Curriculum Vitae et Studiorum

GIAMPIERO CONTESTABILE is Associate Professor at *Scuola Superiore Sant'Anna of University Studies and Doctoral Research* of Pisa, Italy in "*09/F2 Telecomunicazioni*".

Personal information

First name/Surname	*Giampiero Contestabile*
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E-mail	*giampiero.contestabile@santannapisa.it*
Nationality	*Italian*
Date of birth	*22nd December 1972*
Mother tongue	*Italian*
Other language(s)	*English, Japanese*
Self-assessment	*English: proficient; Japanese:basic.*

- **2018** "Abilitazione Scientifica Nazionale (ASN)": National qualification to Full Professor in "*09/B1 Fisica Sperimentale della Materia*".

- 2012 awarded with the *Erasmus Mundus MAPNET Visiting Scholarship (3 months)* at Osaka University (Japan).

- **2010** (September), he is Assistant Professor ("*Ricercatore Universitario Confermato*") at the *Scuola Superiore Sant'Anna of University Studies and Doctoral Research* of Pisa, Italy.

- 2009 awarded with the *Visiting Professor fellowship (7 months)* to Osaka University (Japan) by the Japan Society for Promotion of Science (JSPS) in the "*FY2009 JSPS Invitation Fellowship Program for Research in Japan (Long Term)*".

Education and training

- **2001,** November: ***Ph.D. in Electrical Engineering - Telecommunications*** from "*Tor Vergata*" University of Rome, Italy.
Title of Ph.D. dissertation: "*Miscelazione a quattro onde in amplificatori ottici a semiconduttore: un metodo pratico per la realizzazione di convertitori di lunghezza d'onda completamente ottici*".
Tutors: Dr. Paolo Spano and prof. Paolo Lugli.

- **1998,** March: ***Laurea degree in Physics*** from "*La Sapienza*" University of Rome, Italy.
Title of Laurea dissertation: "*Configurazioni a due pompe nella miscelazione a quattro onde in amplificatori ottici a semiconduttore*".
Tutors: Dr. Faustino Martelli and prof. Paolo Mataloni.

- **1996 to 2000,** he was undergraduate and graduate student with the Semiconductor Devices Group of "*Fondazione Ugo Bordoni*", Rome, Italy.

Previous work experience

- **2010,** from March to September, he was *Research Scientist* at CNIT (Italian Consortium for Research in Telecommunication), Pisa, Italy.

- **2008** (September) to **2010** (February), he was *Research Scientist* ("*Collaboratore a Contratto*") at the *Scuola Superiore Sant'Anna of University Studies and Doctoral Research of Pisa*, Italy.

- **2002** (September) to **2008** (September), he was *Assistant Professor* (non-permanent, "*Ricercatore Universitario a tempo determinato*") at the *Scuola Superiore Sant'Anna of University Studies and Doctoral Research of Pisa*, Italy.

- **2000** (December) to **2001** (December), he was *Research Scientist* at *Optospeed Italia*, Rome, Italy.

- **2000** (May) to **2000** (September), he was *Research Scientist* at *Alenia Difesa* (now Galileo Avionica), Finemeccanica Group, Pomezia, Rome, Italy.

Scientific profile (in short) and experience

- **2013** to now, Dr. Contestabile is *Deputy Area Leader* of the "*Advanced Technologies for Integrated Photonics*" group at the *TeCIP Institute* of *Scuola Superiore Sant'Anna*, Pisa.

- **2010** to **2012** he has been Coordinator of the "*Photonic Integrated Circuit*" group at *Scuola Superiore Sant'Anna*, Pisa. Aim of the group was the design, simulation and test of photonic integrated circuits realized in III-V semiconductor and Silicon.

- **2012 (**May to August), he has been *Erasmus Mundus MAPNET Visiting Scholar* at Osaka University (Japan).

- **2009 (**May to December), he has been *Visiting Professor* at Osaka University (Japan), awarded by the Japan Society for Promotion of Science (JSPS) in the "*FY2009 JSPS Invitation Fellowship Program for Research in Japan (Long Term)*".

- **2002** to **2009**, Dr. Contestabile has been *Deputy Area Leader* of the "*Transmission System*" group at the *TeCIP Institute* of *Scuola Superiore Sant'Anna*, Pisa.

