli, I.K. Battisha, G.C. Righini, W. Streck, M. Ferrari
 105 "Sol-gel-derived photonic structures handling erbium ions luminescence"
 Optical and Quantum Electronics (2014),
 ISSN: 0306-8919, doi: 10.1007/s11082-014-9954-7.

- A. Chiappini, C. Armellini, A. Carpentiero, I. Vasilchenko, A. Lukowiak, D. Ristić, S. Varas, S. Normani, M. Mazzola, A. Chiasera
- 106 "Glass-based confined structures fabricated by sol-gel and radio frequency sputtering"
Optical Engineering (2014), vol 53 (7); pp. 071804-1/6 (Jan 09, 2014),
ISSN: 0091-3286, doi: 10.1117/1.OE.53.7.071804.
- I. Vasilchenko, A. Carpentiero, A. Chiappini, A. Chiasera, A. Vaccari, A. Lukowiak, G.C. Righini, V. Vereshagin, M. Ferrari
- 107 "Influence of phosphorous precursors on spectroscopic properties of Er³⁺-activated SiO₂-HfO₂-P₂O₅ planar waveguides"
Journal of Physics: Conference Series 566 (2014), pp. 012018-1/5, doi: 10.1088/1742-6596/566/1/012018.
- R.R. Gonçalves, A. Lukowiak, D. Ristic, B. Boulard, A. Chiappini, A. Chiasera, D. Dorosz, M. Marciniak, G.C. Righini, M. Ferrari
- 108 "Red photonic glasses and confined structures"
Bulletin of the Polish Academy of Sciences Technical Sciences 62 (2014), pp. 647-653,
doi: 10.2478/bpasts-2014-0071.

Publications verified by an Editorial Committee (not ISI Journals)

- K. Tran Ngoc, H. Pham Thanh, C. Nguyen Duc, C. Armellini, A. Chiasera, M. Ferrari, Y. Jestin, M. Montagna, E. Moser, S. Pelli, G. C. Righini
- 1 "Effect of Yb³⁺ concentration on Er³⁺ luminescence properties of sol-gel-derived silica-alumina xerogels"
Optoelectronics Letters 2 (2006) pp.354-357.
- M. Bouazaoui, B. Capoen, A.P. Caricato, A. Chiasera, A. Fazzi, M. Ferrari, G. Leggieri, M. Martino, M. Mattarelli, M. Montagna, F. Romano, T. Tunno, S. Turrel, and K. Vishnubhatla.
- 2 "Pulsed Laser Deposition of Er doped tellurite films on large area"
Journal of Physics: Conference Series 59 (2007) pp. 475–478
- L. Minati, G. Speranza, M. Anderle, M. Ferrari, A. Chiasera and G. C. Righini
- 3 "Assessment of nanocomposite photonic systems with the X-ray photoelectron spectroscopy"
Optoelectronics Letters 3 (2007) pp. 0192–0194
- M. Mattarelli, S. Caponi, A. Chiappini, M. Montagna, E. Moser, F. Rossi, C. Tosello, C. Armellini, A. Chiasera, M. Ferrari, Y. Jestin, G. Nunzi Conti, S. Pelli and G.C. Righini
- 4 "Diagnostic techniques for photonic materials based on Raman and Brillouin spectroscopies"
Optoelectronics Letters 3 (2007) pp. 0188–0191

- 5 A. Chiappini, C. Armellini, A. Chiasera, Y. Jestin, M. Ferrari, M. Mattarelli, M. Montagna, E. Moser, C. Tosello, L. Zampedri, G. Nunzi Conti, S. Pelli, R. M. Almeida and G. C. Righini
“Er³⁺-activated silica inverse opals synthesized by the solgel method”
Optoelectronics Letters 3 (2007) pp. 0184–0187
- 6 C. Goyes, , M. Ferrari, E. Solarte, C. Armellini, A. Chiasera, Y. Jestin, G.C. Righini, A. Casas, C. Meacock,
“Aplicación del recocido con láser de CO₂ en la fabricación de guías de onda planared nanoestructuradas basadas en SiO₂-ZrO₂ Y SiO₂-HfO₂”
Revista Colombiana de Física 39 (2007) pp. 47-50.
- 7 G. Alombert-Goget, C. Armellini, S.N.B. Bhaktha, B. Boulard, A. Chiappini, A. Chiasera, C. Duverger-Arfuso, P. Féron, M. Ferrari, R.R. Gonçalves, Y. Jestin, L. Minati, A. Monteil, E. Moser, G. Nunzi Conti, R. Osellame, S. Pelli, A. Quandt, R. Ramponi, D. N. Rao, G.C. Righini, G. Speranza, K.C. Vishnubhatla.
“Silica-hafnia-based photonic systems”.
The Mediterranean Journal of Electronics and Communications , Volume 6, No. 1, January 2010 ISSN: 1744-2400, pp.8-17. A special Issue on Advanced Materials And Photonics Application
- 8 Guillaume Alombert-Goget, Davor Ristic, Alessandro Chiasera, Stefano Varas, Maurizio Ferrari, Giancarlo C. Righini, Belto Dieudonne, Brigitte Boulard
“Rare-earth doped materials enhance silicon solar cell efficiency”
22 June 2011, SPIE Newsroom. DOI: 10.1117/2.1201105.003701
- 9 A. Chiasera, G. Alombert-Goget, S. Berneschi, S. Pelli, C. Duverger Arfuso, B. Boulard, M. Ferrari
"Rare earth-activated glass-ceramic waveguides: ideal systems for photonics"
SPIE NEWSROOM 22 November (2011) DOI: 10.1117/2.1201111.003940.

Publications in congress proceedings

- A. Chiasera, C. Duverger, M. Montagna, E. Moser, R. Rolli, S. Ronchin, F. Rossi, C. Tosello, L. Zampedri, S. Pelli, G.C. Righini, C. Armellini, M. Ferrari
1 "Erbium-activated monolithic silica xerogels and silica-titania planar waveguides: optical and spectroscopic characterization"
In Atti del: 2° Workshop italiano Sol-Gel, p. 85 (2000).
- S. Ronchin, A. Chiasera, M. Montagna, R. Rolli, C. Tosello, S. Peli, G.C. Righini, R. R. Gonçalves, S. Ribeiro, C. De Bernardi, F. Pozzi, C. Duverger, R. Belli, M. Ferrari
2 "Erbium-activated silica-titania planar waveguides prepared by rf-sputtering"
SPIE Vol. 4282 (2001) pp. 31-39.
- L. Zampedri, C. Tosello, F. Rossi, S. Ronchin, R. Rolli, M. Montagna, A. Chiasera, G.C. Righini, S. Pelli, A. Monteil, S. Chaussedent, C. Bernard, C. Duverger, M. Ferrari, C. Armellini
3 "Erbium-Activated Monolithic Silica Xerogels and Silica-Titania Planar Waveguides: Optical and Spectroscopic Characterization"
SPIE Vol. 4282 (2001) pp. 200-209.
- R. Rolli, A. Chiasera, M. Montagna, E. Moser, S. Ronchin, S. Pelli, G.C. Righini, A. Jha, V.K. Tikhomirov, S.A. Tikhomirova, C. Duverger, P. Galinetto, M. Ferrari
4 "Rare-earth-activated fluoride and tellurite glasses: optical and spectroscopic properties"
SPIE 4282 (2001) pp. 109-122.
- A. Chiasera, M. Montagna, R. Rolli, S. Ronchin, C. Tosello, L. Zampedri, M. Brenci, S. Pelli, G.C. Righini, R.R. Gonçalves, S.J.L. Ribeiro, C. De Bernardi, P. Della Casa, C. Panciatichi, F. Pozzi, G. Battaglin, F. Gonella, P. Mazzoldi, R. Belli, M. Ferrari
5 "Preparazione via rf sputtering e proprietà ottiche e spettroscopiche di guide di luce planari SiO₂-TiO₂ attivate con ioni Er³⁺"
Atti 7° Convegno Nazionale sulle tecniche fotoniche nelle telecomunicazioni, Ischia, 23-25 Maggio 2001, Ed. AEI (2001) pp. 157-160.
- N. Chiodini, A. Paleari, G. Spinolo, G. Brambilla, A. Chiasera, M. Ferrari
6 "Erbium spectroscopy in photosensitive tin-doped silica glass"
SPIE Proceedings 4645 (2002) pp.71-77.
- A. D'Orazio, M. De Sario, L. Mescia, V. Petruzzelli, F. Prudenzeno, A. Chiasera, M. Montagna, C. Tosello, and M. Ferrari
7 "Modeling of Er³⁺ Doped SiO₂-TiO₂ Planar Amplifier"
SPIE 4645 (2002) pp. 183-192

- R.R. Gonçalves, G. Caruran, L. Zampedri, M. Ferrari, M. Montagna, A. Chiasera, G.C. Righini, S. Pelli, S.J.L. Ribeiro, and Y. Messaddeq.
- 8 “Erbium-activated SiO₂-HfO₂ planar waveguides: a binary system for operation in the C-telecom band”
In Atti III Workshop Italiano Sol-Gel, Trento 13-14-Giugno, 2002, pp.145-152.
- L. Zampedri, M. Ferrari, C. Armellini, C. Tosello, R. Rolli, E. Moser, M. Montagna, A. Chiasera, R.R. Gonçalves, S. Pelli, G.C. Righini, C. Duverger, A. Martucci, and M. Guglielmi.
- 9 “TiO₂-based thin films for photonics”
In atti III Workshop Italiano Sol-Gel, Trento 13-14-Giugno, 2002, pp.166-173.
- A. Chiasera, M. Montagna, C. Tosello, R. R. Goncalves, L. Zampedri, M. Ferrari, M. Brenci, S. Pelli, G. C. Righini, M. Bersani, P. Lazzeri P. Della Casa
- 10 “Fabrication by rf-sputtering processing of Er³⁺/Yb³⁺-codoped silica-titania planar waveguides”
SPIE Vol. 4944 (2003) pp. 53-61.
- A. Chiasera, M. Montagna, C. Tosello, R.R. Gonçalves, A. Chiappini, M. Ferrari, L. Zampedri, S. Pelli, G.C. Righini, A. Monteil, V. Foglietti, A. Minotti, R.M. Almeida, A. Marques, V. Soares
- 11 “Erbium/Ytterbium-activated silica-titania planar and channel waveguides prepared by rf-sputtering.”
SPIE 4990 (2003) pp. 38-46.
- R.R. Gonçalves, G. Carturan, L. Zampedri, M. Ferrari, C. Armellini, A. Chiasera, M. Mattarelli, E. Moser, M. Montagna, G.C. Righini, S. Pelli, G. Nunzi Conti, S.J.L. Ribeiro, Y. Messaddeq, A. Minotti, V. Foglietti, H. Portales
- 12 “Sol-Gel Erbium-Doped Silica-Hafnia Planar and Channel Waveguides.”
SPIE 4990 (2003) pp. 111-120.
- A. Chiasera, M. Mattarelli, M. Montagna, E. Moser, C. Tosello, C. Armellini, M. Ferrari, R.R. Gonçalves, H. Portales, S. Pelli, G.C. Righini, V. Foglietti, A. Minotti
- 13 “Guide di luce planari Silica-Titania attivate con ioni Erblio ed Itterbio preparate via RF sputtering”
Atti 8° Convegno Nazionale sulle tecniche fotoniche nelle telecomunicazioni, Riva del Garda, 7-9 Aprile 2003, Ed. AEI (2003) pp. 297-300.
- M. Mattarelli, A. Chiasera, M. Montagna, AB. Seddon, V.K. Tikhomirov, R. Rolli, S. Pelli, G.C. Righini, G. Nunzi Conti, M. Martino, V. Resta, M. Ferrari, L. Zampedri
- 14 “Vetri telluriti drogati con erblio con alta efficienza quantica”
Atti 8° Convegno Nazionale sulle tecniche fotoniche nelle telecomunicazioni, Riva del Garda, 7-9 Aprile 2003, Ed. AEI (2003) pp. 99-102.

- A. D’Orazio, M. De Sario, L. Mescia, V. Petruzzelli, F. Prudenzeno, A. Chiasera, C. Tosello, M. Ferrari
- 15 “Progetto di amplificatori planari in vetro silicato drogato con $\text{Er}^{3+}/\text{Yb}^{3+}$ ”
Atti 8° Convegno Nazionale sulle tecniche fotoniche nelle telecomunicazioni, Riva del Garda, 7-9 Aprile 2003, Ed. AEI (2003) pp. 375-378.
- G.C. Righini, M. Brenci, A. Chiasera, M. Ferrari, M. Montagna, G. Nunzi Conti, S. Pelli
- 16 “Ion-Exchange Processes in Active Glasses: Spectroscopic and Structural Characterization”
In Proceedings Deutsche Glastechnische Gesellschaft e.V. (DGG) Symposium “Processing and Applications of Optical Components”, 26-28-Mai 2003, Leipzig, Germany
- C. Armellini, A. Chiasera, M. Ferrari, V. Foglietti, R. R. Gonçalves, M. Mattarelli, A. Minotti, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, H. Portales, G. C. Righini, C. Tosello, L. Zampedri.
- 17 “Spotlights on optical-waveguides and integrated optical devices based on rare-earth doped glasses”
In Proceedings, XXVI International Conference on Microprocessors, Process and Information Systems, Microelectronics and Electronics MIPRO 2003, Opatija (Abazia) 19-23 May 2003, Editors Petar Biljanovic and Karolj Skala, pp. 11-16.
- R.M. Almeida, A. Chiasera, M. Ferrari, Y. Jestin, A. Marques, M. Mattarelli, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, S. Portal, H. Portales, G.C. Righini, C. Tosello, L. Zampedri
- 18 “Fabbricazione per via sol-gel di strutture PBG 1-D”,
Atti 4° Workshop su Ottiche Diffrattive, Microottica E Microsistemi, Firenze 1-2 Aprile 2004
- S. Berneschi, M. Bettinelli, M. Brenci, R. Calzolari, A. Chiasera, M. Ferrari, G. Nunzi Conti, S. Pelli, S. Sebastiani, A. Speghini, J. Zheng, G. C. Righini
- 19 “ $\text{Er}^{3+}/\text{Yb}^{3+}$ co-doped soda-lime silicate glasses: a case study”
SPIE vol. 5350 (2004) pp. 140-146.
- A. Chiasera, M. Ferrari, L. Zampedri, M. Mattarelli, M. Montagna, H. Portales, C. Tosello, S. Dirè, S. Pelli, G. C. Righini,
- 20 “Fabrication and characterization of optical planar waveguides activated by erbium ions for 1.5 μm applications”
SPIE 5451 (2004) pp. 574-584.
- B. Boulard, S. Guy, Y. Jestin, I. Vasilief, C. Duverger, A. Chiasera, M. Ferrari
- 21 “Non-radiative relaxation rate modification by chlorine codoping of rare earth-activated PZG fluoride glasses”
SPIE 5451 (2004) pp. 585-592.

- 22 M. Mattarelli, M. Bouazaoui, B. Capoen, S. Turrell, A. Chiasera, M. Ferrari, L. Zampedri, M. Montagna, H. Portales, G. Nunzi-Conti, G. C. Righini
 “Optical spectroscopy of Er³⁺ and Ce³⁺-codoped TeO₂-WO₃-Na₂O glasses”
 SPIE 5451 (2004) pp. 337-346.
- 23 C. Armellini, A. Chiasera, M. Ferrari, Y. Jestin, A. Chiappini, M. Mattarelli, M. Montagna, E. Moser, H. Portales, C. Tosello, L. Zampedri, V. Foglietti, A. Minotti, G. Nunzi Conti, S. Pelli, G.C. Righini, R.M. Almeida, S. Portal, A.B. Seddon, V.K. Tikhomirov, B. Gaillard-Allemand, V. Benoit
 “Rare Earth-Activated Confined Structures for Spectroscopic Properties Enhancement: Ultratransparent Glass Ceramics, Planar Waveguides, Spherical Microresonators and Microcavities”
 In Proceedings, 27^o International Convention, MIPRO 2004, Opatija (Abazia) 24-28 May 2004, Editors Petar Biljanovic and Karolj Skala, pp. 15-20.
- 24 A. Chiasera, C. Armellini, M. Ferrari, M. Mattarelli, M. Montagna, E. Moser, C. Tosello, L. Zampedri, V. Foglietti, A. Minotti, S. Pelli, G. C. Righini
 “Rare Earth-Activated Glass Confined Structures for Photonics: Planar Waveguides and 1-D Photonic Crystals”
 Abstracts of: INFMeeting 2004, Genova 7-10 Giugno 2004, p. 7
- 25 M. Mattarelli, C. Tosello, M. Montagna, L. Zampedri, E. Moser, M. Ferrari, A. Chiasera, V. Tikhomirov, A. B. Seddon, G. Nunzi Conti, G.C. Righini
 “Er³⁺ and Tm³⁺-containing ultra-transparent oxy-fluoride based glass ceramics for Wavelength Division Multiplexing optical amplifiers.”
 Abstract of: INFMeeting 2004, Genova 7-10 Giugno 2004, p. 103
- 26 C. Armellini, A. Chiasera, M. Ferrari, Y. Jestin, A. Chiappini, M. Mattarelli, M. Montagna, E. Moser, H. Portales, C. Tosello, L. Zampedri, S. Dirè, K. Tran Ngoc, R.M. Almeida, S. Portal, V. Foglietti, A. Minotti, G. Nunzi Conti, S. Pelli, G.C. Righini,
 “Sol Gel-Derived Rare Earth-Activated Confined Structures for Photonics”,
 In Atti IV Workshop Italiano Sol-Gel, Monteponi - Iglesias (CA), 17-18 Giugno 2004 pp. 147-154
- 27 R.R. Goncalves, S.J.L. Ribeiro, Y. Messaddeq, A. Martucci, S. Pelli, G. Nunzi Conti, G.C. Righini, V. Foglietti, A. Monotti, K. Tran Ngoc, L. Zampedri, A. Chiappini, M. Mattarelli, M. Montagna, E. Moser, H. Portales, C. Tosello, C. Armellini, A. Chiasera, M. Ferrari, Y. Jestin
 "Erbium-Activated Sol Gel-Derived Silica-Hafnia Planar Waveguides"
 Proceedings of the XX ICG in Kyoto, Sep.27th-Oct.1st(2004), P-14-043

- 28 C. Armellini, A. Chiasera, M. Ferrari, Y. Jestin, R. Belli, S.N.B. Bhaktha, A. Chiappini, M. Mattarelli, M. Montagna, E. Moser, C. Tosello, K.C. Vishunubhatla, L. Zampedri, D.N. Rao, R.M. Almeida, S. Portal, S. Berneschi, G. Nunzi Conti, S. Pelli, G.C. Righini
 “Materiali Nanostrutturati e Strutture Confinare per la Fotonica”
 Atti 9° Convegno Nazionale sulle tecniche fotoniche nelle telecomunicazioni, Trani, 30 Maggio - 1 Giugno 2005, Ed. AEIT (2005) pp. 167-172.
- 29 M. Mattarelli, M. Montagna, C. Tosello, A. Chiappini, L. Zampedri, E. Moser, S.N.B. Bhaktha, K.C. Vishunubhatla, C. Armellini, A. Chiasera, Y. Jestin, M. Ferrari, G. Nunzi Conti, S. Pelli, G.C. Righini, A. B. Seddon V. K. Tikhomirov
 “Vetroceramiche attivate Er^{3+} e Tm^{3+} per applicazioni WDM”
 Atti 9° Convegno Nazionale sulle tecniche fotoniche nelle telecomunicazioni, Trani, 30 Maggio - 1 Giugno 2005, Ed. AEIT (2005) pp. 277-280.
- 30 A. Chiappini, R. Belli, S.N.B. Bhaktha, M. Mattarelli, M. Montagna, E. Moser, C. Tosello, K.C. Vishunubhatla, L. Zampedri, C. Armellini, A. Chiasera, M. Ferrari, Y. Jestin, K. Tran Ngoc, G. Nunzi Conti, S. Pelli, G.C. Righini
 “Fabbricazione per via sol-gel di cristalli fotonici 3D e determinazione delle loro proprietà ottiche e strutturali”
 Atti 9° Convegno Nazionale sulle tecniche fotoniche nelle telecomunicazioni, Trani, 30 Maggio - 1 Giugno 2005, Ed. AEIT (2005) pp. 45-48.
- 31 C. Armellini, S.N.B. Bhaktha, B. Boulard, R. Calzolari, A. Chiappini, A. Chiasera, C. Duverger, M. Ferrari, R.R. Gonçalves, M. Ivanda, Y. Jestin, M. Mattarelli, M. Montagna, A. Monteil, E. Moser, G. Nunzi Conti, S. Pelli, H. Portales, G.C. Righini, G.D. Sorarù, C. Tosello, K.C. Vishunubhatla, L. Zampedri, Y.Zhang, J. Zheng
 Nanocomposite Photonic Materials
 In Proceedings, 28° International Convention, MIPRO, Opatija (Abazia) 30 May 2005- 3 June 2005.
- 32 Y. Jestin, N.D. Afify, C.Armellini, S.N.B. Bhatka, B. Boulard, A. Chiappini, A. Chiasera, G. Dalba, C. Duverger, M. Ferrari, M. Mattarelli, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini, F. Rocca, C. Tosello, K.C. Vishnubhatla, L. Zampedri
 Er^{3+} -activated silica-hafnia glass-ceramics planar waveguides
 In Proceedings of the 13th International Workshop on Sol-Gel Science and Technology, University of California, Los Angeles, August 21-26, 2005, pp. 295-296
- 33 Y. Jestin, C. Armellini, A. Chiappini, A. Chiasera, M. Ferrari, M. Montagna, E. Moser, G.C. Righini
 Fabrication of monosized silica spheres with customized diameter by sol-gel route
 In Proceedings of the 13th International Workshop on Sol-Gel Science and Technology, University of California, Los Angeles, August 21-26, 2005, pp 297-298