- **2002** to now, he is affiliate member of the CNIT (Consorzio Nazionale Interuniversitario per le Telecomunicazioni).

Giampiero Contestabile has been working from the time of his master degree thesis (1997) to now in the field of ***opto-electronic devices*** and ***broadband transmission in fibers***, with special emphasis on the study and experimental demonstration of novel schemes and techniques for the all-optical processing of high speed signals, and on the ***design and exploitation of novel photonic integrated circuits*** (PICs).
He contributed to the study, design and characterization of novel optical devices, to the demonstration of novel all-optical subsystems for next generation networks and, at the same time, he contributed to several experimental demonstrations and field trials.
He is a leading expert in the field of photonic integrated circuits (PICs), semiconductor laser and semiconductor optical amplifiers (SOAs) and their linear and nonlinear applications.

Participation to research projects

Funding from:

European Union (EU)

- **(2017 - ongoing) FP7 ACTPHAST 4.0** (Photonic innovation solutions and support for European companies driven by their business needs) Integrated Project- (Role: ***Expert and project manager***).

- **(2013 - ongoing) Graphene Flagship** (Future and Emerging Technology Flagship) - (***Researcher***).

- (**2013 - 2017**) **FP7 ACTPHAST** (Photonic innovation solutions and support for European companies driven by their business needs) Integrated Project- (***Expert and project manager)***.

- (**2011 - 2013**) **FP7-PEOPLE-2011-IIF**: Photonic Integrated Circuits and Systems - (***Project leader***)

- (**2006 - 2007**) **FP7 Integrated Project NOBEL II** (Next generation Optical network for Broadband European Leadership) phase II - ***(Responsible for experimental activities)***.

- (**2004 - 2005**) **FP 6 Integrated Project NOBEL** (Next generation Optical network for Broadband European Leadership) - ***(Responsible for experimental activities)***.

- (**1999 - 2001**) **IST-ATLAS** (WDM optical transmission system at 160 Gbit/s with wavelength conversion functionality) - ***(Researcher as PhD student)***.

Ministry of Foreign Affairs (MAE)

- (**2016 - ongoing**) Progetto di grande rilevanza **CANTON** "Commutatori ottici ad Altissima velocità iN foTONica integrata" *Italy – China bilateral collaborations* - ***(Project Leader)***

- (**2007 – 2010**) **FIRB – PEDROS** – "Dispositivi fotonici abilitanti per la rigenerazione e la commutazione ottica", *Italy – Canada bilateral collaborations* - ***(Researcher)***.

- (**2005 – 2007**) Joint research projects of particular relevance: ICT A1 "Design and implementation of a 2.5 Tbit/s Optical Time Division Multiplexing (OTDM) system" with Korean Institute of Science and Technologies, Seoul, Korea. ***(Researcher)***.

- (**2002 – 2004**) Indo-Italian Science and Technology Collaboration, "Design of packet switched re-configurable DWDM network with wavelength conversion for multimedia" with Indian Institute of Technology (IIT). ***(Researcher)***.

Ministry of University (MIUR)

- (**2005 - 2006**) **PRIN TOSCA** (Transmission of Optical Systems using Competitive Amplification). ***(Responsible for experimental activities)***.

- (**2001 - 2002**) **PRIN OTDM 2** ("*Trasmissione su sistemi OTDM ad altissimo bit rate*"). ***(Researcher)***.

Italian space Agency (ASI)

- (2017 - ongoing) ASI project "Realizzazione Integrata di un Generatore Quantistico Di Numeri Casuali –**QRNG**", (***Project leader***)

Tuscany Regional Government

- (**2012 - 2015**) **PIC** ("*Photonic Integrated Circuits: Fotonica Integrata a Pisa, una infrastruttura cruciale per il trasferimento tecnologico*") under the *PRSE 2007/2010* and *PAR FAS 2007/2013* (***Technical Coordinator***).

- (**2012 - 2014**) **FORTEC** "Formare alla ricerca applicata e tecnologica" Regione Toscana, under POR CRO FSE 2007-2013. Asse IV Capitale Umano (***Project manager***).

- (**2011 - 2015**) **ARNO T3** ("*Architetture di Reti e Nodi Ottici per la Trasmissione ad alta capacità e il Trasporto accesso-metro-core basati su Tecnologie fotoniche integrate*") under the *POR CReO FESR 2007-2013. (**one of the Project Managers**).*

Industrial relations

- From **2002** to now, consulting activity for **Ericsson Italia**;
he participates to the joint research and development activities between Sant'Anna and *Marconi Communication* (now *Ericsson Italia*) as defined year by year in the framework of the strategic long term agreement between the two research partners (*2001-2016*). These activities led to the assignment/filing of ***7 international patents***.

- **2000**: Research and development for **Alenia Difesa** (now **Galileo Avionica**), Pomezia, Roma, Italy (high power Er/Yb optical amplifiers).

- **1997 – 2001**: Research and development for **Opto Speed CH** (characterization and development of semiconductor optical amplifiers (SOA)).

Funding achievements

Giampiero Contestestabile is principal investigator of the ASI project "Realizzazione Integrata di un Generatore Quantistico Di Numeri Casuali –QRNG", ***(funding 802000 Euros)***

As an Actphast project manager he has been responsible of two projects:

- "Integrated Optical Comb Generator", ***(funding 47500 Euros)***
- "A Parallel Integrated Analog Transmitter for Beamforming and Antenna Remoting", ***(funding 37000 Euros)***

He wrote and was technical coordinator of the Tuscany regional government project "*Photonic Integrated Circuits: Fotonica Integrata a Pisa, una infrastruttura cruciale per il trasferimento tecnologico*". A 8 millions Euros project (***funding: 3.6 millions***) for the realization of a new building with around *550 square meter clean room for the fabrication of silica and silicon PICs*.

As PIC group coordinator he participated to the preparation of the Tuscany regional government project *ARNO T3* (***funding: 1.25 millions Euros***).

He was project leader of the *FP7-PEOPLE-2011-IIF project* (***funding: 193700 Euros***).

He was project leader of *FORTEC* "Formare alla ricerca applicata e tecnologica Regione Toscana", (***funding: 60000 Euros***).

He was project leader of the *LAMPO* project - *Scuola Sant'Anna internal funding* (***funding: 40000 Euros***).

He is project leader of CANTON project - "Progetto bilaterale di grande rilevanza, Ministero degli Affari Esteri" (***funding: 100000 Euros***)

Teaching

-**2010/2011** to **now,** "***Photonic Integrated Technologies***" (3 CFU) in the *TeCIP Institute*, PhD program.

- **2010/2011** to **2015/2016,** "***Commutazione Fotonica (Photonics Switching)***" (6 CFU) in "Corso di Laurea in Informatica e Networking", of "*Università di Pisa"*.

- **2010/2011** to **2015/2016,** "***Photonic Technologies***" (3 CFU) in the "Erasmus Mundus Master on Photonic Networks Engineering (MAPNET)" of *Scuola Superiore Sant'Anna.*

- **2012/2013** to **2014/2015,** "***Optical Communication and Technologies***" (6 CFU) in the "Joint Graduate Program in Information and Communication Technologies" of "*Università di Trento*" and *Scuola Superiore Sant'Anna*.

- **2005** to **2009**, he taught the course "***Laboratory of Networks, Systems and Components***" in the "International Master's program in Communication Networks Engineering (IMCNE)" at *Scuola Superiore Sant'Anna*.

- **2002** to **2008**, he gave series of seminars ("***Dispositivi e tecniche per le comunicazioni fotoniche***") in the course "*Progettazione di Sistemi di Comunicazione Ottica*" of professor Ernesto Ciaramella at *Scuola Superiore Sant'Anna*.

He is *PhD* tutor of *S. Marconi* and *T. Cassese*.
In the years at Sant'Anna, Giampiero Contestabile has been supervisor for the experimental activities of the *PhD students* and *PostDoc* of professor *E. Ciaramella* group: Dr. *R. Proietti,* Dr. *M. Presi,* Dr. *A. D'Errico,* Dr. *L. Banchi* and Dr. *F. Bontempi*.

Additional Academic Experience

-**2012 to 2015**, Giampiero Contestabile has been elected member of the *TeCIP Institute Board of Governors* ("*Giunta dell'Istituto TeCIP*").

-**2012** to now, he is member of the *PhD Selection Committee* and *PhD Coordinator and Scientific Board* of the TeCIP Institute.

-**2010 to 2016,** he has been member of the *Erasmus Mundus Master "MAPNET" Selection Committee*.