- 34 V. Benoit, S.N.B. Bhaktha, B. Boulard, S. Chaussedent, A. Chiappini, A. Chiasera, E. Duval, S. Etienne, M. Ferrari, B. Gaillard-Allemand, Y. Jestin, M. Mattarelli, M. Montagna, A. Monteil, E. Moser, G. Nunzi Conti, S. Pelli, H. Portales, D.N. Rao, G.C. Righini, K.C. Vishunubhatla
Optical and spectroscopic properties erbium-activated modified silica glass with 1.54 μm high quantum efficiency.
SPIE 5723 (2005), pp. 79-88.
- 35 S.N.B. Bhaktha, R. Calzolari, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, M. Mattarelli, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, H. Portales, D.N. Rao, G.C. Righini, C. Tosello, K.C. Vishunubhatla, J. Zheng
Spectroscopic properties of Er^{3+} -activated Ag-exchanged silicate and phosphate glasses.
SPIE 5723 (2005), pp. 139-146
- 36 G. C. Righini, I. Banyasz, S. Berneschi, M. Brenci, A. Chiasera, M. Cremona, D. Ehrt, M. Ferrari, R. M. Montereali, G. Nunzi Conti, S. Pelli, S. Sebastiani, C. Tosello
"Laser irradiation, ion implantation, and e-beam writing of integrated optical structures"
SPIE 5840 (2005), pp. 649-657.
- 37 K. Tran Ngoc, H. Pham Thanh, C. Nguyen Duc, M. Ferrari, A. Chiasera, C. Armellini, Y. Jestin, M. Montagna, G.C. Righini
"Sol-Gel-derived $\text{Er}^{3+}/\text{Yb}^{3+}$ co-activated silica-alumina xerogels"
In Proceedings of the First Vietnamese-Italian International Joint Workshop Photonics and Nanotechnology, Hanoi, Vietnam, November 28-29, 2005, pp. 111-120.
- 38 C. Armellini, A. Chiappini, A. Chiasera, M. Ferrari, R.R. Gonçalves, Y. Jestin, K. Tran Ngoc, M. Mattarelli, M. Montagna, E. Moser, G. Nunzi Conti, G.C. Righini, C. Tosello, L. Zampedri
"Glass-based nanocomposite materials and confined structures for photonics"
In Proceedings of the First Vietnamese-Italian International Joint Workshop Photonics and Nanotechnology, Hanoi, Vietnam, November 28-29, 2005 pp. 71-79.
- 39 B.N. Shivakiran Bhaktha, V. Krishna Chaitanya, Alessandro Chiasera, Cristiana Tosello, Andrea Chiappini, Cristina Armellini, Yoann Jestin, Enrico Moser, Giancarlo C. Righini, Maurizio Ferrari, D. Narayana Rao
"Silica-Titania 1-D Photonic Crystals fabricated by rf-sputtering"
Proceedings of National Laser Symposium-5 (NLS-5), December 7 - 10, 2005, Vellore Institute of Technology, India, N.3-11.
- 40 G. C. Righini, M. Brenci, A. Chiasera, P. Feron, M. Ferrari, G. Nunzi Conti, S. Pelli
"Whispering gallery mode resonators for microlasers and microsensors"
SPIE 6029 (2006), pp. 19-26.

- S. Berneschi, M. Bettinelli, M. Brenci, R. Calzolari, A. Chiasera, M. Ferrari, M. Mattarelli, M. Montagna, G. Nunzi Conti, S. Pelli, A. Speghini, and G.C. Righini.
- 41 “Optical and spectroscopic properties of new erbium-doped soda-lime-alumino-silicate glass for integrated optical amplifiers”
SPIE 6025 (2006), pp. 384-391.
- S. Berneschi, M. Brenci, A. Chiasera, M. Ferrari, G. Nunzi Conti, S. Pelli, S. Sebastiani, C. Tosello, G. C. Righini
- 42 “Characterization of highly photorefractive and active silica-germania sputtered thin films”
SPIE 6123 (2006), pp. 124-129.
- C. Armellini, B. Boulard, M. Brenci, A. Chiappini, A. Chiasera, C. Duverger, P. Feron, M. Ferrari, R.R. Gonçalves, C. Goyes, M. Ivanda, Y. Jestin, M. Mattarelli, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, O. Peron, G.C. Righini, C. Tosello, K. Tran Ngoc, L. Zampedri
- 43 “Optimizing Er³⁺- luminescent properties in photonic glasses: sensitizers, nano and micro-structures”
In Proceedings 29th International Convention MIPRO on Microelectronics, Electronics, and Electronic Technologies, Opatija, Croatia, May 22-26, 2006, pp. 19-24.
- A. Chiappini, S.N.B. Bhaktha, M. Montagna, E. Moser, C. Tosello, K.C. Vishunubhatla, S. Diré, C. Armellini, A. Chiasera, M. Ferrari, C. Goyes, Y. Jestin, G. Nunzi Conti, S. Pelli, G.C. Righini
- 44 “Synthesis, Properties and Structural Investigation of Colloidal Silica Particles for Photonic Applications”
Atti del V Workshop Italiano Sol-Gel, Milano 22-23 Giugno 2006, pp. 58-59
- Y. Jestin, C. Armellini, S.N.B. Bhaktha, A. Chiappini, A. Chiasera, S. Diré, M. Ferrari, C. Goyes, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini, C. Tosello, K.C. Vishunubhatla,
- 45 “Sol-Gel Derived Glass-Ceramic Waveguides for Optical Amplification”
Atti del V Workshop Italiano Sol-Gel, Milano 22-23 Giugno 2006, pp. 54-55
- A. Chiappini, C. Armellini, S. N. B. Bhaktha, A. Chiasera, M. Ferrari, Y. Jestin, M. Mattarelli, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G. C. Righini, V. M. Sglavo
- 46 “Fabrication and optical assessment of sol-gel-derived photonic bandgap dielectric structures”
SPIE 6182 (2006), pp. 454-463.

- 47 A. Chiasera, S. N. B. Bhaktha, M. Brenci, A. Chiappini, M. Ferrari, V. Foglietti, R. R. Gonçalves, Y. Jestin, A. Minotti, M. Montagna, E. Moser, S. Pelli, G. C. Righini, C. Tosello, K. C. Vishnubhatla
“Er³⁺/Yb³⁺ activated silica-hafnia planar waveguides for photonics fabricated by rf-sputtering”
SPIE 6183 (2006), pp. 173-180.
- 48 M. Ferrari, C. Armellini, S. Berneschi, M. Brenci, A. Chiappini, A. Chiasera, Y. Jestin, M. Mattarelli, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G. C. Righini, C. Tosello
“Homogeneous and nanocomposite rare-earth-activated glasses for photonic devices”
SPIE 6183 (2006), pp. 181-194.
- 49 B. Boulard, O. Péron, A. Chiasera, M. Ferrari, Y. Jestin
“Application of PVD technique to the fabrication of erbium doped ZrF₄-based glass ceramic for optical amplification”
SPIE 6183 (2006), pp. 369-376.
- 50 Y. Jestin, N. Afify, C. Armellini, S. Berneschi, S. N. B. Bhaktha, B. Boulard, A. Chiappini, A. Chiasera, G. Dalba, C. Duverger, M. Ferrari, C. E. Goyes Lopez, M. Mattarelli, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G. C. Righini, F. Rocca
“Er³⁺ activated silica-hafnia glass-ceramics planar waveguides”
SPIE 6183 (2006), pp. 438-445.
- 51 C. Armellini, S. N. B. Bhaktha, A. Chiappini, A. Chiasera, Y. Jestin, M. Ferrari, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G. C. Righini.
“Er³⁺-activated silica-hafnia glass-ceramics planar waveguides”
Proceedings VIII Convegno Nazionale, Materiali Nanofasici, 3-4 ottobre 2006, Aula dei Convegni – CNR, P.le Aldo Moro, 7 – Roma, pag. 17.
- 52 G. Speranza, M. Ferrari, L. Minati, A. Chiasera, G. Righini, M. Anderle.
“Study of nano-structured photonic materials by XPS”
Proceedings ICPE 2006 International Conference on Engineering Physics 2006 including the 9th Vietnamese-German Seminar on Physics and Engineering, the 4th Vietnam-Korea International Joint Symposium on Advanced Materials Science and Their Processing, and the Second Vietnamese-Italian International Joint Workshop on Photonics and Nanotechnology. 9-13 October 2006, Hanoi. University of Technology Hanoi, Vietnam, pp. 35-39.

- C. Armellini, A. Chiappini, A. Chiasera, M. Ferrari, P.H. Huy, Y. Jestin, M. Mattarelli, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini, G. Speranza, C. Tosello, K. Tran Ngoc.
 “Er³⁺-activated confined structures in photonic glasses”
 53 Proceedings ICPE 2006 International Conference on Engineering Physics 2006 including the 9th Vietnamese-German Seminar on Physics and Engineering, the 4th Vietnam-Korea International Joint Symposium on Advanced Materials Science and Their Processing, and the Second Vietnamese-Italian International Joint Workshop on Photonics and Nanotechnology. 9-13 October 2006, Hanoi. University of Technology Hanoi, Vietnam, pp. 12-17.
- Brigitte Boulard, Olivier Péron, Alessandro Chiasera, Maurizio Ferrari, Yoann Jestin
 “Erbium doped ZrF₄-based glass waveguides for optical amplification in the C band”
 54 Proceedings ICPE 2006 International Conference on Engineering Physics 2006 including the 9th Vietnamese-German Seminar on Physics and Engineering, the 4th Vietnam-Korea International Joint Symposium on Advanced Materials Science and Their Processing, and the Second Vietnamese-Italian International Joint Workshop on Photonics and Nanotechnology. 9-13 October 2006, Hanoi. University of Technology Hanoi, Vietnam, pp. 69-73.
- K. Tran Ngoc, P.H. Huy, N. D. Chien, M. Ferrari, A. Chiasera, C. Armellini, E. Moser, M. Montagna, A. Chiappini, M. Brenci, G. Nunzi Conti, S. Pelli, G.C. Righini.
 “Silica microspheres coated by Er³⁺-activated silica-hafnia sol-gel layers”
 55 Proceedings ICPE 2006 International Conference on Engineering Physics 2006 including the 9th Vietnamese-German Seminar on Physics and Engineering, the 4th Vietnam-Korea International Joint Symposium on Advanced Materials Science and Their Processing, and the Second Vietnamese-Italian International Joint Workshop on Photonics and Nanotechnology. 9-13 October 2006, Hanoi. University of Technology Hanoi, Vietnam, pp. 30-31.
- C. Goyes, M. Ferrari, E. Solarte, C. Armellini, A. Chiasera, Y. Jestin, G.C. Righini, A. Casas, C. Meacock.
 56 “Aplicación del recocido con Láser de CO₂ en la fabricación de guías de onda planares nanoestructuradas basadas en SiO₂-ZrO₂ y SiO₂-HfO₂”.
 Proceedings Séptima Escuela Nacional de Materia Condensada (VIENFMC), Ciudad de Tunja (Boyacá- Colombia), 23 – 27 October 2006, pp. 5-6.
- Y. Jestin, C. Armellini, S.N.B. Bhatka, B. Boulard, A. Chiappini, A. Chiasera, C. Duverger, M. Ferrari, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, O. Peron, G.C. Righini, K.C. Vishunubhatla
 57 “Guides d’onde planaires en vitro-ceramique SiO₂-HfO₂ dopes erbium”
 Proceedings JNOG: 25^{ème} Journées Nationales d’Optique guidée - Metz, November 7-8-9, 2006, pp. 7-9.

- 58 A. Chiappini, C. Armellini, B. Boulard, A. Chiasera, C. Duverger, P. Féron, M. Ferrari, Y. Jestin, E. Moser, G. Nunzi Conti, S. Pelli, O. Péron, G. C. Righini
 “Protocole de fabrication par voie colloïdale de cristaux photoniques 3D”
 Proceedings JNOG: 25^{ème} Journées Nationales d'Optique guidée - Metz, November 7-8-9, 2006, pp.117-119.
- 59 Olivier Péron, Brigitte Boulard, Alessandro Chiasera, Maurizio Ferrari, Yoann Jestin.
 “Guide d’onde en verre de fluorure a base de ZrF₄ dope erbium pour l’amplification”
 Proceedings JNOG: 25^{ème} Journées Nationales d'Optique guidée - Metz, November 7-8-9, 2006, pp.285-287.
- 60 Clara Goyes, Maurizio Ferrari, Efrain Solarte, Cristina Armellini, Alessandro Chiasera, Yoann Jestin, Giancarlo C. Righini, Alvaro Casas, y Christopher Meacock.
 “Uso del recocido con Laser de CO₂ en la fabricacion de Guías de onda planares nanoestructuradas para amplificacion optica”
 Proceedings X Encuentro Nacional de Optica - I Conferencia Andina y del Caribe en Optica y sus Aplicaciones, Ciudad de Cali (Valle- Colombia), 13 - 17 November 2006, OMP11-O06, pag. 110.
- 61 Y. Jestin, C. Arfuso-Duverger, C. Armellini, B. Boulard, A. Chiappini, A. Chiasera, M. Ferrari, E. Moser, G. Nunzi Conti, S. Pelli, O. Peron, R. Retoux, and G.C. Righini.
 “Ceramization of erbium activated planar waveguides by bottom up technique”
 SPIE 6469 (2006) pp. 646909-1 – 646909-9.
- 62 C. Goyes, M. Ferrari, C. Armellini, A. Chiasera, Y. Jestin, G.C. Righini, A. Casas, C. Meacock, and E. Solarte.
 “Effect of CO₂ laser irradiation on the performances of sol-gel-derived Er³⁺-activated SiO₂ - ZrO₂ and SiO₂ – HfO₂ planar waveguides”
 SPIE 6458 (2006) pp. 64580D-1 – 64580D-9.
- 63 C. Armellini, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, M. Mattarelli, L. Minati, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini, G. Speranza, C. Tosello.
 “Nanocomposite photonic glasses and confined structures optimizing Er³⁺-luminescent properties”
 SPIE 6593 (2007) pp. 65930L-1 - 65930L-11
- 64 G. Speranza, L. Minati, A. Chiasera, M. Ferrari, G.C. Righini.
 “Metal nanocluster and sodalime glasses: an XPS characterization”
 SPIE 6593 (2007) pp. 65930Q-1 - 65930Q-8

- A. Chiappini, C. Armellini, A. Chiasera, M. Ferrari, Y. Jestin, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini
65 "Fabbricazione di strutture attive a cristallo fotonico ad alta efficienza quantica"
Proceedings Fotonica 2007, Mantova, 21-23 maggio 2007 - MAMU Mantova Multicentre, pp. 237-240.
- C. Armellini, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, C. Arfuso-Duverger, B. Boulard, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini, R. Retoux
66 "Guide nanostrutturate per la fotonica fabbricate con tecnica bottom-up"
Proceedings Fotonica 2007, Mantova, 21-23 maggio 2007 - MAMU Mantova Multicentre, pp. 375-378.
- C. Armellini, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini
67 "Fabrication of Er^{3+} active silica direct and inverse opals with high quantum efficiency"
Proceedings CLEO-Europe IQEC 2007 – 18th International Congress on Photonics in Europe, 17-22 June, 2007, Munich, Germany. CD ROM – CK-1485.
- C. Armellini, A. Chiappini, A. Chiasera, M. Ferrari, V. Foglietti, Y. Jestin, A. Minotti, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini, C. Tosello
68 "Fabrication by rf-sputtering and diagnostics of $\text{Er}^{3+}/\text{Yb}^{3+}$ - activated silica-hafnia waveguides"
Proceedings CLEO-Europe IQEC 2007 - 18th International Congress on Photonics in Europe, 17-22 June, 2007, Munich, Germany. CD ROM - CE-390.
- C. Armellini, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, F. Prudenzeno, P. Feron, E. Moser, C. Tosello, B. Boulard, C. Arfuso Duverger, G. Speranza, L. Minati, G. Nunzi Conti, S. Pelli, G.C. Righini,
69 "Tailoring Er^{3+} Spectroscopic Properties by Nanocomposite Photonic Glasses and Confined Structures"
Invited lecture: Paper Th2A.2, Proceedings ICTON-MW 2007. International Conference on Transparent Optical Networks (ICTON) Mediterranean Winter 2007, Sousse, December 6-8, 2007, Tunisia. IEEE Catalog Number: CFP0733D-CDR, ISBN: 978-1-4244-1639-4, Library of Congress: 2007906051
- C. Goyes, F. Sequeda, A. Devia, M. Ferrari, A. Chiasera, F. Fonthal, E. Solarte,
70 "Effect of CO_2 Laser Annealing on Microstructure and Optical Properties of Sputtered Silicon Carbide Nano-Scale Films"
Proceedings 50th SVC Society of Vacuum Coaters Annual Technical Conference. April 28–May 3, 2007, Kentucky International Convention Center, Louisville, KY, USA. Society of Vacuum Coaters 50th Annual Technical Conference Proceedings (2007), Louisville, ISSN 0737-5921, pp. 509-514.

- 71 Y. Jestin, C. Armellini, A. Chiappini, A. Chiasera, Y. Dumeige, M. Ferrari, P. Féron, L. Ghisa, G. Nunzi Conti, S. Trebaol, G.C. Righini,
"Photonic properties of erbium activated coated microspheres"
SPIE Proc. 6890 (2008) pp. 689008-1 - 689008-8.
- 72 K. C. Vishnubhatla, S. Venugopal Rao, R. Sai Santosh Kumar, S. N. B. Bhaktha, A. Chiappini, A. Chiasera, J. Laureyns, M. Ferrari, M. Mattarelli, M. Montagna, R. Osellame, R. Ramponi, G. C. Righini, S. Turrell, D. Narayana Rao,
"Micro-Raman mapping of micro-gratings in 'BACCARAT' glass directly written using femtosecond laser"
SPIE Proc. 6881 (2008) pp. 688141-1 - 688141-10.
- 73 A. Chiappini, C. Armellini, A. Chiasera, M. Ferrari, R. Guider, Y. Jestin, L. Minati, E. Moser, G. Nunzi Conti, S. Pelli, R. Retoux, G.C. Righini, G. Speranza.
"Preparation and characterization of ZnO particles embedded in organic-inorganic planar waveguide by sol-gel route."
SPIE Photonics Europe – Silicon Photonics and Photonic Integrated Circuits – Strasbourg, France, 7-10 April 2008.
Proceedings SPIE 6996 (2008) pp. 699607-1/8.
- 74 G. Speranza, L. Minati, A. Chiasera, C. Arfuso Duverger, M. Ferrari, G.C. Righini.
"Electron confinement effects in silver nanoclusters embedded in sodalime glasses"
SPIE Photonics Europe – Silicon Photonics and Photonic Integrated Circuits – Strasbourg, France, 7-10 April 2008.
Proceedings SPIE 6996 (2008) pp. 699609-1/7
- 75 F. Prudenzano, L. Allegretti, M. De Sario, L. Mescia, T. Palmisano, M. Ferrari, A. Chiasera, Y. Jestin, B. Boulard, O. Péron.
"Design of high gain Er³⁺-Yb³⁺-Ce³⁺ co-doped ZELA fluoride glass waveguide amplifier".
SPIE Photonics Europe – Silicon Photonics and Photonic Integrated Circuits – Strasbourg, France, 7-10 April 2008.
Proceedings SPIE 6996 (2008) pp. 69960U-1/11
- 76 C. Armellini, S.N.B. Bhaktha, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, P. Féron, E. Moser, C. Duverger Arfuso, B. Boulard, G. Speranza, L. Minati, G. Nunzi Conti, S. Pelli, G.C. Righini, P.T. Huy.
"Fabrication and Spectroscopic Properties of Glass-Based Erbium Activated Micro-Nano Photonic Structures"
Proceedings of ICTON 2008 June 22-26, 2008 - Athens, Greece pp. 239-243. 10th Anniversary International Conference on Transparent Optical Networks, Special Session on Novel glasses for photonic devices, June 22-26, 2008 - Athens, Greece.