Participation to scientific committees and editorial boards

Journals

-2018 to now, Giampiero Contestabile is **Subjet Editor** of ***IET Electronics Letters.***

-2017 to now, he is **Associate Editor** of ***IEEE Communication Letters***

-**2015** to now**,** he is **Associate Editor** of ***Elsevier Heliyon Journal*** (http://www.journals.elsevier.com/heliyon/)

Conferences

-2019, he will be **General Co-chair** of ***Photonics in Switching and Computing 2019*** (Fukuoka, Japan, July 2019)

-2017, he has been **Technical Co-chair** of ***Photonics in Switching 2017*** (New Orleans, Louisiana, USA, July 2017)

He is (has been) member of the following conference technical program committees:

-2019, The Optical Networking and Communication Conference & Exhibition 2019 (OFC 2019), San Diego, USA, March 2019

-**2018**, **44th European Conference on Optical Communication (ECOC 2018)**, Rome, September 2018

-2018, **Integrated Photonics Research, Silicon, and Nano-Photonics (IPR 2018)** for Advanced Photonics (AP) **2018**, Zurich, Switzerland, July 2018

-2018, **The Conference on Lasers and Electro-Optics Pacific Rim (CLEO-PR) 2018**, Hong Kong, August 2018

-2018, **The European Semiconductor Laser workshop 2018**, Bari, Italy, September 2018

-2017, **Asia Communications and Photonics Conference (ACP) 2017** Guangzhou, November 2017

-2017, **24th Congress of the International Commission for Optics (ICO-24)**, Tokyo, Japan, August 2017

-**2015 to now**, **IBP** (***International Broadband and Photonics Conference 2015***).

-2014 to now, ***OPTICS, International Conference on Optical Communication Systems***

-2013, ***The Conference on Lasers and Electro-Optics Pacific Rim (CLEO-PR)*** *and* ***The OptoElectronics and Communications Conference (OECC)***

-**2010 to now,** ***Photonics in Switching.***

-**2010 to now,** ***FOTONICA***, the Italian conference organized by AEIT e AICT.

He is in the board of reviewers of the following journals:

IEEE Photonics Technology Letters, IEEE/OSA Journal of Lightwave Technology, IEEE Journal of Quantum Electronics, IEEE Journal of Selected Topics in Quantum Electronics, IEEE Photonics Journal, IET Electronic Letters, OSA Optics Express, OSA Optics Letters, Journal of Optical Society of America, Elsevier Optics Communication, Optics, Chinese Optics Letters, Applied Physics Letters.

Academic International relations and Workshop organization

2019 Giampiero Contestabile has been co-organizer of the **OFC 2019** Workshop "**High Noon. Silicon Photonics vs. Rest of the world**"

-2018 he co-organized the **ECOC 2018** Workshop "**Hybrid Laser integration in Silicon Photonics**"

-**2018** (January) recipient of a **Huazhong University of Science and Technology Visiting Fellowship** at Wuhan, Hubei province, China.

-**2007** he organized the "***Japan-Italy Bilateral Workshop on Photonics for Communication***", Osaka (Japan).

-**2007** he managed the arrangement of a Memorandum of Understanding for joint research and exchange program with ***Waseda University*** of Tokyo and ***Osaka University***.

-**2006** he organized the "***2006 China-Italy Bilateral Workshop on Photonics for Communication and Sensing***", Xi'an (China).

-**2005** and **2007,** Giampiero Contestabile partecipated, as *Scuola Superiore Sant'Anna* representative person, to the roadshow in India "*Invest your talent in Italy*" (http://www.postgradinitaly.org/) for the promotion of high education in Italy.

-2005, He has been member of the steering committee of the "***China-Italy agreement for Research Collaboration***" with the Institute of Optics and Precision Mechanics of the Chinese Academy of Sciences, Xi'an.

-**2004**, he was Scuola Superiore Sant'Anna representative person at the "***Indo Italian Workshop on Photonic Technologies, Networking and Applications***" March 29, 2004, Kharagpur, West Bengali, India.