- C. Armellini, P. Biljanovic, S. Berneschi, S.N.B. Bhaktha, B. Boulard, A. Chiappini, A. Chiasera, C. Arfuso Duverger, P. Feron, M. Ferrari, P. T. Huy, M. Ivanda, Y. Jestin,
E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini, G. Speranza
- 77 “Optical properties and fabrication of glass-based erbium activated micro-nano photonic structures”
Proceedings MIPRO 2008, pp. 21-26, ISBN 978-953-233-036-6. 31st International Convention MIPRO 2008, Microelectronics, Electronics, and Electronic Technology, May 26-30, 2008, Opatija, Croatia.
- M. Ivanda, D. Ristić, K. Furić, S. Musić, M. Ristić, M. Buljan, U. V. Desnica, M. Montagna, M. Ferrari, A. Chiasera
- 78 “Spherical vibrational modes of nanoparticles”
Proceedings MIPRO 2008, pp. 56-60, ISBN 978-953-233-036-6. 31st International Convention MIPRO 2008, Microelectronics, Electronics, and Electronic Technology, May 26-30, 2008, Opatija, Croatia.
- C. Armellini, S.N.B. Bhaktha, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, P. Feron, E. Moser, C. Duverger Arfuso, B. Boulard, G. Speranza, L. Minati, G. Nunzi Conti, S. Pelli, G.C. Righini, P.T. Huy
- 79 “Fabrication and spectroscopic properties of glass-based erbium activated micro-nano photonic structures.”
Invited lecture. Paper Th.A3.2
Proceedings ICTON 2008, Paper Th.A3.2, pp. 239-243.
- G. Nunzi Conti, S. Soria, S. Berneschi, M. Brenci, S. Pelli, G.C. Righini, C. Armellini, A. Chiappini, A. Chiasera, Y. Jestin, M. Ferrari, L. Ghisa, P. Féron
- 80 “Glass Microspherical Lasers”
Advances in Science and Technology Vol. 55 (2008) pp 46-55.
Invited lecture: Proceedings 3rd International Conference ”Smart Materials, Structures and Systems”, Acireale, Sicily, Italy, 8 -13 June, 2008.
- L. Minati, G. Speranza, Y. Jestin, C. Armellini, A. Chiappini, A. Chiasera, M. Ferrari, G.C. Righini
- 81 “Structural and Spectroscopic Assessment of Er³⁺- activated SiO₂-HfO₂ Glass Ceramics Planar Waveguides”
Advances in Science and Technology Vol. 55 (2008) pp 56-61
Oral communication: Proceedings 3rd International Conference ”Smart Materials, Structures and Systems”, Acireale, Sicily, Italy, 8 -13 June, 2008.
- C. Armellini, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, E. Moser, R. Retoux, G. Speranza, L. Minati, G. Nunzi Conti, S. Berneschi, I. Cacciari, S. Pelli, G.C. Righini.
- 82 “Fabrication and Characterization of Silica Opals”
Advances in Science and Technology Vol. 55 (2008) pp 118-126.
Invited lecture: Proceedings 3rd International Conference ”Smart Materials, Structures and Systems”, Acireale, Sicily, Italy, 8 -13 June, 2008.

- 83 D. Ristic, M. Ivanda, K. Furic, M. Montagna, M. Ferrari, A. Chiasera, Y. Jestin
 “Raman scattering on on the l=2 spheroidal mode of spherical nanoparticles”
 Advances in Science and Technology Vol. 55 (2008) pp 132-137.
 Poster communication: Proceedings 3rd International Conference ”Smart Materials,
 Structures and Systems”, Acireale, Sicily, Italy, 8 -13 June, 2008.
- 84 A. Chiappini, C. Armellini, A. Chiasera, M Ferrari, Y. Jestin, E. Moser, G. Speranza,
 G. Nunzi Conti, G. C. Righini
 “Self-assembly approach to metamaterials and plasmonics”
 Oral communication - Book of abstracts COST MP07 Meeting “Towards Functional
 Sub-Wavelength Photonic Structures” Bratislava, Slovak Republic, October 26-28-
 2008.
- 85 G. Alombert-Goget, C. Armellini, S.N.B. Bhaktha, B. Boulard, A. Chiappini, A.
 Chiasera, C. Duverger-Arfulso, P. Féron, M. Ferrari, R.R. Gonçalves, P.T. Huy, Y.
 Jestin, T.N. Khiem, L. Minati, A. Monteil, E. Moser, G. Nunzi Conti, R.
 Osellame, S. Pelli, A. Quandt, R. Ramponi, D. N. Rao, G.C. Righini, G. Speranza,
 K.C. Vishnubhatla
 “Erbium-activated silica-hafnia: a reliable photonic system”
Invited paper Fr1B.1: Proceedings 2nd ICTON-MW’08 Conference, Workshop on
 Advanced Materials and Photonics Applications, 11-13 December 2008, Marrakesh,
 Morocco.
 IEEE catalog number CFP0833D-CDR; ISBN 978-1-4244-3485-5 (2008)
- 86 S.N.B. Bhaktha, C. Armellini, F. Beclin, M. Bouazaoui, B. Capoen, A. Chiappini, A.
 Chiasera, M. Ferrari, Y. Jestin, C. Kinowski, E. Moser, D.N. Rao, G.C. Righini, S.
 Turrell
 “Fabrication and spectroscopic assessment of sol-gel derived SiO₂-SnO₂ glass-
 ceramics planar waveguides”
 Proceedings PHOTONICS-2008: International Conference on Fiber Optics and
 Photonics, December 13-17, 2008, IIT Delhi, India.
- 87 S.N.B. Bhaktha, C. Armellini, F. Beclin, M. Bouazaoui, B. Capoen, A. Chiappini, A.
 Chiasera, M. Ferrari, Y. Jestin, C. Kinowski, E. Moser, D.N. Rao, G.C. Righini, S.
 Turrell
 “SiO₂-SnO₂ glass-ceramics planar waveguides activated by rare earth ions”
 Proceedings of SPIE Vol. 7212 (2009) pp. 721207-1/8. doi: 10.1117/12.808277.
 Photonics West 2009, Conference OE102 Optical Components and Materials VI, 24
 - 29 January 2009, San Jose Convention Center, San Jose, California, USA.
- 88 Daniele Zonta, Andrea Chiappini, Alessandro Chiasera, Maurizio Ferrari, Matteo
 Pozzi, Lorenzo Battisti, Matteo Benedetti
 “Photonic crystals for monitoring fatigue phenomena in steel structures”
 Proceedings of SPIE Vol. 7292 (2009) pp. 729215-1/10 doi: 10.1117/12.814915
 Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace
 Systems 9-12 March 2009, San Diego, CA, USA.

- G.Alombert-Goget, C. Armellini, S. Berneschi, S.N.B. Bhaktha, B. Boulard, A. Chiappini, A. Chiasera, C. Duverger-Arfuso, P. Féron, M. Ferrari, Y. Jestin, L. Minati, A. Monteil, E. Moser, G. Nunzi Conti, S. Pelli, F. Prudenzano, G.C. Righini, G. Speranza
- 89 “Glass-Based Erbium Activated Micro-Nano Photonic Structures”
Invited lecture Proceedings ICTON 2009, 11th International Conference on Transparent Optical Networks and First Annual Conference of COST Action MP0702: Towards Functional Sub-Wavelength Photonic Structures, June 28 - July 2, 2009 - Island of São Miguel, Azores, Portugal. Paper We.A5.4, Pages 1-4.
Digital Object Identifier 10.1109/ICTON.2009.5185200
- G.Alombert-Goget, C. Armellini, S. Berneschi, S.N.B. Bhaktha, B. Boulard, M. Brenci, A. Chiappini, A. Chiasera, C. Duverger-Arfuso, P. Féron, M. Ferrari, R.R. Gonçalves, Y. Jestin, L. Minati, E. Moser, G. Nunzi Conti, S. Pelli, D.N. Rao, R. Retoux, G.C. Righini, G. Speranza
- 90 “Er³⁺ - activated photonic structures fabricated by sol-gel and rf-sputtering techniques”
Invited paper Proceedings of SPIE Vol. 7366 (2009) pp. 73660E-1/15. doi: 10.1117/12.821697
Europe Microtechnologies for the New Millennium Conference 7366 Photonic Materials, Devices, and Applications, 4-6 May 2009. Dresden, Germany.
- Guillaume Alombert-Goget, Cristina Armellini, Simone Berneschi, Alessandro Chiasera, Franco Cosi, Gualtiero Nunzi Conti, Patrice Féron, Maurizio Ferrari, Lorenzo Lunelli, Enrico Moser, Cecilia Pederzoli, Giancarlo C. Righini.
- 91 “Glass-ceramics coating of silica microspheres”
Proceedings 3rd ICTON - International Conference on Transparent Optical Networks, Mediterranean Winter - 2009, December 10-12th, 2009, Angers, France . Paper Fr2B.2
- G.Alombert-Goget, C. Armellini, S. Berneschi, B. Boulard, A. Chiappini, A. Chiasera, C. Duverger-Arfuso, P. Féron, M. Ferrari, S. Guddala, E. Moser, S. Pelli, D.N. Rao, G.C. Righini, G. Speranza.
- 92 “Fabrication, Assessment, and Application of Confined Structures in Photonic Glasses”
Proceedings 3rd ICTON - International Conference on Transparent Optical Networks, Mediterranean Winter - 2009, December 10-12th, 2009, Angers, France . Paper Fr1.1
- Armellini, C.; Bhaktha, S.N.B.; Beclin, F.; Berneschi, S.; Biljanovi?, Petar; Bouazaoui, M.; Boulard, B.; Capoen, B.; Chiappini, A.; Chiasera, A.; Duverger-Arfuso, C.; Feron, P.; Ferrari, M.; Kinowski, C.; Ivanda, Mile; Jestin, Y.; Moser, E.; Nunzi Conti, G.; Pelli, S.; Righini, G.C.; Robbe, O.; Speranza, G.; Turrell, S.
- 93 “Rare-earth activated nano-structures fabricated by sol-gel route”
Proceedings MIRPO 2009
ISBN: 978-953-233-044-1

- 93 S. Berneschi, S.N.B. Bhaktha, A. Chiappini, A. Chiasera, M. Ferrari, C. Kinowski, S. Turrell, C. Trono, M. Brenci, I. Cacciari, G. Nunzi Conti, S. Pelli, G. C. Righini
 “Highly photorefractive Eu³⁺ activated sol-gel SiO₂ – SnO₂ thin film waveguides”
 Proceedings of SPIE Vol. 7604 (2010) pp. 76040Z-1/6
 doi: 10.1117/12.843210
 SPIE Photonic West Conference 7604 Integrated Optics: Devices, Materials, and Technologies XIV, 23 - 28 January 2010, The Moscone Center, San Francisco, California United States.
- 94 G. Alombert Goget, C. Armellini, A. Chiappini, A. Chiasera, M. Ferrari, S. Berneschi, M. Brenci, S. Pelli, G.C. Righini, M. Bregoli, A. Maglione, G. Pucker, G. Speranza.
 “Frequency converter layers based on terbium and ytterbium activated HfO₂ glass-ceramics”
 Proceedings of SPIE Vol. 7725 (2010) pp. 77250w-1/8.
 doi: 10.1117/12.855025
- 95 L. Minati, G. Speranza, I. Bernagozzi, S. Torrenzo, M. Ferrari, A. Chiasera
 “Luminescent functionalized multi-walled carbon nanotubes”
 Proceedings of FOTONICA 2010 12° Convegno Nazionale delle Tecnologie Fotoniche 25-27 maggio 2010 – Pisa
- 96 S. Berneschi, G. Alombert-Goget, C. Armellini, B. N. S. Bhaktha, M. Brenci, A. Chiappini, A. Chiasera, M. Ferrari, S. Guddala, E. Moser, G. Nunzi Conti, S. Pelli, G. C. Righini
 "Rare-earth-doped silicate glass-ceramic thin films for integrated optical devices"
 Advances in Science and Technology 71 (2010) pp. 6-15.
 Trans Tech Publications, Switzerland. doi:10.4028/www.scientific.net/AST.71.6
 ISBN / ISBN-13: 3-908158-54-0 / 978-3-908158-54-7
 Proceedings CIMTEC 2010, 12th International Ceramics Congress, International Conference “Disclosing Materials at Nanoscale”, Montecatini, June 6-11, 2010, Italy.
- 97 S. Torrenzo, A. Miotello, G. Speranza, L. Minati, I. Bernagozzi, M. Ferrari, A. Chiasera, M. Dipalo, E. Kohn
 "XPS study of in situ one-step amination of nanocrystalline diamond films"
 Advances in Science and Technology 71 (2010) pp. 45-49.
 Trans Tech Publications, Switzerland. doi:10.4028/www.scientific.net/AST.71.45
 ISBN / ISBN-13: 3-908158-54-0 / 978-3-908158-54-7
 Proceedings CIMTEC 2010, 12th International Ceramics Congress, International Conference “Disclosing Materials at Nanoscale”, Montecatini, June 6-11, 2010, Italy.

- 98 A.Chiasera, M. Ferrari, M. Mazzola, S. Varas, E.Moser, S. Valligatla, V. Foglietti, G. Nunzi Conti, S. Pelli, G.C. Righini
“Caratterizzazione e fabbricazione con tecnica rf-sputtering di strutture confinate dielettriche”
FOTONICA 2011, 13° Convegno Nazionale delle Tecnologie Fotoniche
Proceedings of Fotonica 2011, paper B2.3
- 99 N. Iznie Razaki, U. Sarah Jais, S. N. B. Bhaktha, A. Chiasera, M. Ferrari, M. Kamil Abd-Rahman
“Nanocrystal in Er³⁺-doped SiO₂-ZrO₂ planar waveguide with Yb³⁺ sensitizer”
AIP Conf. Proc. Volume 1250 (2010) pp. 15-18.
ISSN: 0094243X
ISBN: 978-073540797-8
DOI: 10.1063/1.3469624
Progress of Physics Research in Malaysia, PERFIK2009; Malacca; 7 December 2009 through 9 December 2009
- 100 Z. Tijanić, D. Ristić, M. Ivanda, I. Bogdanović-Raković, M. Marciuš, M. Ristić, O. Gamulin, S. Musić, K. Furić, A. Chiasera, M. Ferrari, G.C. Righini
“Low temperature deposition of SiNx thin films by the LPCVD method”
34th International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2011; Opatija; 23 May 2011 through 27 May 2011; Category number CFP1139K-CDR; Code 86227
2011, Article number 5967015, Pages 23-24
ISBN: 978-953233067-0
- 101 A.G. Goget, C.A. Duverger, C. Armellini, S. Berneschi, P. Biljanovic, B. Boulard, A. Carpentiero, A. Chiappini, A. Chiasera, P. Feron, M. Ferrari, M. Ivanda, M. Mazzola, L. Minati, E. Moser, G.N. Conti, S. Pelli, D. Ristic, G.C. Righini, G. Speranza, S. Varas
“Rare earth-activated glass ceramics: A cutting-edge photonic system”
34th International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2011; Opatija; 23 May 2011 through 27 May 2011; Category number CFP1139K-CDR; Code 86227
2011, Article number 5967010, Pages 1-6
ISBN: 978-953233067-0
- 102 D. Ristić, M. Ivanda, K. Furić, A. Chiasera, E. Moser, M. Ferrari
“Thermal decomposition of silicon-rich oxides deposited by the LPCVD method”
34th International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2011; Opatija; 23 May 2011 through 27 May 2011; Category number CFP1139K-CDR; Code 86227
2011, Article number 5967016, Pages 25-26
ISBN: 978-953233067-0

D. Ristic, M. Ivanda, M. Marcius, V. Holy, Z. Siketic, I. Bogdanovic-Radovic, O. Gamulin, K. Furic, M. Ristic, S. Music, M. Buljan, M. Ferrari, A. Chiasera, A. Chiappini and G. C. Righini

“Characterisation of thin LPCVD silicon-rich oxide films”

Proc. SPIE 8069, 80690P (2011)

ISSN: 0277786X

103 ISBN: 978-081948658-5

CODEN: PSISD

DOI: 10.1117/12.886783

Integrated Photonics: Materials, Devices, and Applications; Prague; 18 April 2011 through 20 April 2011; Code 85454

B. Han, E. Rigo, R. Guider, S. Larcheri, G. Nunzi Conti, M. R. Vanacharla, A. Chiasera, M. Ferrari, L. Pavesi, G. Pucker, G. C. Righini M. Ghulinyan

“Development and optical characterization of vertical tapers in SiON waveguides using gray-scale lithography”

Proc. SPIE 8069, 80690K (2011)

ISSN: 0277786X

104

ISBN: 978-081948658-5

CODEN: PSISD

DOI: 10.1117/12.886820

Integrated Photonics: Materials, Devices, and Applications; Prague; 18 April 2011 through 20 April 2011; Code 85454

G. Alombert Goget, D. Ristic, A. Chiasera, S. Varas, M. Ferrari, G. C. Righini, B. Dieudonné, B. Boulard

“Down-converter based on rare earth doped fluoride glass to improve Si-based solar cell efficiency”

Proc. SPIE 8069, 80690N (2011)

ISSN: 0277786X

105

ISBN: 978-081948658-5

CODEN: PSISD

DOI: 10.1117/12.886789

Integrated Photonics: Materials, Devices, and Applications; Prague; 18 April 2011 through 20 April 2011; Code 85454

- Radoslaw Belka, Małgorzata Suchanska, Elzbieta Czerwosz, Alessandro Chiasera, Maurizio Ferrari
"The optical study of nanoporous C-Pd thin films"
Proc. SPIE 8070, 807019 (2011)
ISSN: 0277786X
106 ISBN: 978-081948660-8
CODEN: PSISD
DOI: 10.1117/12.891944
- Metamaterials VI; Prague; 20 April 2011 through 21 April 2011; Code 85223
- Davor Ristic, Andrea Chiappini, Alessandro Chiasera, Cristina Armellini, Alessandro Carpentiero, Maurizio Mazzola, Enrico Moser, Stefano Varas, Simone Berneschi, Gualtiero Nunzi Conti, Stefano Pelli, Silvia Soria, Giorgio Speranza, Lorenzo Lunelli, Cecilia Pederzoli, Francesco Prudenzano, Patrice Féron, Mile Ivanda, Gilles Cibiel, Giancarlo C. Righini, Maurizio Ferrari
107 "Spherical resonators coated by glass and glass-ceramic films"
Proc.SPIE 8236, 82361W-1-(2012)
ISBN: 9780819488794
DOI: 10.1117/12.910104
- Laser Resonators, Microresonators, and Beam Control XIV, Alexis V. Kudryashov; Alan H. Paxton; Vladimir S. Ilchenko, Editors, 82361W, 6 February 2012
- D. Ristic, A. Chiasera, E. Moser, P. Féron, G. Cibiel, M. Ivanda, G.C. Righini, M. Ferrari
"Whispering gallery modes in coated silica microspheres"
SPIE Europe 2012 Conference 8431 Silicon Photonics and Photonic Integrated Circuits, Brussels, Belgium, 16-19/04/2012
108 Proc.SPIE 8431, 84311P-1-(2012)
ISSN 0277-786X
ISBN 9780819491237
DOI: 10.1117/12.921620
- T.T. Van Tran, C. Kinowski, O. Cristini, B. Capoen, A. Chiasera, D. Ristic, M. Ferrari, S. Turrell
"Erbium-activated silica-tin oxide glass ceramics for photonic integrated circuits fabrication, characterisation and assessment"
SPIE Europe 2012 Conference 8431 Silicon Photonics and Photonic Integrated Circuits, Brussels, Belgium, 16-19/04/2012
109 Proc.SPIE 8431, 84311F-1-(2012)
ISSN 0277-786X
ISBN 9780819491237
DOI: 10.1117/12.922595

- A. Chiasera, S. Valligatlaa, S. Varas, N. Bazzanella, D. Narayana Rao, G.C. Righini, M. Ferrari
 "High quality factor dielectric multilayer structures fabricated by rf-sputtering"
 Oral Communication: SPIE Europe 2012 Conference 8431 Silicon Photonics and
 110 Photonic Integrated Circuits, Brussels, Belgium, 16-19/04/2012
 Proc.SPIE 8431, 843127-1-(2012)
 ISSN 0277-786X
 ISBN 9780819491237
 DOI: 10.1117/12.921695
- D. Ristic, L. Lunelli, A. Chiasera, P. Feron, G. Cibiel, M. Ivanda, G.C. Righini, M. Ferrari
 111 "Erbium doped silica microspheres for lasing applications"
 MIPRO, 2012 Proceedings of the 35th International Convention (2012) pp. 1-4
 ISBN: 978-1-4673-2577-6
- D. Ristic, Thi Thanh Van Tran, B. Dieudonné, C. Armellini, S. Berneschi, A. Chiappini, A. Chiasera, S. Varas, A. Carpentiero, M. Mazzola, G. Nunzi Conti, S. Pelli, G. Speranza, P. Feron, C. Duverger Arfuso, G. Cibiel, S. Turrell, K. Tran Ngoc, B. Boulard, G.C. Righini, M. Ferrari
 "Tailored spectroscopic and optical properties in rare earth-activated glass-ceramics
 112 planar waveguides"
 Proc. SPIE 8621 (2013) pp. 86210M-1/12
 ISSN: 1996-756X
 DOI: 10.1117/12.2008192
- SPIE Photonic West 2013, "Optical Components and Materials X" SPIE OPTO, San Francisco, California, USA, 2 -7 February 2013.
- Alessandro Chiasera, Alessandro Carpentiero, Maurizio Mazzola, Stefano Varas, Maurizio Ferrari, Sreeramulu Valligatla, Nicola Bazzanella, D. Narayana Rao, Giancarlo C. Righini
 "High quality factor 1-D Er³⁺-activated dielectric microcavity fabricated by rf –
 113 sputtering"
 Oral communication: FOTONICA 2013, 15° Convegno Nazionale delle Tecnologie Fotoniche, Milano 21/23 maggio 2013
 Fascicolo C1 (2013) pp. 1-4
 ISBN: 9788887237160
- A. Lukowiak, A. Bednarkiewicz, R.J. Wiglusz, W. Strek, L. Kepinski, L. Krajczyk, D. Ristic, A. Chiasera, M. Ferrari
 "Eu³⁺ / Yb³⁺ - activated nanocrystals of lanthanide phosphates"
 114 Mipro 2013, 36° nternational convention on information and communication technology, electronics and microelectronics, Opatija-Croatia, 20-24 Maggio 2013.
 MEET Conference (2013) pp. 44-48.
 ISSN: 1847-3946
 ISBN:9789532330748

- 115 A. Lukowiak, A. Chiappini, A. Chiasera, D. Ristic, I. Vasilchenko, C. Armellini, A. Carpentiero, S. Varas, G. Speranza, S. Taccheo, S. Pelli, I.K. Battisha, G.C. Righini, W. Streck, M. Ferrari
"Sol-gel-derived photonic structures"
Information Photonics 2013 Conference - Book of Abstracts, pp. 89-93.
- 116 A. Chiasera, C. Macchi, S. Mariazzi, S. Valligatla, S. Varas, M. Mazzola, N. Bazzanella, L. Lunelli, C. Pederzoli, D.N. Rao, G.C. Righini, A. Somoza, R. Brusa, M. Ferrari
"GeO₂ glass ceramic planar waveguides fabricated by RF-sputtering"
Proceedings SPIE 8982 (2014) pp. 89820D-1/12. Optical Components and Materials XI, 89820D, doi: 10.1117/12.2042099.
- 117 A. Lukowiak, I. Vasilchenko, S. Normani, A. Chiappini, A. Chiasera, C. Armellini, C. Arfuso Duverger, B. Boulard, R.J. Wiglusz, S. Pelli, I.K. Battisha, G.C. Righini, M. Marciniak, M. Ferrari
"Glass-ceramics for photonics: advances and perspectives"
Invited Paper Proceedings ICTON 2014, 16th International Conference on Transparent Optical Networks, Graz, Austria, July 6-10, pp. 1-4,
doi: 10.1109/ICTON.2014.6876584.
- 118 A. Chiappini, A. Chiasera, C. Armellini, A. Carpentiero, A. Lukowiak, M. Mazzola, S. Normani, D. Ristic, S. Valligatla, I. Vasilchenko, S. Varas, G.C. Righini and M. Ferrari
"Glass-based Photonic Crystals: from Fabrication to applications"
Advances in Science and Technology Vol. 90 (2014), pp 121-126,
doi:10.4028/www.scientific.net/AST.90.121.
Proceedings CIMTEC 2014, 13th International Ceramics Congress, International Conference "Inorganic Materials Systems for Optical and Photonic Applications", Montecatini, June 8-13, 2014, Italy.