Publications and patents

Giampiero Contestabile is author/co-author of:

-**90** papers on ***international peer reviewed journals***
*(First author of **29**, last author of **15**)*

-**103** papers in ***proceedings of major international conferences*** (including *8 invited* and *4 postdeadline* papers)

-**18** papers in ***Italian journals and conferences***

-**7** ***international patents***

Patents

P1] "An Optical PON Network using Passive DPSK", N. Calabretta, M. Presi, ***G. Contestabile***, E. Ciaramella, P. Ghiggino, F. Cavaliere - *US 8478125 B2, WO/2008/145464*

P2] "Asynchronous all-optical circuit for simultaneous extraction and serial-to-parallel conversion of label bits from optical DPSK packets based on time-to-wavelength conversion", N. Calabretta, M. Presi, ***G. Contestabile***, E. Ciaramella - International patent number: *P/64101, US 20100189446 A1, WO 2008078309 A3*

P3] "A novel code preserving regenerative NRZ-DPSK wavelength and format conversion", N. Calabretta, M. Presi, ***G. Contestabile***, E. Ciaramella – *Patent pending - P/64125/X8*

P4] "OSSB WDM-PON with multi-wavelength recovery and distribution to reflective ONT", F. Cavaliere, M. Presi, R. Proietti, A. D'Errico, ***G. Contestabile***, E. Ciaramella –*US 20120321316 A1*

P5] "IRZ/RZ coding for long reach WDM-PONs based on R-SOAs", M. Presi, E. Ciaramella, R. Proietti, ***G. Contestabile*** –- *US 2011/0236021, WO 2010025767 A1*

P6] "All-Optical Selective Wavelength Shifter in an integrated SOA-MZI", C. Porzi, ***G. Contestabile***, A. Bogoni, - *Patent Pending - P34369*

P7] "Optical Communication Signal Conversion," ***G. Contestabile***, L. Giorgi and L. Bottari, - *Patent Pending - P42178*

International peer-reviewed journals

J1] N. Andriolli, P. Velha, M. Chiesa, A. Trifiletti, ***G. Contestabile***, "A Directly Modulated Multiwavelength Transmitter Monolithically Integrated on InP," *IEEE Journal of Selected Topics in Quantum Electronics*, vol. 24, p. 1-6, **2018** (ISSN: 1077-260X)

J2] V. Sorianello, M. Midrio, ***G. Contestabile***, I. Asselberghs, J. Van Campenhout, C. Huyghebaert, I. Goykhman, A. K. Ott, A. C. Ferrari, M. Romagnoli "Graphene–silicon phase modulators with gigahertz bandwidth," *Nature Photonics*, vol. 12, p. 40-44, **2018** (ISSN: 1749-4885)

J3] V. Sorianello, ***G. Contestabile***, M. Midrio, M. Pantouvaki, I. Asselbergs, J. Van Campenhout, C. Huyghebaerts, A. D'Errico, P. Galli, M. Romagnoli, "Chirp management in silicon-graphene electro absorption modulators," *Optics Express*, vol. 25, pp. 19371-19381, **2017** (ISSN: 1094-4087)

J4] P. Velha, N. Andriolli, and ***G. Contestabile***, "Preamplified Demodulation of 56-Gb/s WDM-DPSK Signals by an AWG-Based InP PIC," *IEEE Photonics Journal*, vol. 8, no. 2, **2016** (ISSN: 1943-0655)

J5] P. Velha, S. Faralli, ***G. Contestabile***, "A Compact Silicon Photonic DQPSK Receiver based on Micro-Ring Filters," *IEEE Journal of Selected Topics in Quantum Electronics*, vol. 22, p. 418-424, **2016** (ISSN: 1077-260X)

J6] ***G. Contestabile***, P. Velha, and N. Andriolli, "High-Speed InP-Integrated Pre-Amplified Demodulator for WDM-DPSK Signals," *IEEE Photonics Technology Letters*, vol. 27, no. 24, pp. 2547 - 2550, **2015** (ISSN: 1041-1135)

J7] S. Faralli, G. Meloni, F. Gambini, J. Klamkin, L. Poti, and ***G. Contestabile***, "A Compact Silicon Coherent Receiver without Waveguide-Crossing," *IEEE Photonics Journal*, vol. 7, no. 4, **2015**

J8] F. Fresi, F. Bontempi, A. Malacarne, G. Meloni, N. Andriolli, J. Klamkin, L. Poti, and ***G. Contestabile***, "Integrated Reconfigurable Coherent Transmitter Driven by Binary Signals," *IEEE Journal of Selected Topics in Quantum Electronics*, vol. 21, no. 6, **2015** (ISSN: 1077-260X)