Other publications

- A. Chiasera, M. Montagna, E. Moser, R. Rolli, S. Ronchin, F. Rossi, C. Tosello, L. Zampedri, S. Pelli, G.C. Righini, C. De Bernardi, P. Della Casa, C. Panciatichi, F. Pozzi, G. Battaglin, F. Gonella, P. Mazzoldi, R. Belli, M. Ferrari
- 1 "Guide di luce planari $\text{SiO}_2\text{-TiO}_2$ attivate con ioni Er^{3+} prodotte per rf-sputtering su substrati silice on silicon"
7° volume della collana quaderni di ottica e fotonica 2001, 85-90, ISBN 88-7957-170-2.
- L. Zampedri, C. Tosello, F. Rossi, S. Ronchin, R. Rolli, E. Moser, M. Montagna, A. Chiasera, G.C. Righini, S. Pelli, A. Monteil, S. Chausse-dent, C. Duverger, S.J.L. Ribeiro, R.R. Gonç-alves, M. Ferrari, C. Armellini
- 2 "Guide di luce planari $\text{SiO}_2\text{-TiO}_2\text{:Er}^{3+}$ e vetri $\text{SiO}_2\text{-Er}_2\text{O}_3$ prodotti per via sol-gel."
7° volume della collana quaderni di ottica e fotonica 2001, 79-84, ISBN 88-7957-170-2.

Chapters and articles in book with international publishing house

Stefano Pelli, Alessandro Chiasera, Maurizio Ferrari, and Giancarlo C. Righini
“Spectroscopic techniques for sensors”

- 1 In “An Introduction to Optoelectronic Sensors”, Series in Optics and Photonics Vol. 7 (2009) pp. 197-215. World Scientific Publishing Co. Pte. Ltd. Editors: Giancarlo C. Righini, Antonella Tajani, Antonello Cutolo.

L. Minati, G. Speranza, A. Chiappini, A. Chiasera, M. Ferrari, S. Berneschi, S. Pelli, G.C. Righini

“Electronic confinement of silver nanoclusters in Er³⁺-activated silicate and phosphate glasses”

- 2 Invited paper in “Synchrotron Radiation and Nanostructures: Papers in Honour of Paolo Perfetti” Editors: Antonio Cricenti, Giorgio Margaritondo, World Scientific Publishing Company, May 2009.
ISBN: 9814280836, ISBN-13: 9789814280839

List of communications in national or international conferences

National

- 1 A. Chiasera, C. Duverger, M. Montagna, E. Moser, R. Rolli, S. Ronchin, F. Rossi, C. Tosello, L. Zampedri, S. Pelli, G.C. Righini, C. Armellini, M. Ferrari
"Erbium-activated monolithic silica xerogels and silica-titania planar waveguides: optical and spectroscopic characterization"
Oral communication: 2° Workshop italiano Sol-Gel, Parma 21-22 Settembre 2000.
- 2 A. Chiasera, M. Montagna, E. Moser, R. Rolli, S. Ronchin, F. Rossi, C. Tosello, L. Zampedri, S. Pelli, G.C. Righini, C. De Bernardi, P. Della Casa, C. Panciatichi, F. Pozzi, G. Battaglin, F. Gonella, P. Mazzoldi, R. Belli, M. Ferrari
"Guide di luce planari SiO₂-TiO₂ attivate con ioni Er³⁺ prodotte per rf-sputtering su substrati silica on silicon"
Poster communication: Giornata di Ottica SIOF e GNEQP-CNR 28 Novembre 2000
- 3 L. Zampedri, C. Tosello, F. Rossi, S. Ronchin, R. Rolli, E. Moser, M. Montagna, A. Chiasera, G.C. Righini, S. Pelli, A. Monteil, S. Chaussedent, C. Duverger, S.J.L. Ribeiro, R.R. Gonçalves, M. Ferrari, C. Armellini
"Guide di luce planari SiO₂-TiO₂:Er³⁺ e vetri SiO₂-Er₂O₃ prodotti per via sol-gel."
Poster communication: Giornata di Ottica SIOF e GNEQP-CNR 28 Novembre 2000.
- 4 A. Chiasera, M. Montagna, R. Rolli, S. Ronchin, C. Tosello, L. Zampedri, M. Brenci, S. Pelli, G. Righini, R. Gonsalves, S.J. L. Ribeiro, C. De Bernardi, P. Della Casa, C. Panciatichi, F. Pozzi, G. Battagnin, F. Gonella, P. Mazzoldi, R. Belli, M. Ferrari
"Preparazione via RF sputtering e proprietà ottiche e spettroscopiche di guide di luce planari SiO₂ - TiO₂ attivate con Ioni Er³⁺."
Oral communication: Fotonica 2001, Ischia 23-25 Maggio 2001.
- 5 Martucci, M. Ferrari, A. Chiasera
"Er Doped GeO₂-TiO₂ Sol-Gel Waveguides."
Poster communication: III Convegno Nazionale sulla Scienza e Tecnologia dei Materiali, Trento 18-20 Giugno 2001.
- 6 R.R. Gonçalves, G. Carturan, L. Zampedri, M. Ferrari, M. Montagna, A. Chiasera, G.C. Righini, S. Pelli, S.J.L. Ribeiro, and Y. Messaddeq.
"Erbium-activated SiO₂-HfO₂ planar waveguides: a binary system for operation in the C-telecom band"
Oral communication: III Workshop Italiano Sol-Gel, Trento 13-14-Giugno, 2002.
- 7 L. Zampedri, M. Ferrari, C. Armellini, C. Tosello, R. Rolli, E. Moser, M. Montagna, A. Chiasera, R.R. Gonçalves, S. Pelli, G.C. Righini, C. Duverger, A. Martucci, and M. Guglielmi.
"TiO₂-based thin films for photonics"
Oral communication: III Workshop Italiano Sol-Gel, Trento 13-14-Giugno, 2002

- 8 A. Chiasera, M. Mattarelli, M. Montagna, E. Moser, C. Tosello, C. Armellini, M. Ferrari, R.R. Gonçalves, H. Portales, S. Pelli, G.C. Righini, V. Foglietti, A. Minotti
 “Guide di luce planari Silica-Titania attivate con ioni Erblio ed Itterbio preparate via RF sputtering”
 Oral communication: Fotonica 2003, Riva del Garda 7-9 Aprile 2003.
- 9 M. Mattarelli, A. Chiasera, M. Montagna, AB. Seddon, V.K. Tikhomirov, R. Rolli, S. Pelli, G.C. Righini, G. Nunzi Conti, M. Martino, V. Resta, M. Ferrari, L. Zampedri
 “Vetri telluriti drogati con erblio con alta efficienza quantica”
 Oral communication: Fotonica 2003, Riva del Garda 7-9 Aprile 2003.
- 10 A. D’Orazio, M. De Sario, L. Mescia, V. Petruzzelli, F. Prudenzeno, A. Chiasera, C. Tosello, M. Ferrari
 “Progetto di amplificatori planari in vetro silicato drogato con $\text{Er}^{3+}/\text{Yb}^{3+}$ ”
 Poster communication: Fotonica 2003, Riva del Garda 7-9 Aprile 2003.
- 11 R.M. Almeida, A. Chiasera, M. Ferrari, Y. Jestin, A. Marques, M. Mattarelli, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, S. Portal, H. Portales, G.C. Righini, C. Tosello, L. Zampedri,
 “Fabbricazione per via sol-gel di strutture PBG 1-D”
 Oral communication: Workshop su Ottiche Diffrattive, Microottica E Microsistemi, Firenze 1-2 Aprile 2004
- 12 A. Chiasera, C. Armellini, M. Ferrari, M. Mattarelli, M. Montagna, E. Moser, C. Tosello, L. Zampedri, V. Foglietti, A. Minotti, S. Pelli, G. C. Righini
 “Rare Earth-Activated Glass Confined Structures for Photonics: Planar Waveguides and 1-D Photonic Crystals”
 Oral communication: INFMeeting 2004, Genova 7-10 Giugno 2004
- 13 M. Mattarelli, C. Tosello, M. Montagna, L. Zampedri, E. Moser, M. Ferrari, A. Chiasera, V. Tikhomirov, A. B. Seddon, G. Nunzi Conti, G.C. Righini
 “ Er^{3+} and Tm^{3+} -containing ultra-transparent oxy-fluoride based glass ceramics for Wavelength Division Multiplexing optical amplifiers.”
 Poster communication: INFMeeting 2004, Genova 7-10 Giugno 2004
- 14 C. Armellini, A. Chiasera, M. Ferrari, Y. Jestin, A. Chiappini, M. Mattarelli, M. Montagna, E. Moser, H. Portales, C. Tosello, L. Zampedri, S. Dirè, K. Tran Ngoc, R.M. Almeida, S. Portal, V. Foglietti, A. Minotti, G. Nunzi Conti, S. Pelli, G.C. Righini
 “Sol Gel-Derived Rare Earth-Activated Confined Structures for Photonics”
 Oral communication: IV Workshop Italiano Sol-Gel, Monteponi - Iglesias (CA), 17-18 Giugno 2004

- 15 H. Portales, M. Mattarelli, M. Montagna, A. Chiappini, A. Chiasera, M. Ferrari, A. Martucci, P. Mazzoldi, S. Pelli, G. C. Righini
“Investigation of the role of silver on spectroscopic features of Er³⁺-activated Ag-exchanged silicate and phosphate glasses”
Poster communication: VII Convegno Nazionale Materiali Nanofasici 16 – 17 settembre 2004 Roma
- 16 C. Armellini, A. Chiasera, M. Ferrari, Y. Jestin, R. Belli, S.N.B. Bhaktha, A. Chiappini, M. Mattarelli, M. Montagna, E. Moser, C. Tosello, K.C. Vishunubhatla, L. Zampedri, D.N. Rao, R.M. Almeida, S. Portal, S. Berneschi, G. Nunzi Conti, S. Pelli, G.C. Righini
“Materiali Nanostrutturati e Strutture Confinare per la Fotonica”
Invited Oral communication: Fotonica 2005, Trani 30 Maggio-1 Giugno 2005
- 17 M. Mattarelli, M. Montagna, C. Tosello, A. Chiappini, L. Zampedri, E. Moser, S.N.B. Bhaktha, K.C. Vishunubhatla, C. Armellini, A. Chiasera, Y. Jestin, M. Ferrari, G. Nunzi Conti, S. Pelli, G.C. Righini, A. B. Seddon V. K. Tikhomirov
“Vetroceramiche attivate Er³⁺ e Tm³⁺ per applicazioni WDM”
Oral communication: Fotonica 2005, Trani 30 Maggio-1 Giugno 2005
- 18 A. Chiappini, R. Belli, S.N.B. Bhaktha, M. Mattarelli, M. Montagna, E. Moser, C. Tosello, K.C. Vishunubhatla, L. Zampedri, C. Armellini, A. Chiasera, M. Ferrari, Y. Jestin, K. Tran Ngoc, G. Nunzi Conti, S. Pelli, G.C. Righini
“Fabbricazione per via sol-gel di cristalli fotonici 3D e determinazione delle loro proprietà ottiche e strutturali”
Oral communication: Fotonica 2005, Trani 30 Maggio-1 Giugno 2005
- 19 B.N. Shivakiran Bhaktha, V. Krishna Chaitanya, Alessandro Chiasera, Cristiana Tosello, Andrea Chiappini, Cristina Armellini, Yoann Jestin, Enrico Moser, Giancarlo C. Righini, Maurizio Ferrari, D. Narayana Rao
“Silica–Titania 1-D Photonic Crystals fabricated by rf-sputtering”
Poster communication, National Laser Symposium-5 (NLS-5), December 7 - 10, 2005, Vellore Institute of Technology, India.
- 20 A. Chiappini, S.N.B. Bhaktha, M. Montagna, E. Moser, C. Tosello, K.C. Vishunubhatla, C. Armellini, A. Chiasera, M. Ferrari, C.E.L Goyes, Y. Jestin, G. Nunzi Conti, S. Pelli, G.C. Righini, R.M. Almeida, M.C. Gonçalves.
“Protocollo di fabbricazione per via colloidale di cristalli fotonici 3 D”
Oral communication ODIMI’06, 5° Workshop su Ottiche diffrattive, microottica e microsistemi”, Firenze 11-12 maggio 2006.
- 21 A. Chiasera, C. Armellini, M. Ferrari, C.E.L Goyes, Y. Jestin, S.N.B. Bhaktha, A. Chiappini, M. Montagna, E. Moser, C. Tosello, K.C. Vishunubhatla, G. Nunzi Conti, S. Pelli, G.C. Righini, R.M. Almeida, A. Marques.
“Fabbricazione via rf-sputtering e caratterizzazione di cristalli fotonici 1-D”
Oral communication ODIMI’06, 5° Workshop su Ottiche diffrattive, microottica e microsistemi”, Firenze 11-12 maggio 2006.

- 22 Y.Jestin, N. Afify, C. Armellini, S. Berneschi, S.N.B. Bhaktha, B. Boulard, A. Chiappini, A. Chiasera, G. Dalba, C. Duverger, M. Ferrari, C.E.L. Goyes, M. Mattarelli, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini, F. Rocca, C. Tosello.
 “Vetroceramiche di silice-afnia attivata erbio in formato di guida di luce planare”
 Poster communication ODIMI’06, 5° Workshop su Ottiche diffrattive, microottica e microsistemi”, Firenze 11-12 maggio 2006.
- 23 A.D’Orazio, M. De Sario, L. Mescia, V. Petruzzelli, F. Prudenzeno, A. Chiasera, M. Ferrari, M. Montagna.
 “Progetto, ottimizzazione e caratterizzazione di amplificatori ottici mediante algoritmi genetici”
 Poster communication ODIMI’06, 5° Workshop su Ottiche diffrattive, microottica e microsistemi”, Firenze 11-12 maggio 2006.
- 24 A.Chiappini, S.N.B. Bhaktha, M. Montagna, E. Moser, C. Tosello, K.C. Vishunubhatla, S. Diré, C. Armellini, A. Chiasera, M. Ferrari, C. Goyes, Y. Jestin, G. Nunzi Conti, S. Pelli, G.C. Righini.
 “Synthesys, properties and structural investigation of colloidal silica particles for photonic applications”
 Oral communication V Workshop Italiano Sol-Gel, Milano, 22 - 23 giugno 2006.
- 25 Y.Jestin, C. Armellini, S.N.B. Bhaktha, A. Chiappini, A. Chiasera, S. Diré, M. Ferrari, C. Goyes, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini, C. Tosello, K.C. Vishunubhatla.
 “Sol-gel derived glass-ceramic waveguides for optical amplification”.
 Oral communication V Workshop Italiano Sol-Gel, Milano, 22 - 23 giugno 2006.
- 26 C.Armellini, S.N.B. Bhaktha, A. Chiappini, A. Chiasera, Y. Jestin, M. Ferrari, M. Montagna, E. Moser, G.Nunzi Conti, S. Pelli, G.C. Righini.
 “Er³⁺-activated silica-hafnia glass-ceramics planar waveguides”
 Oral communication at VIII Convegno Nazionale, Materiali Nanofasici, 3-4 ottobre 2006, Aula dei Convegni – CNR, P.le Aldo Moro, 7 – Roma.
- 27 Y.Jestin, C. Armellini, S.N.B. Bhatka, B. Boulard, A. Chiappini, A. Chiasera, C. Duverger, M. Ferrari, M. Montagna, E. Moser, G.Nunzi Conti, S. Pelli, O. Peron, G.C. Righini, K.C. Vishunubhatla.
 “Guides d’onde planaires en vitro-ceramique SiO₂-HfO₂ dopes erbium”
 Oral communication at 25^{èmes} Journées Nationales d’Optique Guidée, 7-9 Novembre 2006, Metz, France.
- 28 A.Chiappini, C. Armellini, B. Boulard, A. Chiasera, C. Duverger, P. Féron, M. Ferrari, Y. Jestin, E. Moser, G. Nunzi Conti, S. Pelli, O.Péron, G.C. Righini.
 “Protocole de fabrication par voie colloïdale de cristaux photoniques 3D”
 Oral communication at 25^{èmes} Journées Nationales d’Optique Guidée, 7-9 Novembre 2006, Metz, France.

- 29 Olivier Péron, Brigitte Boulard, Alessandro Chiasera, Maurizio Ferrari, Yoann Jestin
 “Guide d’onde en verre de fluorure a base de ZrF_4 dope erbium pour l’amplification”
 Poster communication at 25^{èmes} Journées Nationales d’Optique Guidée, 7-9
 Novembre 2006, Metz, France.
- 30 C.Goyes, M. Ferrari, E. Solarte, C. Armellini, A. Chiasera, Y. Jestin, G.C. Righini,
 A. Casas, y C. Meacock.
 “Aplicación del recocido con Láser de CO_2 en la fabricación de guías de onda
 planares nanoestructuradas basadas en SiO_2-ZrO_2 y SiO_2-HfO_2 ”.
 Poster communication at Séptima Escuela Nacional de Materia Condensada
 (VIENFMC), Ciudad de Tunja (Boyacá- Colombia), 23 – 27 October 2006.
- 31 Clara Goyes, Maurizio Ferrari, Efrain Solarte, Cristina Armellini, Alessandro
 Chiasera, Yoann Jestin, Giancarlo C. Righini, Alvaro Casas, y Christopher Meacock.
 “Uso del recocido con Laser de CO_2 en la fabricacion de Guías de onda planares
 nanoestructuradas para amplificacion optica”
 Oral communication at X Encuentro Nacional de Optica - I Conferencia Andina y
 del Caribe en Optica y sus Aplicaciones, Ciudad de Cali (Valle- Colombia),13 - 17
 November 2006.
- 32 A.Chiappini, C. Armellini, A. Chiasera, M. Ferrari, Y. Jestin, M. Montagna, E.
 Moser, G. Nunzi Conti, S. Pelli, G.C. Righini
 “Fabbricazione di strutture attive a cristallo fotonico ad alta efficienza quantica”
 Oral communication at Fotonica 2007, Mantova, 21-23 maggio 2007 - MAMU
 Mantova Multicentre
- 33 C.Armellini, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, C. Arfuso-Duverger,
 B. Boulard, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini, R.
 Retoux
 “Guide nanostrutturate per la fotonica fabbricate con tecnica bottom-up”
 Oral communication at Fotonica 2007, Mantova, 21-23 maggio 2007 - MAMU
 Mantova Multicentre
- 34 Y.Jestin, C. Armellini, A. Chiappini, A. Chiasera, P. Féron, L. Ghisha, M. Ferrari, E.
 Moser, G.Nunzi Conti, S. Pelli, Giancarlo C. Righini
 “Etude spectroscopique de micro-sphères recouvertes d’une couche mince
 optiquement active”
 Poster communication : JNOG 2007- 26-èmes journées Nationales de l’Optique
 Guidée, 2 au 5 juillet 2007, Grenoble, France.
- 35 G.Speranza, L. Minati, S. Torrenco, A. Miotello, C. Ciminelli, M.N. Armenise, G.
 Adami, A. Cucina, M. Bizzarri, M. Ferrari, A. Chiasera, S. Pelli, G.C. Righini
 “Diamond-based platform for biological investigations”
 Poster communication at
 IV Congresso Nazionale of Italian Society of Space Biomedicine and Biotechnology,
 Santa Margherita Ligure 31 Marzo - 2 Aprile 2009.

- 36 G. Speranza, C. Armellini, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, L. Minati, E. Moser, G.C. Righini, S. Torrenco
 “Nanostructure to boost material properties”
Invited communication XIX Congresso AIV, Senigallia 19-21 maggio 2009.
- 37 M. Ferrari, A. Chiappini, A. Chiasera
 “Spettroscopia di fluorescenza e Raman di materiali vetrosi”
Relazione su invito XCV Congresso Nazionale Società Italiana di Fisica, Bari 28 settembre – 3 ottobre 2009.
- 38 L. Minati, G. Speranza, I. Bernagozzi, S. Torrenco, M. Ferrari, A. Chiasera
 “Luminescent functionalized multi-walled carbon nanotubes”
 Poster communication: FOTONICA 2010 12° Convegno Nazionale delle Tecnologie Fotoniche 25-27 maggio 2010 – Pisa
- 39 A. Chiasera, M. Ferrari, M. Mazzola, S. Varas, E. Moser, S. Valligatla, V. Foglietti, G. Nunzi Conti, S. Pelli, G.C. Righini
 “Caratterizzazione e fabbricazione con tecnica rf-sputtering di strutture confinate dielettriche”
 Oral communication: FOTONICA 2011, 13° Convegno Nazionale delle Tecnologie Fotoniche, Genova 9-11 maggio 2011
- 40 D. Ristic, A. Chiasera, S. Varas, P. Feron, G. Cibiel, M. Ivanda, G.C. Righini, M. Ferrari
 "Erbium activated silica - hafnia coated microspheres"
 Poster Communication: VIII Workshop Italiano Sol-Gel, Trento, Italy, 21-22/06/2012
- 41 Alessandro Chiasera, Alessandro Carpentiero, Maurizio Mazzola, Stefano Varas, Maurizio Ferrari, Sreeramulu Valligatla, Nicola Bazzanella, D. Narayana Rao, Giancarlo C. Righini
 “High quality factor 1-D Er³⁺-activated dielectric microcavity fabricated by rf – sputtering”
 Oral communication: FOTONICA 2013, 15° Convegno Nazionale delle Tecnologie Fotoniche, Milano 21/23 maggio 2013
- 42 A. Chiasera, C. Macchi, S. Mariazzi, S. Valligatla, S. Varas, M. Mazzola, N. Bazzanella, L. Lunelli, C. Pederzoli, A. Łukowiak, D.N. Rao, G.C. Righini, A. Somoza, R.S. Brusa, and M. Ferrari
 “GeO₂ glass ceramic planar waveguides fabricated by RF-sputtering”
 Oral Communication at Fotonica14, Napoli 12-14 May 2014.
- 43 M. Ferrari, R. R. Gonçalves, I. Vasilchenko, A. Chiappini, A. Chiasera, A. L. Lukowiak, A.K. Piotrowska, D. Zonta, M. Marciniak, G. C. Righini
 “Photonic Glasses and Confined Structures”
 Invited Communication: XIII Encontro da SBPMat, Joao Pessoa, Brasil, September 28 – October 02 2014

International

- 1 G.C. Righini, S. Pelli, M. Ferrari, C. Armellini, L. Zampedri, C. Tosello, S. Ronchin, R. Rolli, E. Moser, M. Montagna, A. Chiasera, S.J.L. Ribeiro
"Er-Doped Silica-Based Waveguides Prepared by Different Techniques: RF-Sputtering, Sol-Gel and Ion-Exchange"
Oral communication: 2nd International Photonics Conference IPC 2000 12-15 December 2000 Hsinchu, Taiwan ROC
- 2 S. Ronchin, A. Chiasera, M. Montagna, R. Rolli, C. Tosello, S. Peli, G.C. Righini, R. R. Gonçalves, S. Ribeiro, C. De Bernardi, F. Pozzi, C. Duverger, R. Belli, M. Ferrari
"Erbium-activated silica-titania planar waveguides prepared by rf-sputtering"
Oral communication: Photonics West, 20-26 January 2001 San Jose, California USA
- 3 L. Zampedri, C. Tosello, F. Rossi, S. Ronchin, R. Rolli, M. Montagna, A. Chiasera, G.C. Righini, S. Pelli, A. Monteil, S. Chaussedent, C. Bernard, C. Duverger, M. Ferrari, C. Armellini
"Erbium-Activated Monolithic Silica Xerogels and Silica-Titania Planar Waveguides: Optical and Spectroscopic Characterization"
Poster communication: Photonics West, 20-26 January 2001 San Jose, California USA
- 4 R. Rolli, A. Chiasera, M. Montagna, E. Moser, S. Ronchin, S. Pelli, G.C. Righini, A. Jha, V.K. Tikhomirov, S.A. Tikhomirova, C. Duverger, P. Galinetto, M. Ferrari
"Rare-earth-activated fluoride and tellurite glasses: optical and spectroscopic properties"
Invited oral communication: Photonics West, 20-26 January 2001 San Jose, California USA
- 5 L. Armelao, G. Bottaro, S. Gross, G. Obetti, A. Martucci, M. Ferrari, S. Ronchin, A. Chiasera
"Sol-gel synthesis and characterization of Er³⁺-doped Al₂O₃-SiO₂ films"
Poster communication: Photonics West, 20-26 January 2001 San Jose, California USA
- 6 R. Rolli, M. Montagna, A. Chiasera, G. C. Righini, S. Pelli, A. Jha, V. K. Tikhomirov, S. A. Tikhomirova, A. Monteil, S. Chaussedent, M. Ferrari
"A comparative study of the spectroscopic properties at 1.5 μm in erbium-activated fluoride and tellurite glasses"
Poster communication: 8th International Workshop on Disordered Systems, 12-15 March 2001, Andalo (Italy).

- 7 A. Chiasera, M. Montagna, R. Rolli, S. Ronchin, L. Zampedri, S. Pelli, G.C. Righini, R.R. Gonçalves, Y. Messaddeq, S.J.L. Ribeiro, C. Armellini, M. Ferrari
 "Er³⁺/Yb³⁺ co-activated silica-alumina monolithic xerogels"
 Poster communication: XI International Workshop on Glasses, Ceramics, Hybrids and Nanocomposites from Gels, Padova 16-21 Settembre 2001
- 8 L. Zampedri, F. Visintainer, C. Tosello, S. Ronchin, R. Rolli, M. Montagna, A. Chiasera, G.C. Righini, S. Pelli, A. Monteil, C. Duverger, M. Ferrari, C. Armellini
 "Erbium-activated silica-titania planar waveguides"
 Poster communication: XI International Workshop on Glasses, Ceramics, Hybrids and Nanocomposites from Gels, Padova 16-21 Settembre 2001
- 9 Martucci, M. Ferrari, A. Chiasera
 "Er Doped GeO₂-TiO₂ Sol-Gel Waveguides."
 Poster communication: XI International Workshop on Glasses, Ceramics, Hybrids and Nanocomposites from Gels, Padova 16-21 Settembre 2001
- 10 A. Martucci, M. Ferrari, A. Chiasera,
 "Er doped GeO₂-TiO₂ sol-gel waveguides"
 Oral communication: PAC RIM IV International Conference on Advanced Ceramics and Glasses, 4-8 November 2001, Outrigger Wailea Resort, Wailea, Maui, Hawaii.
- 11 A. D'Orazio, M. De Sario, L. Mescia, V. Petruzzelli, F. Prudenzeno, A. Chiasera, M. Montagna, C. Tosello, and M. Ferrari
 "Modeling of Er³⁺ Doped SiO₂-TiO₂ Planar Amplifier"
 Oral communication: Photonics West, 19-25 January 2002 San Jose, California USA.
- 12 N. Chiodini, A. Paleari, G. Spinolo, G. Brambilla, A. Chiasera, M. Ferrari
 "Erbium spectroscopy in photosensitive tin-doped silica glass"
 Poster communication: Photonics West, 19-25 January 2002 San Jose, California USA
- 13 A. Chiasera, M. Bersani, P. Lazzeri, C. Tosello, M. Montagna, S. Ronchin, L. Zampedri, M. Ferrari
 "Codoped Silica-Titania Planar Waveguides Prepared by RF-Sputtering"
Invited oral communication: The American Ceramic Society, 104th Annual Meeting & Exposition, St. Louis, Missouri, April 28- May 1, 2002.
- 14 R.R. Gonçalves, M. Ferrari, L. Zampedri, M. Montagna, R. Rolli, A. Chiasera, S.J. Ribeiro
 "Silica-Hafnia Erbium-Activated Planar Waveguides"
 Oral communication: The American Ceramic Society, 104th Annual Meeting & Exposition, St. Louis, Missouri, April 28- May 1, 2002.

- A. Chiasera, M. Montagna, C. Tosello, S. Pelli, G.C. Righini, M. Ferrari, L. Zampedri, A. Monteil, P. Lazzeri
- 15 “Enhanced spectroscopic properties at 1.5 μm in $\text{Er}^{3+}/\text{Yb}^{3+}$ -activated silica-titania planar waveguides fabricated by rf-sputtering”
 Oral communication: ICO19, 19th Congress of the International Commission for Optics, Session Photonic Glasses, Firenze, Italy, 25-30 August 2002.
- Ana C. Marques, Rui M. Almeida, Alessandro Chiasera, and Maurizio Ferrari
- 16 “Reversible Photoluminescence quenching in Er^{3+} -doped silica-titania planar waveguides prepared by sol-gel”
 Oral communication: SiO_2 and Advanced Dielectrics Trento, Italy, 16-18 September 2002
- R.R. Gonçalves, G. Carturan, L. Zampedri, M. Ferrari, A. Chiasera, M. Montagna, G.C. Righini, S. Pelli, S.J.L. Risiero, Y. Messaddeq
- 17 “Erbium activated Silica-Hafnia waveguides prepared by sol-gel route”
 Poster communication: SiO_2 and Advanced Dielectrics Trento, Italy, 16-18 September 2002
- A. Chiasera, C. Tosello, E. Moser, M. Montagna, R. Belli, R.R. . Gonçalves, G.C. Righini, S. Pelli, A. Chiappini, L. Zampedri, M. Ferrari
- 18 “ $\text{Er}^{3+}/\text{Yb}^{3+}$ -activated silica-titania planar waveguides for EDPWAs fabricated by rf sputtering”
 Poster communication: SiO_2 and Advanced Dielectrics Trento, Italy, 16-18 September 2002
- A. Chiasera, M. Montagna, C. Tosello, R. R. Goncalves, L. Zampedri, M. Ferrari, M. Brenci, S. Pelli, G. C. Righini, M. Bersani, P. Lazzeri P. Della Casa
- 19 “Fabrication by rf-sputtering processing of $\text{Er}^{3+}/\text{Yb}^{3+}$ -codoped silica-titania planar waveguides”
 Oral communication: SPIE Photonics Fabrication Europe 28 October – 1 November 2002, Brugge, Belgium.
- L. Zampedri, M. Ferrari, C. Armellini, R.R. Gonçalves, C. Tosello, E. Moser, M. Montagna, M. Mattarelli, A. Chiasera, H. Portales, G.C. Righini, S. Pelli, S.J.L. Ribeiro, Y. Messaddeq, A. Mintoti, V. Foglietti
- 20 “Sol-Gel materials for Photonics”
 Oral communication, plenary lecture: 6th International Workshop on Laser Physics and its Applications, Tunis, Tunisia 11-17 December 2002.
- A. Chiasera, M. Montagna, C. Tosello, R.R. Gonçalves, A. Chiappini, M. Ferrari, L. Zampedri, S. Pelli, G.C. Righini, A. Monteil, V. Foglietti, A. Minotti, R.M. Almeida, A. Marques, V. Soares
- 21 “Erbium/Ytterbium-activated silica-titania planar and channel waveguides prepared by rf-sputtering.”
 Oral communication: SPIE Photonic West January 2003 San Jose, California USA

- 22 Rogéria R. Gonçalves, Giovanni Carturan, Luca Zampedri, Maurizio Ferrari, Cristina Armellini, Alessandro Chiasera, M. Mattarelli, Enrico Moser, Maurizio Montagna, Giancarlo C. Righini, Stefano Pelli, Gualtiero Nunzi Conti, Sidney J.L. Ribeiro, Younes Messaddeq, Antonio Minotti, Vittorio Foglietti, Hervè Portales
 “Sol-Gel Erbium-Doped Silica-Hafnia Planar and Channel Waveguides”
 Oral communication: SPIE Photonic West January 2001 San Jose, California USA
- 23 M. Montagna, A. Chiasera, E. Moser, F. Visintainer, M. Ferrari, L. Zampedri, R.R. Gonçalves, S.J.L. Ribeiro, A. Martucci, M. Guglielmi, M. Ivanda, and R.M. Almeida
 “Nucleation and Crystallization of Titania Nanoparticles in Silica Titania Planar Waveguides: a Study by Low Frequency Raman Scattering.”
 Oral communication: II International Materials Symposium (IMS), Materiais 2003, (14-16 April Caparica, Portugal)
- 24 C. Armellini, A. Chiasera, M. Ferrari, V. Foglietti, R. R. Gonçalves, M. Mattarelli, A. Minotti, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, H. Portales, G. C. Righini, C. Tosello, L. Zampedri
 “Spotlights on Optical-Waveguides and Integrated Optical Devices Based on Rare-Earth Doped Glasses”
Invited lecture, XXVI International Conference on Microprocessors, Process and Information Systems, Microelectronics and Electronics MIPRO 2003, Opatija (Abazia) 19-23 May 2003.
- 25 R.M. Almeida, A.C. Marques, S. Pelli, G.C. Righini, A. Chiasera, M. Mattarelli, M. Montagna, C. Tosello, R.R. Gonçalves, H. Portales, S. Chausseant, M. Ferrari, L. Zampedri
 “Spectroscopic assessment of silica-titania and silica-hafnia planar waveguides”
 Oral communication: 9th International Workshop on Disordered Systems Andalo (Italy)
- 26 G.C. Righini, M. Brenci, A. Chiasera, M. Ferrari, M. Montagna, G. Nunzi Conti, S. Pelli
 “Ion-Exchange Processes in Active Glasses: Spectroscopic and Structural Characterization”
 Oral communication: Deutsche Glastechnische Gesellschaft e.V. (DGG) Symposium “Processing and Applications of Optical Components”, 26-28-May 2003, Leipzig, Germany.
- 27 G.C. Righini, A. Chiasera, M. Bettinelli, M. Brenci, M. Ferrari, G. Nunzi Conti, S. Pelli, A. Speghini
 “Rare-earth-doped oxide glasses for integrated optical amplifiers and lasers”
 Oral communication: 6th Mediterranean Workshop and Topical Meeting on Novel Optical Materials and Applications (NOMA)”, Cetraro – Italy, June 08 – 13, 2003.

- 28 S. Pelli, M. Bettinelli, M. Brenci, R. Calzolari, A. Chiasera, M. Ferrari, G. Nunzi Conti, A. Speghini, L. Zampedri, J. Zheng, and G. C. Righini
 “Erbium Doped Silicate Glasses for Integrated Optical Amplifiers and Lasers”
 Poster communication: International Conf. on the Physics of Non-Crystalline Solids (Parma, 13-17 July 2003)".
- 29 L. Zampedri, G. C. Righini, H. Portales, S. Pelli, G. Nunzi Conti, M. Montagna, M. Mattarelli, R.R. Gonçalves, M. Ferrari, A. Chiasera, C. Armellini
 “Sol-Gel-Derived Er-activated SiO₂-HfO₂ Planar Waveguides for 1.5 μm application”
 Oral Communication: International Conf. on the Physics of Non-Crystalline Solids (Parma, 13-17 July 2003)".
- 30 M. Mattarelli, M. Montagna, E. Moser, A. Chiasera, V. Tikhomirov, A. B. Seddon, S. Chausseant, G. Nunzi Conti, S. Pelli, G.C. Righini, L. Zampedri, M. Ferrari
 “Tm³⁺-activated transparent oxy-fluoride glass ceramics: structural and spectroscopic properties.”
 Oral Communication: International Conf. on the Physics of Non-Crystalline Solids (Parma, 13-17 July 2003)".
- 31 Cristina Armellini, Massimo Brenci, Alessandro Chiasera, Maurizio Ferrari¹, Vittorio Foglietti, Rogeria R. Gonçalves, Maurizio Mattarelli, Antonio Zodolin, Maurizio Montagna, Enrico Moser, Gualtiero Nunzi Conti, Stefano Pelli, Hervé Portales, Giancarlo C. Righini, Cristiana Tosello, Luca Zampedri
 “Erbium/Ytterbium co-doped Glass Thin Film Waveguides”
Invited oral communication: TC-20 meeting; Meeting of the ICG Technical Committee on Glasses for Optoelectronics; “Nello Carrara” Institute of Applied Physics – CNR, Via Panciatichi 64, 50127 Firenze; Florence, Italy - Friday, July 18th., 2003
- 32 C. Armellini, A. Chiasera, S. Dirè, M. Ferrari, A. Martucci, M. Mattarelli, M. Montagna, E. Moser, S. Pelli, G.C. Righini, G.D. Soraru, L. Zampedri
 “Photoluminescence excitation spectroscopy of Er³⁺/Yb³⁺ co-activated silica-alumina monolithic xerogels”
 Poster Communication: XII International Workshop on Sol-Gel Science and Technology, Sydney, August 24 - 29 2003, Australia.
- 33 R.M. Almeida, A.C. Marques, R. Cabeça, L. Zampedri, A. Chiasera, and M. Ferrari
 “Photoluminescence of erbium-doped silicate sol-gel planar waveguides”
 Oral Communication: XII International Workshop on Sol-Gel Science and Technology, Sydney, August 24 - 29 2003, Australia.

- A. Monteil, S. Chaussedent, G. Alombert-Goget, N. Gaumer, J. Obriot, A. Chiasera, M. Ferrari
- 34 “Clustering of rare earth in glasses, Aluminum effect: experiments and modelling.”
 Oral Communication: II International Symposium on Non-Crystalline Solids and Annual Meeting of the International Commission on Glass, September 21-25, 2003 Campos do Jordão, SP Brazil.
- A.M. Baranov, V.V. Sleptsov, A.A. Nefedov, A.E. Varfolomeev, S.S. Fanchenko, L. Calliari, G. Speranza, M. Ferrari, A. Chiasera
- 35 “Erbium-doped thin amorphous carbon films prepared by sputtering”
 Poster Communication: APHYS-2003 First International Meeting on Applied Physics, 15 to 18 October 2003, Badajoz (Spain), Spain.
- S. Berneschi, M. Bettinelli, M. Brenci, R. Calzolari, A. Chiasera, M. Ferrari, G. Nunzi Conti, S. Pelli, S. Sebastiani, A. Speghini, J. Zheng, G. C. Righini
- 36 “Er³⁺/Yb³⁺ co-doped soda-lime silicate glasses: a case study”
 Oral communication: Photonics West, 24-29 January 2004 San Jose, California USA.
- A. Chiasera, M. Ferrari, L. Zampedri, M. Mattarelli, M. Montagna, H. Portales, C. Tosello, S. Dirè, S. Pelli, G. C. Righini,
- 37 “Fabrication and characterization of optical planar waveguides activated by erbium ions for 1.5 μm applications”
 Poster communication: SPIE Photonics Europe April 2004 Strasbourg, France.
- B. Boulard, C. Duverger, S. Guy, A. Chiasera, M. Ferrari, Y. Jestin
- 38 "Non-radiative relaxation rate modification by chlorine codoping of rare earth-activated PZG glasses"
 Poster communication: SPIE Photonics Europe April 2004 Strasbourg, France.
- M. Mattarelli, M. Bouazaoui, B. Capoen, S. Turrell, A. Chiasera, M. Ferrari, L. Zampedri, M. Montagna, H. Portales, G. Nunzi-Conti, G. C. Righini
- 39 "Optical spectroscopy of Er³⁺ and Ce³⁺-codoped TeO₂-WO₃-Na₂O glasses"
 Oral communication: SPIE Photonics Europe April 2004 Strasbourg, France.
- C. Armellini, A. Chiasera, M. Ferrari, Y. Jestin, A. Chiappini, M. Mattarelli, M. Montagna, E. Moser, H. Portales, C. Tosello, L. Zampedri, V. Foglietti, A. Minotti, G. Nunzi Conti, S. Pelli, G.C. Righini, R.M. Almeida, S. Portal, A.B. Seddon, V.K. Tikhomirov, B. Gaillard-Allemand, V. Benoit
- 40 “Rare Earth-Activated Confined Structures for Spectroscopic Properties Enhancement: Ultratransparent Glass Ceramics, Planar Waveguides, Spherical Microresonators and Microcavities”
Invited lecture, 27^o International Convention, MIPRO 2004, Opatija (Abazia) 24-28 May 2003.

- A. Chiasera, M. Ferrari, M. Mattarelli, M. Montagna, S. Pelli, H. Portales, G.C. Righini
 41 “Assessment of spectroscopic properties of erbium ions in silicate and phosphate glasses after silver exchange”
 Poster communication: International Workshop Photonic And Electronic Materials, Donostia / San Sebastián, June 14 – 16, 2004.
- H. Portales, M. Mattarelli, M. Montagna, A. Chiasera, M. Ferrari, A. Martucci, P. Mazzoldi, S. Pelli, G. C. Righini
 42 “Investigation of the role of silver on spectroscopic features of Er³⁺-activated Ag-exchanged silicate and phosphate glasses”
 Oral communication: 5th Symposium “SiO₂, Advanced Dielectrics & Related Devices” Chamonix Mont-Blanc, June 21-23, 2004
- M. Mattarelli, A. Chiappini, M. Montagna, A. Martucci, A. Ribaudou, M. Guglielmi, M. Ferrari, A. Chiasera
 43 “Optical Spectroscopy of TeO₂-GeO₂ glasses activated with Er³⁺ and Tm³⁺ ions”
 Poster communication: 5th Symposium “SiO₂, Advanced Dielectrics & Related Devices” Chamonix Mont-Blanc, June 21-23, 2004
- G. Alombert-Goget, N. Gaumer, J. Obriot, S. Chaussedent, A. Monteil, H. Portales, A. Chiasera, M. Ferrari
 44 “Aluminum effect on photoluminescence properties of sol-gel-derived silicate glasses activated by rare-earth ions”
 Poster communication: 5th Symposium “SiO₂, Advanced Dielectrics & Related Devices” Chamonix Mont-Blanc, June 21-23, 2004
- A. D’Orazio, M. De Sario, V. Marrocco, L. Mescia, V. Petruzzelli, F. Prudenzeno, A. Chiasera, M. Ferrari, C. Tosello
 45 “Design of erbium/ytterbium codoped SiO₂-TiO₂ waveguide amplifiers”
 Poster communication: 5th Symposium “SiO₂, Advanced Dielectrics & Related Devices” Chamonix Mont-Blanc, June 21-23, 2004
- M. Ferrari, A. Chiasera, Y. Jestin, C. Tosello, H. Portales, M. Mattarelli, M. Montagna, L. Zampedri, G.C. Righini, S. Pelli, M. Martino, R.M. Almeida
 46 “Spectroscopic assessment of rare-earth activated glasses, planar waveguides and microresonators”
 Oral communication: 4-ICPEPA International Conference on Photo Excited Processes and Applications, Lecce, Italy, 5-9 September 2004.
- H. Portales, M. Mattarelli, M. Montagna, M. Ferrari, A. Chiasera, G.C. Righini, S. Pelli, A. Monteil, S. Chaussedent, E. Duval, S. Etienne, B. Gaillard-Allemand, and V. Benoit.
 47 “Erbium-activated modified silica glasses with high 4I13/2 luminescence quantum yield”
 Oral communication: RIAO-OPTILAS Conference, October 3-8, 2004, Porlamar, Venezuela.

- 48 R.R. Goncalves, S.J.L. Ribeiro, Y. Messaddeq, A. Martucci, S. Pelli, G. Nunzi Conti, G.C. Righini, V. Foglietti, A. Monotti, K. Tran Ngoc, L Zampedri, A. Chiappini, M. Mattarelli, M. Montagna, E. Moser, H. Portales, C. Tosello, C. Armellini, A. Chiasera, M. Ferrari, Y. Jestin
 "Erbium-Activated Sol Gel-Derived Silica-Hafnia Planar Waveguides"
 Poster communication: XX International Congress on Glasses in Kyoto, Sep.27th-Oct.1st, 2004
- 49 H.Portales, A. Chiasera, M. Mattarelli, M. Montagna, M. Ferrari, L. Zampedri, A. Monteil, S. Chaussedent, E. Duval, S. Etienne, B. Gaillard-Allemand, V. Benoit
 "High quantum efficiency at 1.54 μm in erbium-activated modified silica glass"
 Oral communication: XIVth International Symposium on Non-Oxide Glasses (ISNOG), November 7-12, 2004, Radisson Resort At The Port Cape Canaveral, Florida USA
- 50 V. Benoit, S.N.B. Bhaktha, B. Boulard, S. Chaussedent, A. Chiappini, A. Chiasera, E. Duval, S. Etienne, M. Ferrari, B. Gaillard-Allemand, Y. Jestin, M. Mattarelli, M. Montagna, A. Monteil, E. Moser, G. Nunzi Conti, S. Pelli, H. Portales, D.N. Rao, G.C. Righini, K.C. Vishunubhatla
 Optical and spectroscopic properties erbium-activated modified silica glass with 1.54 μm high quantum efficiency.
 Oral communication: SPIE Photonic West January 2005 San Jose, California USA
- 51 S.N.B. Bhaktha, R. Calzolari, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, M. Mattarelli, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, H. Portales, D.N. Rao, G.C. Righini, C. Tosello, K.C. Vishunubhatla, J. Zheng
 Spectroscopic properties of Er^{3+} -activated Ag-exchanged silicate and phosphate glasses.
 Oral communication: SPIE Photonic West January 2005 San Jose, California USA
- 54 V. Benoit, S.N.B. Bhaktha, B. Boulard, S. Chaussedent, A. Chiappini, A. Chiasera, E. Duval, C. Duverger, S. Etienne, M. Ferrari, B. Gaillard-Allemand, Y. Jestin, M. Mattarelli, M. Montagna, A. Monteil, E. Moser, G. Nunzi Conti, S. Pelli, H. Portales, D.N. Rao, G.C. Righini, K.C. Vishunubhatla
 Erbium-activated modified silica glasses with high ${}^4\text{I}_{13/2}$ luminescence quantum yield
 Oral communication: 1st Workshop on Photoluminescence in Rare Earths: Photonic Materials and Devices (Pre'05), Trento, Italy, 2 - 3 May 2005
- 55 M. Mattarelli, M. Montagna, E. Moser, M. Bouazaoui, B. Capoen, S. Turrell, A. Chiasera, M. Ferrari, Y. Jestin, G. Nunzi-Conti, G.C. Righini
 Increasing of the population feeding of the ${}^4\text{I}_{13/2}$ Er^{3+} level by Ce^{3+} codoping in $\text{TeO}_2\text{-WO}_3\text{-Na}_2\text{O}$ glasses.
 Poster communication: 1st Workshop on Photoluminescence in Rare Earths: Photonic Materials and Devices (Pre'05), Trento, Italy, 2 - 3 May 2005

- S. Sebastiani, M. Brenci, R. Calzolari, A. Chiasera, M. Ferrari, M. Mattarelli, G. Nunzi Conti, S. Pelli, G.C. Righini
- 56 Characterization of erbium-doped lithium niobate crystals and waveguides
Poster communication: 1st Workshop on Photoluminescence in Rare Earths: Photonic Materials and Devices (Pre'05), Trento, Italy, 2 - 3 May 2005
- A.P. Caricato, A. Fazzi, G. Leggieri, M. Martino, F. Romano, T. Tunno, A. Chiasera, M. Ferrari, M. Mattarelli, M. Montagna, M. Bouazaoui, B. Capoen, S. Turrell
- 57 Er³⁺-activated tellurite films deposited on a large area by Pulsed Laser Deposition technique
Poster communication: 1st Workshop on Photoluminescence in Rare Earths: Photonic Materials and Devices (Pre'05), Trento, Italy, 2 - 3 May 2005
- A. Chiasera, G. Nunzi Conti, S. Sebastiani
- 58 Er³⁺/Yb³⁺ co-doped photorefractive RF-sputtered SiO₂-GeO₂ thin films
Invited oral communication: 1st Workshop on Photoluminescence in Rare Earths: Photonic Materials and Devices (Pre'05), Trento, Italy, 2 - 3 May 2005
- G.C. Righini, I. Banyasz, S. Berneschi, M. Brenci, A. Chiasera, M. Cremona, D. Ehrt, M. Ferrari, R.M. Montoreali, G. Nunzi Conti, S. Pelli, S. Sebastiani, C. Tosello
- 59 Laser irradiation, ion implantation and e-beam writing of integrated optical structures
Oral communication: Microtechnologies for the New Millennium 2005, 9-11 May 2005, Sevilla, Spain
- C. Armellini, S.N.B. Bhaktha, B. Boulard, R. Calzolari, A. Chiappini, A. Chiasera, C. Duverger, M. Ferrari, R.R. Gonçalves, M. Ivanda, Y. Jestin, M. Mattarelli, M. Montagna, A. Monteil, E. Moser, G. Nunzi Conti, S. Pelli, H. Portales, G.C. Righini,
- 60 G.D. Sorarù, C. Tosello, K.C. Vishunubhatla, L. Zampedri, Y. Zhang, J. Zheng
Nanocomposite Photonic Materials
Invited lecture, 28^o International Convention, MIPRO, Opatija (Abazia) 30 May 2005- 3 June 2005.
- S. Sebastiani, M. Brenci, A. Chiasera, M. Ferrari, M. Mattarelli, G. Nunzi Conti, S. Pelli, and G.C. Righini
- 61 Characterization of erbium- or iron-doped lithium niobate crystals and waveguides
Comunicazione poster: 20th Congress of the International Commission for Optics Challenging Optics in Science & Technology, August 21-26, 2005, Changchun, China.
- S. Berneschi, M. Bettinelli, M. Brenci, R. Calzolari, A. Chiasera, M. Ferrari, M. Mattarelli, M. Montagna, G. Nunzi Conti, S. Pelli, A. Speghini, and G.C. Righini.
- 62 Optical and spectroscopic properties of new erbium-doped soda-lime-alumino-silicate glass for integrated optical amplifiers
Comunicazione orale: 20th Congress of the International Commission for Optics Challenging Optics in Science & Technology, August 21-26, 2005, Changchun, China.

- Y. Jestin, C. Armellini, A. Chiappini, A. Chiasera, M. Ferrari, M. Montagna, E. Moser, G.C. Righini
- 63 Fabrication of monosized silica spheres with customized diameter by sol-gel route
Poster communication: 13th International Workshop on Sol-Gel Science and Technology, University of California, Los Angeles, August 21-26, 2005
- Y. Jestin, N.D. Afify, C. Armellini, S.N.B. Bhatka, B. Boulard, A. Chiappini, A. Chiasera, G. Dalba, C. Duverger, M. Ferrari, M. Mattarelli, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini, F. Rocca, C. Tosello, K.C. Vishnubhatla, L. Zampedri
- 64 Er³⁺-activated silica-hafnia glass-ceramics planar waveguides
Poster communication: 13th International Workshop on Sol-Gel Science and Technology, University of California, Los Angeles, August 21-26, 2005
- M. Bouazaoui, B. Capoen, A. P. Caricato, A. Chiasera, A. Fazzi, M. Ferrari, G. Leggieri, M. Martino, M. Mattarelli, M. Montagna, F. Romano, T. Tunno, S. Turrel, K. Vishnubhatla
- 65 Pulsed Laser Deposition of Er doped tellurite films on large area
Poster communication: 8th International Conference on Laser Ablation, Banff, Canada, September 11-16, 2005
- C. Armellini, S.N.B. Bhaktha, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, M. Mattarelli, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini, C. Tosello, K.C. Vishnubhatla
- 66 Photonic bandgap dielectric structures fabricated by sol-gel and rf-sputtering techniques
Oral communication: European Optical Society Topical Meeting on Optical Microsystems, Capri-Island September 15-18, 2005
- S.N.B. Bhaktha, A. Chiappini, A. Chiasera, M. Ferrari, C. Goyes, Y. Jestin, M. Mattarelli, L. Minati, M. Montagna, G. Nunzi Conti, S. Pelli, G.C. Righini, G. Speranza, C. Tosello, K.C. Vishnubhatla
- 67 Nanocomposite Er-Ag Silicate Glasses
Oral communication: European Optical Society Topical Meeting on Optical Microsystems, Capri-Island September 15-18, 2005
- G. Nunzi Conti, S. Pelli, G.C. Righini, S. Sebastiani, A. Chiasera, M. Ferrari, et al.
- 68 Erbium-doped silica-germania sputtered films: photorefractivity and photoluminescence
Oral communication: AIOM 2005 The First Conference on Advances in Optical Materials, Tucson, Arizona, USA, October 12-16, 2005.
- G. Nunzi Conti, S. Pelli, G.C. Righini, M. Brenci, S. Berneschi, A. Chiasera, et al.
- 69 Spectroscopic and lasing properties of rare-earth-doped glass microspheres.
Oral communication: AIOM 2005 The First Conference on Advances in Optical Materials, Tucson, Arizona, USA, October 12-16, 2005.

- K. Tran Ngoc, H. Pham Thanh, C. Nguyen Duc, M. Ferrari, A. Chiasera, C. Armellini, Y. Jestin, M. Montagna, G.C. Righini
 70 "Sol-Gel-derived Er³⁺/Yb³⁺ co-activated silica-alumina xerogels"
 Poster communication: First Vietnamese-Italian International Joint Workshop Photonics and Nanotechnology, Hanoi, Vietnam, November 28-29,2005.
- C. Armellini, A. Chiappini, A. Chiasera, M. Ferrari, R.R. Gonçalves, Y. Jestin, K. Tran Ngoc, M. Mattarelli, M. Montagna, E. Moser, G. Nunzi Conti, G.C. Righini, C. Tosello, L. Zampedri
 71 "Glass-based nanocomposite materials and confined structures for photonics"
 Oral communication: First Vietnamese-Italian International Joint Workshop Photonics and Nanotechnology, Hanoi, Vietnam, November 28-29,2005.
- S. Sebastiani, S. Berneschi, M. Brenci, A. Chiasera, M. Ferrari, G. Nunzi Conti, S. Pelli, C. Tosello, G.C. Righini
 72 "UV imprinting of waveguides on active silica-germania sputtered thin film"
 Oral communication: SPIE Photonic West 2006, 21-26 January, San Jose, California USA.
- A. Chiappini, C. Armellini, S. N. B. Bhaktha, A. Chiasera, M. Ferrari, Y. Jestin, M. Mattarelli, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G. C. Righini, V. M. Sglavo
 73 "Fabrication and optical assessment of sol-gel-derived photonic bandgap dielectric structures"
Invited oral communication: SPIE Photonic Europe 2006, 3-7 April, Strasbourg, France.
- A. Chiasera, S. N. B. Bhaktha, M. Brenci, A. Chiappini, M. Ferrari, V. Foglietti, R. R. Gonçalves, Y. Jestin, A. Minotti, M. Montagna, E. Moser, S. Pelli, G. C. Righini, C. Tosello, K. C. Vishnubhatla
 74 "Er³⁺/Yb³⁺ activated silica-hafnia planar waveguides for photonics fabricated by rf-sputtering"
 Oral communication: SPIE Photonic Europe 2006, 3-7 April, Strasbourg, France.
- M. Ferrari, C. Armellini, S. Berneschi, M. Brenci, A. Chiappini, A. Chiasera, Y. Jestin, M. Mattarelli, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G. C. Righini, C. Tosello
 75 "Homogeneous and nanocomposite rare-earth-activated glasses for photonic devices"
Invited oral communication: SPIE Photonic Europe 2006, 3-7 April, Strasbourg, France.
- B. Boulard, O. Péron, A. Chiasera, M. Ferrari, Y. Jestin
 76 "Application of PVD technique to the fabrication of erbium doped ZrF₄-based glass ceramic for optical amplification"
 Poster communication: SPIE Photonic Europe 2006, 3-7 April, Strasbourg, France.

- 77 Y. Jestin, N. Afify, C. Armellini, S. Berneschi, S. N. B. Bhaktha, B. Boulard, A. Chiappini, A. Chiasera, G. Dalba, C. Duverger, M. Ferrari, C. E. Goyes Lopez, M. Mattarelli, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G. C. Righini, F. Rocca
 “Er³⁺ activated silica-hafnia glass-ceramics planar waveguides”
 Poster communication: SPIE Photonic Europe 2006, 3-7 April, Strasbourg, France.
- 78 L.M. Fortes, L.F. Santos, M. Clara Gonçalves, R.M. Almeida, M. Mattarelli, M. Montagna, A. Chiasera, M. Ferrari, A. Monteil, S. Chaussedent, and G.C. Righini
 “Enhanced Er³⁺ ion dispersion in tellurium oxychloride glasses”
 Oral communication at XV International Symposium on Non-Oxide and new Optical Glasses. (ISNOG - 2006). 10 - 14 April 2006, Bangalore, India.
- 79 C.Armellini, S.N.B. Bhaktha, S. Berneschi, M. Brenci, A. Chiappini, A. Chiasera, M. Ferrari, C.E.L. Goyes, Y. Jestin, M. Mattarelli, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini, C. Tosello, K.C. Vishunubhatla, L. Zampedri.
 “Glass-based Confined Structures and Nanocomposite Materials for Photonics”
Plenary Lecture (invited): 5th Biannual Conference OPTIQUE’06 at Rabat, Morocco from 14 to 15 April 2006.
- 80 C. Armellini, B. Boulard, M. Brenci, A. Chiappini, A. Chiasera, C. Duverger, P. Feron, M. Ferrari, R.R. Gonçalves, C. Goyes, M. Ivanda, Y. Jestin, M. Mattarelli, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, O. Peron, G.C. Righini, C. Tosello, K. Tran Ngoc, L. Zampedri
 “Optimizing Er³⁺- luminescent properties in photonic glasses: sensitizers, nano and micro-structures”
Invited oral communication: 29^o International Convention, MIPRO, Opatija (Abazia) 22-26 May 2006.
- 81 C.Armellini, S.N.B. Bhaktha, I. Cacciari, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini, C. Tosello.
 “Rare-earth-doped silica-based glasses for photonic applications.”
Invited lecture: Eighth International Workshop on Non-Crystalline Solids, Gijón, Spain, 20 - 23 June, 2006.
- 82 R.M. Almeida, A.C. Marques, A. Chiasera, A. Chiappini, M. Ferrari
 “Er³⁺/Yb³⁺-doped photonic crystal microcavities prepared by sol-gel”
 Oral communication: 6th symposium “SiO₂, advanced dielectrics and related devices”, Mondello (Palermo) Italy. 25-28 June 2006
- 83 Y. Jestin, C. Armellini, A. Chiappini, A. Chiasera, M. Ferrari, C. Goyes, M. Mattarelli, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini, G. Speranza
 “Erbium activated HfO₂ based glass-ceramics waveguides for photonics”
 Oral communication: 6th symposium “SiO₂, advanced dielectrics and related devices”, Mondello (Palermo) Italy. 25-28 June 2006

- 84 M.Mattarelli, M.Montagna, E. Moser, K.C. Vishnubhatla, C. Armellini, A.Chiasera, M.Ferrari, G.Speranza, M.Brenci, G. Nunzi Conti, G.C. Righini
 “Mechanisms of energy transfer in soda-lime and phosphate glasses co-activated with silver and erbium”
 Oral communication: 6th symposium “SiO₂, advanced dielectrics and related devices”, Mondello (Palermo) Italy. 25-28 June 2006
- 85 A. D’Orazio, M. De Sario, L. Mescia, V. Petruzzelli, F. Prudenzeno A. Chiasera, M. Ferrari, M. Montagna
 “Design and characterization of rare earth doped amplifier via genetic algorithm”
 Oral communication: 6th symposium “SiO₂, advanced dielectrics and related devices”, Mondello (Palermo) Italy. 25-28 June 2006
- 86 A. Chiappini, C. Armellini, A. Chiasera, M. Ferrari, Y. Jestin, M. Mattarelli, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini, M. Clara Gonçalves, Rui M. Almeida
 “Design of photonic structures by sol gel-derived silica nanospheres”
 Oral communication: 6th symposium “SiO₂, advanced dielectrics and related devices”, Mondello (Palermo) Italy. 25-28 June 2006
- 87 A.Monteil, M. El-Jouad, G. Alombert-Goget, S. Chaussedent, N. Gaumer, A. Chiasera, Y. Jestin, M. Ferrari
 “Relationship between structure and properties in rare-earth-doped hafnium and silicon oxides: modeling and spectroscopic measurements”
Invited lecture at International Conference on Physics of Optical Materials and Devices, ICOM 2006 31st August – 2nd September 2006, Herceg Novi, Montenegro.
- 88 Giancarlo C. Righini, Cristina Armellini, Andrea Chiappini, Alessandro Chiasera, Yoann Jestin, Maurizio Ferrari, Claire Arfuso Duverger, Patrice Féron, M. Brenci, G. Nunzi Conti, S. Pelli.
 “Er³⁺-activated sol-gel silica derived spherical microresonators”
 Oral communication at 8th ESG/ ICG Annual Meeting/ SGT Annual Meeting, Sunderland, UK 10th-14th September 2006.
- 89 Brigitte Boulard, Olivier Péron, Alessandro Chiasera, Maurizio Ferrari, Yoann Jestin
 “Erbium doped ZrF₄-based glass waveguides for optical amplification in the C band”
 Oral communication at ICPE 2006 International Conference on Engineering Physics 2006 including the 9th Vietnamese-German Seminar on Physics and Engineering, the 4th Vietnam-Korea International Joint Symposium on Advanced Materials Science and Their Processing, and the Second Vietnamese-Italian International Joint Workshop on Photonics and Nanotechnology. 9-13 October 2006, Hanoi. University of Technology Hanoi, Vietnam.

- K. Tran Ngoc, P.H. Huy, N. D. Chien, M. Ferrari, A. Chiasera, C. Armellini, E. Moser, M. Montagna, A. Chiappini, M. Brenci, G. Nunzi Conti, S. Pelli, G.C. Righini.
 “Silica microspheres coated by Er³⁺-activated silica-hafnia sol-gel layers”
 90 Oral communication at ICPE 2006 International Conference on Engineering Physics 2006 including the 9th Vietnamese-German Seminar on Physics and Engineering, the 4th Vietnam-Korea International Joint Symposium on Advanced Materials Science and Their Processing, and the Second Vietnamese-Italian International Joint Workshop on Photonics and Nanotechnology. 9-13 October 2006, Hanoi. University of Technology Hanoi, Vietnam.
- G.Speranza, M.Ferrari, L. Minati, A. Chiasera, G. Righini, M. Anderle.
 “Study of nano-structured photonic materials by XPS”
 91 Oral communication at ICPE 2006 International Conference on Engineering Physics 2006 including the 9th Vietnamese-German Seminar on Physics and Engineering, the 4th Vietnam-Korea International Joint Symposium on Advanced Materials Science and Their Processing, and the Second Vietnamese-Italian International Joint Workshop on Photonics and Nanotechnology. 9-13 October 2006, Hanoi. University of Technology Hanoi, Vietnam.
- C.Armellini, A. Chiappini, A. Chiasera, M. Ferrari, P.H. Huy, Y. Jestin, M. Mattarelli, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini, G. Speranza, C. Tosello, K. Tran Ngoc.
 “Er³⁺-activated confined structures in photonic glasses”
 92 **Plenary Lecture** at ICPE 2006 International Conference on Engineering Physics 2006 including the 9th Vietnamese-German Seminar on Physics and Engineering, the 4th Vietnam-Korea International Joint Symposium on Advanced Materials Science and Their Processing, and the Second Vietnamese-Italian International Joint Workshop on Photonics and Nanotechnology. 9-13 October 2006, Hanoi. University of Technology Hanoi, Vietnam.
- C.Goyes, M. Ferrari, C. Armellini, A. Chiasera, Y. Jestin, G.C. Righini, A. Casas, C. Meacock, and E. Solarte.
 “Effect of CO₂ laser irradiation on the performances of sol-gel-derived Er³⁺-activated SiO₂ - ZrO₂ and SiO₂ – HfO₂ planar waveguides”
 93 Oral communication at SPIE Photonics West 2007, LASE 2007 – Lasers and Applications in Science and Engineering, 20-25 January 2007 San Jose, California USA.
- Y.Jestin, C. Arfuso-Duverger, C. Armellini, B. Boulard, A. Chiappini, A. Chiasera, M. Ferrari, E. Moser, G. Nunzi Conti, S. Pelli, O. Peron, R. Retoux, and G.C. Righini.
 94 “Ceramization of erbium activated planar waveguides by bottom up technique”
 Oral communication at SPIE Photonics West 2007, OPTO 2007 - Integrated Optoelectronic Devices, 20-25 January 2007 San Jose, California USA.

- C. Armellini, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, M. Mattarelli, L. Minati, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini, G. Speranza, C. Tosello.
- 95 “Nanocomposite photonic glasses and confined structures optimizing Er³⁺-luminescent properties”
Invited lecture at SPIE Europe, Microtechnologies for the New Millennium 2007, 2–4 May 2007, Maspalomas, Gran Canaria, Spain.
- G. Speranza, L. Minati, A. Chiasera, M. Ferrari, G.C. Righini.
 96 “Metal nanocluster and sodalime glasses: an XPS characterization”
 Oral communication at SPIE Europe, Microtechnologies for the New Millennium 2007, 2–4 May 2007, Maspalomas, Gran Canaria, Spain.
- C. Goyes, M. Ferrari, C. Armellini, A. Chiasera, Y. Jestin, G.C. Righini, F. Fonthal, and E. Solarte
 97 “CO₂ laser annealing on erbium-activated glass-ceramic waveguides for photonics”
 Oral communication 2nd Workshop on Photoluminescence in Rare Earths: Photonic Materials and Devices (PRE’07) Trento, Italy, 31May - 1 June 2007
- M. Clara Gonçalves, Rui M. Almeida, A. Chiasera, A. Chiappini, and M. Ferrari
 98 “3-D rare earth-doped colloidal photonic crystals”
 Oral communication 2nd Workshop on Photoluminescence in Rare Earths: Photonic Materials and Devices (PRE’07) Trento, Italy, 31May - 1 June 2007
- Y.G. Boucher, A. Chiasera, M. Ferrari, and G. C. Righini
 99 “Extended transfer matrix modeling of an erbium-doped cavity with SiO₂/TiO₂ Bragg reflectors”
 Poster communication 2nd Workshop on Photoluminescence in Rare Earths: Photonic Materials and Devices (PRE’07) Trento, Italy, 31May - 1 June 2007
- G. Speranza, L. Minati, A. Chiasera, M. Ferrari, and G.C. Righini
 100 “The influence of the chemical state of silver on the enhancement of the Er³⁺ emission”
 Poster communication 2nd Workshop on Photoluminescence in Rare Earths: Photonic Materials and Devices (PRE’07) Trento, Italy, 31May - 1 June 2007
- C. Armellini, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, E. Moser, G. Nunzi Conti, S. Pelli, and G.C. Righini
 101 Synthesis and characterization of rare-earth-doped inverse silica opals and core-shell-like structures.
Invited oral communication 2nd Workshop on Photoluminescence in Rare Earths: Photonic Materials and Devices (PRE’07) Trento, Italy, 31May – 1 June 2007

- 102 C.Armellini, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini
 “Fabrication of Er³⁺ active silica direct and inverse opals with high quantum efficiency”
 Poster communication: CLEO-Europe IQEC 2007 – 18th International Congress on Photonics in Europe, 17-22 June, 2007, Munich, Germany.
- 103 C.Armellini, A. Chiappini, A. Chiasera, M. Ferrari, V. Foglietti, Y. Jestin, A. Minotti, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini, C. Tosello
 "Fabrication by rf-sputtering and diagnostics of Er³⁺/Yb³⁺ - activated silica–hafnia waveguides"
 Poster communication: CLEO-Europe IQEC 2007 - 18th International Congress on Photonics in Europe, 17-22 June, 2007, Munich, Germany.
- 104 C. Armellini, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, E. Moser, G. Nunzi Conti,
 S. Pelli, G.C. Righini, C. Tosello
 “Er³⁺ - activated nanocomposite photonic glasses and confined structures”
Invited oral communication: 3^o International Workshop Photonic and Electronic Materials, Donostia, 4-6 July 2007
- 105 G.C. Righini, S. Berneschi, A. Chiasera, M. Ferrari, G. Nunzi Conti
 “Glasses for integrated optics: recent advances and perspectives”
Invited oral communication ICG 2007 XXI International Congress on Glass Strasbourg-France July 1-6, 2007
- 106 A. Chiasera, A. Chiappini, M. Ferrari, Y. Jestin, E. Moser, S. Pelli, G.C. Righini, C. Tosello
 “Er³⁺ -activated dielectric microcavity fabricated by rf-sputtering.”
 Poster communication ICG 2007 XXI International Congress on Glass Strasbourg-France July 1-6, 2007
- 107 O.Peron, B. Boulard, C. Duverger, Y. Jestin, M. Ferrari, A. Chiasera
 “Recent developments in rare earth doped fluoride glass ceramics planar waveguides”
 Oral communication at ICG-2007, XXIst International Congress on Glass, Strasbourg, France, 1- 6 July 2007.
- 108 C.Armellini, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, P.H. Huy, M. Mattarelli, L. Minati, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini, G. Speranza, C. Tosello, K. Tran Ngoc.
 “Nanocomposite photonic glasses, waveguiding glass ceramics, and confined structures tailoring Er³⁺ spectroscopic properties”
Invited lecture: ICTON 2007, International Conference on Transparent Optical Networks, Roma, 1-5 July, 2007.

- C. Armellini, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, F. Prudenzeno, P. Feron, E. Moser, C. Tosello, B. Boulard, C. Arfuso Duverger, G. Speranza, L. Minati, G. Nunzi Conti, S. Pelli, G.C. Righini
109 “Tailoring Er³⁺ Spectroscopic Properties by Nanocomposite Photonic Glasses and Confined Structures”
Invited lecture: ICTON-MW 2007. International Conference on Transparent Optical Networks (ICTON) Mediterranean Winter 2007, Sousse, December 6-8, 2007, Tunisia.
- K.C. Vishnubhatla, S. Venugopal Rao, R. Sai Santosh Kumar, S.N.B. Bhaktha, A. Chiappini, A. Chiasera, J. Laureyns, M. Ferrari, M. Mattarelli, M. Montagna, R. Osellame, R. Ramponi, G.C. Righini, S. Turrell, and D. Narayana Rao.
110 “Micro-Raman mapping of micro-gratings in ‘BACCARAT’ glass directly written using femtosecond laser”
Oral communication at SPIE Photonics West 2008, LASE 2008 – Lasers and Applications in Science and Engineering, 19-24 January 2008 San Jose, California USA.
- Y. Jestin, C. Armellini, A. Chiappini, A. Chiasera, Y. Dumeige, M. Ferrari, P. Féron, L. Ghisa, G. Nunzi Conti, S. Trebaol, and G.C. Righini.
111 “Photonic properties of erbium activated coated microspheres.”
Oral communication at SPIE Photonics West 2008, OPTO 2008 – Optical components and materials, 21-23 January 2008 San Jose, California USA.
- A. Chiappini, C. Armellini, A. Chiasera, M. Ferrari, Y. Jestin, E. Moser, G. Nunzi Conti, S. Pelli, R. Retoux, G.C. Righini, G. Speranza.
112 “Preparation and characterization of ZnO particles embedded in organic-inorganic planar waveguide by sol-gel route.”
Oral communication, SPIE Photonics Europe – Silicon Photonics and Photonic Integrated Circuits – Strasbourg, France, 7-10 April 2008.
- G. Speranza, L. Minati, A. Chiasera, M. Ferrari, G.C. Righini.
113 “Quantum confinement and matrix effects in silver exchanged sodalime glasses”
Oral communication, SPIE Photonics Europe – Silicon Photonics and Photonic Integrated Circuits – Strasbourg, France, 7-10 April 2008.
- F. Prudenzeno, L. Allegretti, M. De Sario, L. Mescia, T. Palmisano, M. Ferrari, A. Chiasera, Y. Jestin, B. Boulard, O. Péron.
114 “Design of high gain Er³⁺-Yb³⁺-Ce³⁺ co-doped ZELA waveguide amplifier”.
Oral communication, SPIE Photonics Europe – Silicon Photonics and Photonic Integrated Circuits – Strasbourg, France, 7-10 April 2008.

- 115 C. Armellini, S. Berneschi, S.N.B. Bhaktha, Chiappini, A. Chiasera, P. Féron, M. Ferrari, R.R. Gonçalves, Y. Jestin, M. Mattarelli, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, R. Retoux, F. Rocca, G.C. Righini, G. Speranza, C. Tosello.
 “Er³⁺-activated photonic structures fabricated by sol-gel and rf sputtering.”
Invited lecture: SEDWAL Workshop 2008 – Sensitized Er doped waveguide amplifier/laser, 13-15 April 2008, Levico Terme – Trento, Italy.
- 116 G.C. Righini, S. Berneschi, G. Nunzi Conti, S. Pelli, E. Moser, R. Retoux, P. Féron, R.R. Gonçalves, G. Speranza, Y. Jestin, M. Ferrari, A. Chiasera, A. Chiappini, and C. Armellini.
 “Er³⁺-doped silica-hafnia films for optical waveguides and spherical resonators”
Invited lecture: XVIth International Symposium on Non-Oxide Glasses and New Optical Glasses, Le Corum, Montpellier, France, April 20 - 25, 2008.
- 117 M. Ferrari, C. Armellini, S. Berneschi, S.N.B. Bhaktha, Chiappini, A. Chiasera, Y. Jestin, M. Mattarelli, L. Minati, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini, G. Speranza, C. Tosello, K. Vishnubhatla
 Assessment of Spectroscopic Properties of Erbium Ions in a Soda-Lime Silicate Glass after Silver–Sodium Exchange.
 Oral communication at COST MP07 Kick-off Workshop “Towards Functional Sub-Wavelength Photonic Structures” Warsaw University, Poland , April 28-29-2008.
- 118 M. Ferrari, C. Armellini, S. Berneschi, S.N.B. Bhaktha, A. Chiappini, A. Chiasera, P. Féron, Y. Jestin, E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini, G. Speranza, C. Tosello
 Erbium doped silica based microcavities and microspheres
 Oral communication at COST MP07 Kick-off Workshop “Towards Functional Sub-Wavelength Photonic Structures” Warsaw University, Poland , April 28-29-2008.
- 119 G.C. Righini, S. Berneschi, M. Brenci, S. Pelli, G. Nunzi Conti, A. Chiappini, A. Chiasera, M. Ferrari
 Advances in Glasses and Fabrication Processes for Integrated Optical Amplifiers
Invited communication at ACerS 2008 Glass & Optical Materials Division Meeting, May 18-21, 2008 Tucson, Arizona, USA.
- 120 M. Ferrari, C. Armellini, A. Chiappini, A. Chiasera, Y. Jestin, E. Moser, C. Tosello, M. Montagna, G.C. Righini, S. Berneschi, M. Brenci, S. Pelli, G. Nunzi Conti, S. Soria
 Er³⁺-Activated Waveguiding Glass Ceramics, Microcavities and Nano-Microsphere: Fabrication and Spectroscopic Assessment
 Oral communication at ACerS 2008 Glass & Optical Materials Division Meeting, May 18-21, 2008 Tucson, Arizona, USA.

- C. Armellini, P. Biljanovic, S. Berneschi, S.N.B. Bhaktha, B. Boulard, A. Chiappini, A. Chiasera, C. Arfuso Duverger, P. Feron, M. Ferrari, P. T. Huy, M. Ivanda, Y. Jestin
- 121 E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini, G. Speranza
 “Optical properties and fabrication of glass-based erbium activated micro-nano photonic structures”
Invited lecture: 31st International Convention MIPRO 2008, Microelectronics, Electronics, and Electronic Technology, May 26-30, 2008, Opatija, Croatia.
- G. Nunzi Conti, S. Soria, S. Berneschi, M. Brenci, S. Pelli, G.C. Righini, C. Armellini, A. Chiappini, A. Chiasera, Y. Jestin, M. Ferrari, L. Ghisa, P. Féron
- 122 “Glass Microspherical Lasers”
Invited lecture: 3rd International Conference ”Smart Materials, Structures and Systems”, Acireale, Sicily, Italy, 8 -13 June, 2008.
- L. Minati, G. Speranza, V. Micheli, C. Armellini, A. Chiappini, A. Chiasera, Y. Jestin, M. Ferrari, R. Retoux, G.C. Righini
- 123 “Structural and Spectroscopic Assessment of Er³⁺- activated SiO₂-HfO₂ Glass Ceramics Planar Waveguides”
 Oral communication: 3rd International Conference ”Smart Materials, Structures and Systems”, Acireale, Sicily, Italy, 8 -13 June, 2008.
- C. Armellini, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, E. Moser, R. Retoux, G. Speranza, L. Minati, G. Nunzi Conti, S. Berneschi, I. Cacciari, S. Pelli, G.C. Righini.
- 124 “Fabrication and Characterization of Silica Opals”
Invited lecture: 3rd International Conference ”Smart Materials, Structures and Systems”, Acireale, Sicily, Italy, 8 -13 June, 2008.
- C. Armellini, S.N.B. Bhaktha, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, P. Feron, E. Moser, C. Duverger Arfuso, B. Boulard, G. Speranza, L. Minati, G. Nunzi Conti, S. Pelli, G.C. Righini, P.T. Huy.
- 125 “Fabrication and Spectroscopic Properties of Glass-Based Erbium Activated Micro-Nano Photonic Structures”
Invited Lecture: 10th Anniversary International Conference on Transparent Optical Networks ICTON 2008 June 22-26, 2008 - Athens, Greece
- A. Chiasera, C. Armellini, S.N.B. Bhaktha, A. Chiappini, Y. Jestin, M. Ferrari, E. Moser, A. Coppa, V. Foglietti, P.T. Huy, K. Tran Ngoc, G. Nunzi Conti, S. Pelli, G.C. Righini, G. Speranza.
- 126 “Er³⁺/Yb³⁺ - activated silica–hafnia planar waveguides for photonics fabricated by rf-sputtering”
 Oral communication: The 7th symposium "SiO₂ , advanced dielectrics and related devices", June 30th - July 2nd, 2008 Saint-Etienne, France

- 127 A. Chiappini, C. Armellini, A. Chiasera, M. Ferrari, R. Guider, Y. Jestin, L. Minati, E. Moser, G. Nunzi Conti, S. Pelli, R. Retoux, G.C. Righini, G. Speranza
 “Preparation and characterization of ZnO particles embedded in organic-inorganic planar waveguide by sol-gel route”
 Oral communication: The 7th symposium "SiO₂ , advanced dielectrics and related devices", June 30th - July 2nd, 2008 Saint-Etienne, France
- 128 C. Armellini, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, R.M. Almeida, L. Fortes, M.C. Gonçalves, E. Moser, R. Guider, R. Retoux, G. Nunzi Conti, S. Pelli, G.C. Righini.
 “An alternative method to obtain direct opal photonic crystals structures”
 Poster communication: The 7th symposium "SiO₂ , advanced dielectrics and related devices", June 30th - July 2nd, 2008 Saint-Etienne, France
- 129 G. Speranza, L. Minati, A. Chiasera, Y. Jestin, M. Ferrari, G.C. Righini
 “Structural investigation of photonic materials at the nano-level using XPS”
 Poster communication: The 7th symposium "SiO₂ , advanced dielectrics and related devices", June 30th - July 2nd, 2008 Saint-Etienne, France
- 130 Y.G. Boucher, A. Chiasera, M. Ferrari, G. C. Righini
 “Photoluminescence spectra of an optically pumped Erbium-doped micro-cavity with SiO₂/TiO₂ distributed Bragg reflectors”
 Poster communication: 15th International Conference on Luminescence and Optical Spectroscopy of Condensed Matter (ICL’08), Lyon-France, 7-11 July, 2008
- 131 S. Torrenço, L. Minati, M. Filippi, A. Miotello, M. Ferrari, A. Chiasera, E. Vittone, A. Pasquarelli, M. Dipalo, E. Kohn, G. Speranza
 “XPS and UPS investigation of the diamond surface oxidation by UV irradiation”
 Poster communication: 19th European Conference on Diamond, Diamond-Like Materials, Carbon Nanotubes & Nitrides, 7 – 11 September 2008, Meliá Sitges Hotel, Sitges , Spain.
- 132 S. Soria, G. Nunzi Conti, S. Berneschi, M. Brenci, F. Cosi, S. Pelli, A. Chiasera, M. Ferrari, L. Ghisa, Y. Dumeige, P. Féron, and G. C. Righini
 “Microspherical lasers in oxide glasses”
 Oral communication at European Optical Society Annual Meeting 2008, 29th September 2008 - 2nd October 2008, Paris, France.
- 133 Y.G. Boucher, Y. Dumeige, P. Féron, A. Chiasera, M. Ferrari, G. Nunzi Conti, G. C. Righini
 “All-analytical modelling of confined dielectric structures: active micro-cavities and micro-resonators”
Invited lecture at European Optical Society Annual Meeting 2008, 29th September 2008 - 2nd October 2008, Paris, France.

- A. Chiappini, C. Armellini, A. Chiasera, M. Ferrari, Y. Jestin, E. Moser, G. Speranza, G. Nunzi Conti, G. C. Righini
- 134 “Self-assembly approach to metamaterials and plasmonics”
Oral communication at COST MP07 Meeting “Towards Functional Sub-Wavelength Photonic Structures” Bratislava, Slovak Republic, October 26-28-2008
- G. Alombert-Goget, C. Armellini, S.N.B. Bhaktha, B. Boulard, A. Chiappini, A. Chiasera, C. Duverger-Arfulso, P. Féron, M. Ferrari, R.R. Gonçalves, P.T. Huy, Y. Jestin, T.N. Khiem, L. Minati, A. Monteil, E. Moser, G. Nunzi Conti, R. Osellame, S. Pelli, A. Quandt, R. Ramponi, D. N. Rao, G.C. Righini, G. Speranza, K.C. Vishnubhatla
- 135 “Erbium-activated silica-hafnia: a reliable photonic system”
Invited lecture: 2nd ICTON-MW’08 Conference, Workshop on Advanced Materials and Photonics Applications, 11-13 December 2008, Marrakesh, Morocco.
- S.N.B. Bhaktha, C. Armellini, F. Beclin, M. Bouazaoui, B. Capoen, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, C. Kinowski, E. Moser, D.N. Rao, G.C. Righini, S. Turrell
- 136 “Fabrication and spectroscopic assessment of sol-gel derived SiO₂-SnO₂ glass-ceramics planar waveguides”
Oral communication: PHOTONICS-2008: International Conference on Fiber Optics and Photonics, December 13-17, 2008, IIT Delhi, India.
- A. Chiappini, C. Armellini, A. Chiasera, M. Ferrari, Y. Jestin, E. Moser, G. Speranza, G. Nunzi Conti, G.C. Righini
- 137 “Self-assembly approach to metamaterials and plasmonics”
Poster communication: NANOMETA 2009. The 2nd European Topical Meeting on Nanophotonics and Metamaterials, 5-8 January 2009, Seefeld ski resort, Tirol, Austria
- S. Torrenzo, A. Miotello, G. Speranza, L. Minati, M. Filippi, R. Bartali, M. Ferrari, A. Chiasera, A. Pasquarelli, M. Dipalo, E. Kohn
- 138 “One-Step Direct Amination of H-Nanocrystalline Diamond”
Poster communication at 1st International Winter School on Nano and Biotechnology, Sterzing, Bozen, Italy January 26 - 30, 2009.
- S.N.B. Bhaktha, C. Armellini, F. Beclin, M. Bouazaoui, B. Capoen, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, C. Kinowski, E. Moser, D.N. Rao, G.C. Righini, S. Turrell
- 139 “SiO₂-SnO₂ glass-ceramics planar waveguides activated by rare earth ions”
Oral presentation at Photonics West 2009, Conference OE102 Optical Components and Materials VI, 24 - 29 January 2009, San Jose Convention Center, San Jose, California, USA.

- S. Berneschi, S.N.B. Bhaktha, M. Bouazaoui, B. Capoen, A. Chiasera, M. Ferrari, G. Nunzi Conti, S. Pelli, G.C. Righini, S. Turrell
- 140 “Tin-silicate glass-ceramics: a promising material for smart photonic circuits”
Oral Communication at: Smart Systems Integration 2009, 10-11 March 2009, Brussels, Belgium.
- D. Zonta, A. Chiappini, A. Chiasera, M. Ferrari, M. Pozzi, L. Battisti
- 141 “Photonic crystals for monitoring fatigue phenomena in steel structures”
Oral communication at SPIE Smart Structures, 8 - 12 March 2009, Town and Country Resort and Convention Ctr., San Diego, California, USA.
- G. Alombert-Goget, C. Armellini, S. Berneschi, S.N.B. Bhaktha, B. Boulard, M. Brenci, A. Chiappini, A. Chiasera, C. Duverger-Arfulso, P. Féron, M. Ferrari, R.R. Gonçalves, Y. Jestin, L. Minati, E. Moser, G. Nunzi Conti, S. Pelli, D.N. Rao, R. Retoux, G.C. Righini, G. Speranza
- 142 “Er³⁺ - activated photonic structures fabricated by sol-gel and rf-sputtering techniques”
Invited lecture SPIE Europe Microtechnologies for the New Millennium Conference 7366 Photonic Materials, Devices, and Applications, 4-6 May 2009. Dresden, Germany.
- Armellini, C.; Bhaktha, S.N.B.; Beclin, F.; Berneschi, S.; Biljanovi?, Petar; Bouazaoui, M.; Boulard, B.; Capoen, B.; Chiappini, A.; Chiasera, A.; Duverger-Arfulso, C.; Feron, P.; Ferrari, M.; Kinowski, C.; Ivanda, Mile; Jestin, Y.; Moser, E.; Nunzi Conti, G.; Pelli, S.; Righini, G.C.; Robbe, O.; Speranza, G.; Turrell, S.
- 143 “Rare-earth activated nano-structures fabricated by sol-gel route”
Invited Communication: 32nd International Convention MIPRO 2009, Opatija, Hrvatska, 25-29/05/2009
- Guillaume Alombert-Goget, Cristina Armellini, Simone Berneschi, Shivakiran N. Bhaktha, Brigitte Boulard, Massimo Brenci, Ilaria Cacciari, Andrea Chiappini, Alessandro Chiasera, Claire Duverger-Arfulso, Maurizio Ferrari, Rogeria Rocha Gonçalves, Yoann Jestin, Luca Minati, Enrico Moser, Gualtiero Nunzi Conti, Stefano Pelli, Richard Retoux, Giancarlo C. Righini, Giorgio Speranza.
- 144 “Sol-gel and rf-sputtering techniques for glass photonics”
Oral Communication at: 8th Pacific RIM Conference on Ceramic and Glass Technology, Symposium 25: Glasses for Optoelectronic and Optical Applications, 31 May – 5 June 2009 Vancouver, Canada.

- Cristina Armellini; Simone Berneschi, Shivakiran N.B. Bhaktha, Yann Boucher, Brigitte Boulard, Andrea Chiappini, Alessandro Chiasera, Claire Arfuso-Duverger, Patrice Féron, Maurizio Ferrari, Yoann Jestin, Luca Minati, Enrico Moser, Gualtiero Nunzi Conti, Stefano Pelli, Alexander Quandt, D. Narayana Rao, Giancarlo C. Righini, Silvia Soria, Giorgio Speranza.
- 145 “Opals and core-shell systems: a possible route to metamaterials and plasmonics”
Oral Communication at: 8th Pacific RIM Conference on Ceramic and Glass Technology, Symposium 25: Glasses for Optoelectronic and Optical Applications, 31 May – 5 June 2009 Vancouver, Canada.
- A.Chiasera, C. Armellini, F. Beclin, S. Berneschi, S.N.B. Bhaktha , M. Bouazaoui, B. Capoen, A. Chiappini, M. Ferrari, Y. Jestin, C. Kinowski, E. Moser, D.N. Rao, G.C. Righini, G. Speranza, S. Turrell
- 146 “Sol-Gel derived SiO₂-SnO₂ glass-ceramics planar waveguides”
Oral communication: Joint Meeting DGaO-SIOF (110th Annual Meeting of the DGaO) June 2nd -5th , 2009 Brescia, Italy.
- A.Chiappini, C. Armellini, A. Chiasera, M Ferrari, Y. Jestin, E. Moser, R. Retoux, G. Speranza, L. Minati, S. Berneschi, G. Nunzi Conti , S. Soria , S. Pelli, G.C. Righini
- 147 “Fabrication and characterization of opals and core-shell silica spheres”
Oral communication: Joint Meeting DGaO-SIOF (110th Annual Meeting of the DGaO) June 2nd -5th , 2009 Brescia, Italy.
- L. Minati, G. Speranza, S. Torrenzo , Y. Jestin, C. Armellini, A. Chiappini, A. Chiasera, M. Ferrari, S. Pelli, G.C. Righini
- 148 “X-ray photoelectron spectroscopy of Er³⁺-activated SiO₂-HfO₂ glass-ceramic planar waveguides”
Poster communication: Joint Meeting DGaO-SIOF (110th Annual Meeting of the DGaO) June 2nd -5th , 2009 Brescia, Italy.
- G.Alombert-Goget, C. Armellini, S. Berneschi, S.N.B. Bhaktha, B. Boulard, A. Chiappini, A. Chiasera, C. Duverger-Arfuso, P. Féron, M. Ferrari, Y. Jestin, L. Minati, A. Monteil, E. Moser, G. Nunzi Conti, S. Pelli, F. Prudenzeno, G.C. Righini, G. Speranza
- 149 “Glass-Based Erbium Activated Micro-Nano Photonic Structures”
Invited lecture ICTON 2009, 11th International Conference on Transparent Optical Networks and First Annual Conference of COST Action MP0702: Towards Functional Sub-Wavelength Photonic Structures, June 28 - July 2, 2009 - Island of São Miguel, Azores, Portugal.
- Y.Jestin, S. Berneschi, G. Nunzi Conti, A. Chiappini, M. Ferrari, G. C. Righini
- 150 “Micro Resonator Stabilization by Thin Film Coating”
Oral communication: ICTON 2009, 11th International Conference on Transparent Optical Networks and First Annual Conference of COST Action MP0702: Towards Functional Sub-Wavelength Photonic Structures, June 28 - July 2, 2009 - Island of São Miguel, Azores, Portugal.

- A. Chiappini, C. Armellini, I. Cacciari, A. Chiasera, M. Ferrari, E. Giorgetti, E. Moser, G. Speranza, I. Timtcheva, G.C. Righini
- 151 “Optical effects in artificial opals infiltrated with gold nanoparticles”
Poster communication at Summer School on Plasmonics COST Action MP0702, 13-17 September 2009, Porquerolles Island, Côte d’Azur, France.
- G. Alombert-Goget, C. Armellini, S. Berneschi, A. Chiasera, F. Cosi, G. Nunzi Conti, P. Féron, M. Ferrari, L. Lunelli, E. Moser, C. Pederzoli, G. C. Righini.
- 152 “Glass-ceramics coating of silica microspheres”
Invited lecture, plenary session 3rd ICTON - International Conference on Transparent Optical Networks, Mediterranean Winter - 2009, December 10-12th, 2009, Angers, France .
- G. Alombert-Goget, C. Armellini, S. Berneschi, B. Boulard, A. Chiappini, A. Chiasera, C. Duverger-Arfulso, P. Féron, M. Ferrari, S. Guddala, E. Moser, S. Pelli, D.N. Rao, G.C. Righini, G. Speranza.
- 153 “Fabrication, Assessment, and Application of Confined Structures in Photonic Glasses”
Oral communication 3rd ICTON - International Conference on Transparent Optical Networks, Mediterranean Winter - 2009, December 10-12th, 2009, Angers, France
- S. Berneschi, S.N.B. Bhaktha, A. Chiappini, A. Chiasera, M. Ferrari, C. Kinowski, S. Turrell, C. Trono, M. Brenci, I. Cacciari, G. Nunzi Conti, S. Pelli, G. C. Righini
- 154 “Highly photorefractive Eu³⁺ activated sol-gel SiO₂ – SnO₂ thin film waveguides”
Oral communication, SPIE Photonic West Conference 7604 Integrated Optics: Devices, Materials, and Technologies XIV, 23 - 28 January 2010, The Moscone Center, San Francisco, California United States
- B.N. Shivakiran Bhaktha, Simone Berneschi, Gualtiero Nunzi Conti, Giancarlo C. Righini, Andrea Chiappini, Alessandro Chiasera, Maurizio Ferrari, Sylvia Turrell
- 155 “Spatially localized UV-induced crystallization of SnO₂ in photorefractive SiO₂-SnO₂ thin film”.
Oral communication, SPIE Photonics Europe Conference 7719 Silicon Photonics and Photonic Integrated Circuits, 12 - 16 April 2010, The Square Conference Ctr. Brussels Belgium.
- G. Alombert Goget, C. Armellini, A. Chiappini, A. Chiasera, M. Ferrari, S. Berneschi, M. Brenci, S. Pelli, G.C. Righini, M. Bregoli, A. Maglione, G. Pucker, G. Speranza.
- 156 “Frequency converter layers based on terbium and ytterbium activated HfO₂ glass-ceramics”
Oral communication, SPIE Photonics Europe Conference 7725 Photonics for Solar Energy Systems, 12 - 16 April 2010, The Square Conference Ctr. Brussels Belgium

- A. Chiasera, M. Ferrari, B. Boulard, C. Duverger Arfuso, S.N.B. Bhaktha, S. Pelli, G.C. Righini, G. Speranza, S. Turrell
- 157 "Glass ceramic planar waveguides"
Invited oral communication IV International Workshop on Photonic and Electronic Materials; Donostia (San Sebastian, Spain), July 5-7, 2010
- S. Berneschi, G. Alombert-Goget, C. Armellini, B. N. S. Bhaktha, M. Brenchi, A. Chiappini, A. Chiasera, M. Ferrari, S. Guddala, E. Moser, G. Nunzi Conti, S. Pelli, G. C. Righini
- 158 "Rare-earth-doped silicate glass-ceramic thin films for integrated optical devices"
 Oral communication CIMTEC 2010, 12th International Ceramics Congress, International Conference "Disclosing Materials at Nanoscale", Montecatini, June 6-11, 2010, Italy
- S. Torrenzo, A. Miotello, G. Speranza, L. Minati, I. Bernagozzi, M. Ferrari, A. Chiasera, M. Dipalo, E. Kohn
- 159 "XPS study of in situ one-step amination of nanocrystalline diamond films"
 Advances in Science and Technology 71 (2010) pp. 45-49.
 Oral communication CIMTEC 2010, 12th International Ceramics Congress, International Conference "Disclosing Materials at Nanoscale", Montecatini, June 6-11, 2010, Italy
- N. Iznie Razaki, U. Sarah Jais, S. N. B. Bhaktha, A. Chiasera, M. Ferrari, M. Kamil Abd-Rahman
- 160 "Nanocrystal in Er³⁺-doped SiO₂-ZrO₂ planar waveguide with Yb³⁺ sensitizer"
 Oral Communication: Progress of Physics Research in Malaysia, PERFIK2009; Malacca; 7 December 2009 through 9 December 2009
- Z. Tijanić, D. Ristić, M. Ivanda, I. Bogdanović-Raković, M. Marciuš, M. Ristić, O. Gamulin, S. Musić, K. Furić, A. Chiasera, M. Ferrari, G.C. Righini
- 161 "Low temperature deposition of SiNx thin films by the LPCVD method"
 Oral communication: 34th International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2011; Opatija; 23 May 2011 through 27 May 2011; Category number CFP1139K-CDR; Code 86227
- A.G. Goget, C.A. Duverger, C. Armellini, S. Berneschi, P. Biljanovic, B. Boulard, A. Carpentiero, A. Chiappini, A. Chiasera, P. Feron, M. Ferrari, M. Ivanda, M. Mazzola, L. Minati, E. Moser, G.N. Conti, S. Pelli, D. Ristic, G.C. Righini, G. Speranza, S. Varas
- 162 "Rare earth-activated glass ceramics: A cutting-edge photonic system"
Invited Oral communication: 34th International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2011; Opatija; 23 May 2011 through 27 May 2011; Category number CFP1139K-CDR;

- D. Ristić, M. Ivanda, K. Furić, A. Chiasera, E. Moser, M. Ferrari
 “Thermal decomposition of silicon-rich oxides deposited by the LPCVD method”
 163 **Invited Oral communication:** 34th International Convention on Information and
 Communication Technology, Electronics and Microelectronics, MIPRO 2011;
 Opatija; 23 May 2011 through 27 May 2011; Category number CFP1139K-CDR;
- D. Ristic, M. Ivanda, M. Marcius, V. Holy, Z. Siketic, I. Bogdanovic-Radovic, O.
 Gamulin, K. Furic, M. Ristic, S. Music, M. Buljan, M. Ferrari, A. Chiasera, A.
 Chiappini and G. C. Righini
 164 “Characterisation of thin LPCVD silicon-rich oxide films”
 Oral Communication: SPIE Microtechnologies; Integrated Photonics: Materials,
 Devices, and Applications; Conference 8069; Prague; 18 April 2011 through 20
 April 2011
- B. Han, E. Rigo, R. Guider, S. Larcheri, G. Nunzi Conti, M. R. Vanacharla, A
 Chiasera, M. Ferrari, L. Pavesi, G. Pucker, G. C. Righini M. Ghulinyan
 “Development and optical characterization of vertical tapers in SiON waveguides
 using gray-scale lithography”
 165 Oral Communication: SPIE Microtechnologies; Integrated Photonics: Materials,
 Devices, and Applications; Conference 8069; Prague; 18 April 2011 through 20
 April 2011
- G. Alombert Goget, D. Ristic, A. Chiasera, S. Varas, M. Ferrari, G. C. Righini, B.
 Dieudonné, B. Boulard
 “Down-converter based on rare earth doped fluoride glass to improve Si-based solar
 cell efficiency”
 166 Oral Communication: SPIE Microtechnologies; Integrated Photonics: Materials,
 Devices, and Applications; Conference 8069; Prague; 18 April 2011 through 20
 April 2011
- Radoslaw Belka, Małgorzata Suchanska, Elzbieta Czerwosz, Alessandro Chiasera,
 Maurizio Ferrari
 167 “The optical study of nanoporous C-Pd thin films”
 Poster communication: SPIE Optics+Optoelectronics, Conference 8070,
 Metamaterials VI; Prague; 20 April 2011 through 21 April 2011
- G. Speranza, S. Torrenzo, L. Minati, L.G. Quagliano, M. Ortolani, A. Di Gaspare, D.
 Steimueller Nethl, A. Chiasera, M. Ferrari
 168 “Optical properties of nanocrystalline diamond in terahertz region”
 Poster communication: 22nd European Conference on Diamond, Diamond-Like
 Materials, Carbon Nanotubes and Nitrides – DIAMOND 2011; September 4-8;
 Garmisch, Germany.

- Davor Ristic, Andrea Chiappini, Alessandro Chiasera, Cristina Armellini, Alessandro Carpentiero, Maurizio Mazzola, Enrico Moser, Stefano Varas, Simone Berneschi, Gualtiero Nunzi Conti, Stefano Pelli, Silvia Soria, Giorgio Speranza, Lorenzo Lunelli, Cecilia Pederzoli, Francesco Prudenzano, Patrice Feron, Mile Ivanda, Gilles Cibiel, Giancarlo C. Righini, Maurizio Ferrari
 169 "Spherical resonators coated by glass and glass-ceramic films"
Invited communication: Spie Photonic West 2012, Laser Resonators, Microresonators, and Beam Control XIV, The Moscone Center, San Francisco, California, USA
- I. Scarpelli, S. Berneschi, R. Calzolari, A. Chiasera, M. Ferrari, G. Nunzi Conti, S. Pelli, G.C. Righini, C. Trono
 170 "UV-imprinted active waveguides in silica-germania RF-sputtered thin films"
 Poster Communication: MINAP 2012 "Micro- and nano-photonics materials and devices "- Final Conference of the MP0702 COST Action, Trento, Italy, 16-18/01/2012
- D. Ristic, A. Chiasera, E. Moser, P. Féron, G. Cibiel, M. Ivanda, G.C. Righini, M. Ferrari
 171 "Whispering gallery modes in coated silica microspheres"
 Oral Communication: SPIE Europe 2012 Conference 8431 Silicon Photonics and Photonic Integrated Circuits, Brussels, Belgium, 16-19/04/2012
- T.T. Van Tran, C. Kinowski, O. Cristini, B. Capoen, A. Chiasera, D. Ristic, M. Ferrari, S. Turrell
 172 "Erbium-activated silica-tin oxide glass ceramics for photonic integrated circuits fabrication, characterisation and assessment"
 Oral Communication: SPIE Europe 2012 Conference 8431 Silicon Photonics and Photonic Integrated Circuits, Brussels, Belgium, 16-19/04/2012
- A. Chiasera, S. Valligatlaa, S. Varas, N. Bazzanella, D. Narayana Rao, G.C. Righini, M. Ferrari
 173 "High quality factor dielectric multilayer structures fabricated by rf-sputtering"
 Oral Communication: SPIE Europe 2012 Conference 8431 Silicon Photonics and Photonic Integrated Circuits, Brussels, Belgium, 16-19/04/2012
- D. Ristic, L. Lunelli, A. Chiasera, P. Feron, G. Cibiel, M. Ivanda, G.C. Righini, M. Ferrari
 174 "Erbium doped silica microspheres for lasing applications"
Invited Communication: MIPRO 2012, Opatija, Croatia, 21-25/05/2012
- Andrea Chiappini, Anna Lukowiak, Cristina Armellini, Davor Ristic, Alessandro Chiasera, Inas K. Battisha, Claire Duverger Arfuso, Brigitte Boulard, Giancarlo C. Righini, Maurizio Ferrari
 175 "Rare earth-activated nano-composites glass systems for photonics"
Invited Communication: ICG 2013 23ed International Congress on Glasses, Praga, 1-5 luglio 2013

- 176 A. Lukowiak, A. Bednarkiewicz, R.J. Wiglusz, W. Strek, L. Kepinski, L. Krajczyk, D. Ristic, A. Chiasera, M. Ferrari
 “Eu 3+ / Yb 3+ - activated nanocrystals of lanthanide phosphates”
 Oral Communication: Mipro 2013, 36^o nternational convention on information and communication technology, electronics and microelectronics, Opatija-Croatia, 20-24 Maggio 2013.
- 177 Davor Ristic, Andrea Chiappini, Alessandro Chiasera, Iustyna Vasilchenko, Cristina Armellini, Anna Lukowiak, Alessandro Carpentiero, Maurizio Mazzola, Stefano Varas, Gualtiero Nunzi Conti, Stefano Pelli, Giorgio Speranza, Mile Ivanda, Claire Duverger Arfuso, Khiem Tran Ngoc, Brigitte Boulard, Giancarlo C. Righini, Maurizio Ferrari
 “Glass-Based Sub-Wavelength Photonic Structures”
Invited Communication: 15th International Conference on Transparent Optical Networks (ICTON 2013), Cartagena, Spain, June 23-27, 2013
- 178 D. Ristic, Thi Thanh Van Tran, B. Dieudonné, C. Armellini, S. Berneschi, A. Chiappini, A. Chiasera, S. Varas, A. Carpentiero, M. Mazzola, G. Nunzi Conti, S. Pelli, G. Speranza, P. Feron, C. Duverger Arfuso, G. Cibiel, S. Turrell, K. Tran Ngoc, B. Boulard, G.C. Righini, M. Ferrari
 “Tailored spectroscopic and optical properties in rare earth-activated glass-ceramics planar waveguides”
Invited communication: SPIE Photonic West 2013, "Optical Components and Materials X" SPIE OPTO, San Francisco, California, USA, 2 -7 February 2013.
- 179 A. Chiasera, C. Macchi, S. Mariazzi, S. Valligatla, S. Varas, M. Mazzola, N. Bazzanella, L. Lunelli, C. Pederzolli, D.N. Rao, G.C. Righini, A. Somoza, R. Brusa, M. Ferrari
 "GeO₂ glass ceramic planar waveguides fabricated by RF-sputtering"
 Oral Communication: SPIE 8982 (2014) pp. 89820D-1/12. Optical Components and Materials XI, 89820D, doi: 10.1117/12.2042099.
- 180 A. Łukowiak, I. Vasilchenko, S. Normani, A. Chiappini, A. Chiasera, C. Armellini, C. Arfuso Duverger, B. Boulard, R.J. Wiglusz, S. Pelli, I.K. Battisha, G.C. Righini, M. Marciniak, M. Ferrari
 "Glass-ceramics for photonics: advances and perspectives"
Invited communication: ICTON 2014, 16th International Conference on Transparent Optical Networks, Graz, Austria, July 6-10, pp. 1-4,
- 181 V. Prusakova, C. Armellini, A. Carpentiero, A. Chiappini, C. Collini, S. Dirè, M. Ferrari, L. Lorenzelli, M. Nardello, S. Normani, A. Vaccari, A. Chiasera
 “Morphologic, structural, and optical characterization of sol-gel derived TiO₂ thin films for memristive devices”
 Poster communication EMRS 2014 Spring Meeting Lille, France – May 26th - 30th

- F. Scotognella, A. Chiasera, L. Criante, S. Varas, S. Pelli, A. Lukowiak, G. C. Righini, R. Ramponi, M. Ferrari
- 182 "Disorder in Photonic Structures induced by random layer thickness"
Oral communication E-MRS 2014 FALL MEETING, September 15-18, Warsaw University of Technology, Poland
- A. Chiasera, J. Jasieniak, S. Normani, S. Valligatla, A. Lukowiak, S. Taccheo, D. N. Rao, G. C. Righini, M. Marciniak, A. Martucci, M. Ferrari
- 183 "Hybrid 1-D dielectric microcavity fabricated by rf-sputtering and solution processed technique"
Oral communication E-MRS 2014 FALL MEETING, September 15-18, Warsaw University of Technology, Poland
- A. Chiappini, A. Chiasera, C. Armellini, A. Carpentiero, A. Lukowiak, M. Mazzola, S. Normani, D. Ristic, S. Valligatla, I. Vasilchenko, S. Varas, G.C. Righini and M. Ferrari
- 184 "Glass-based Photonic Crystals: from Fabrication to applications"
Oral communication: CIMTEC 2014, 13th International Ceramics Congress, International Conference "Inorganic Materials Systems for Optical and Photonic Applications", Montecatini, June 8-13, 2014, Italy.

.....

Alessandro Chiasera