J9] P. Velha, S. Faralli, and ***G. Contestabile***, "Microring-Based Fully Integrated Silicon DQPSK Receiver," *IEEE Photonics Technology Letters*, vol. 27, no. 15, pp. 1605 - 1608, **2015** (ISSN: 1041-1135)

J10] N. Andriolli, F. Fresi, F. Bontempi, A. Malacarne, G. Meloni, J. Klamkin, L. Poti, and ***G. Contestabile***, "InP monolithically integrated coherent transmitter," *Optics Express*, vol. 23, no. 8, pp. 10741-10746, **2015** (ISSN: 10944087)

J11] F. Bontempi, S. Faralli, X. J.M. Leijtens, J. Bolk, ***G. Contestabile***, and N. Andriolli, "A 40 Gb/s InP-monolithically integrated DPSK-demodulator enhanced by cross-gain-compression in an SOA," *Optics Communications*, vol. 340, pp. 155-158, **2015** (ISSN: 0030-4018)

J12] ***G. Contestabile*** and F. Bontempi, "All-Optical Distribution Node for Long Reach PON Downlink," *IEEE Photonics Technology Letters*, vol. 26, no. 14, pp. 1403 - 1406, **2014** (ISSN: 1041-1135)

J13] ***G. Contestabile***, "A Multirate All-Optical Aggregator for Digital Back-Haul and PON Uplink," *IEEE Photonics Technology Letters*, vol. 26, no. 9, pp. 862 - 865, **2014** (ISSN: 1041-1135)

J14] V. Vercesi, C. Porzi, ***G. Contestabile*** and A. Bogoni, "Polarization-Independent All-Optical Regenerator for DPSK Data," *Photonics,* vol. 1, no. 2, pp. 154-161, **2014** (ISSN 2304-6732)

J15] J. Klamkin, F. Gambini, S. Faralli, A. Malacarne, G. Meloni, G. Berrettini, ***G. Contestabile***, and L. Potì, "A 100-Gb/s noncoherent silicon receiver for PDM-DBPSK/DQPSK signals," *Optics Express*, vol. 22, no. 2, pp. 2150-2158, **2014** (ISSN: 10944087)

J16] ***G. Contestabile***, A. Maruta, and K.-I. Kitayama, "Four Wave Mixing in Quantum Dot Semiconductor Optical Amplifiers," *IEEE Journal of Quantum Electronics,* vol. 50, no. 5, pp. 379 - 389, **2014** (ISSN: 0018-9197)

J17] C. Porzi, G. Serafino, A. Bogoni, and ***G. Contestabile***, "Phase-Preserving Amplitude Noise Compression of 40 Gb/s DPSK Signals in a Single SOA," *IEEE/OSA Journal of Lightwave Technology*, vol. 32, no. 10, pp. 1966 - 1972, **2014** (ISSN: 0733-8724)

J18] S. Lange, ***G. Contestabile***, Y. Yoshida, and K. Kitayama "Phase-transparent Amplification of 16 QAM Signals in a QD-SOA," *IEEE Photonics Technology Letters*, vol. 25, no. 24, pp. 2486-2489, **2013** (ISSN: 1041-1135)

J19] ***G. Contestabile***, Y. Yoshida, A. Maruta, and K. Kitayama, "Coherent Wavelength Conversion in a Quantum Dot SOA," *IEEE Photonics Technology Letters*, vol. 25, no. 9, pp. 791 - 794, **2013** (ISSN: 1041-1135)

J20] C. Porzi, A. Bogoni, and ***G. Contestabile***, "Regenerative Wavelength Conversion of DPSK Signals Through FWM in an SOA," *IEEE Photonics Technology Letters*, vol. 25, no. 2, pp. 175 - 178, **2013** (ISSN: 1041-1135)

J21] N. Andriolli, S. Faralli, X.J.M. Leijtens, J. Bolk, and ***G. Contestabile***, "Monolithically Integrated All-Optical Regenerator for Constant Envelope WDM Signals," *IEEE/OSA Journal of Lightwave Technology*, vol. 31, no. 2, pp. 322 - 327, **2013** (ISSN: 0733-8724)

J22] F. Bontempi, S. Faralli, N. Andriolli, and ***G. Contestabile***, "An InP Monolithically Integrated Unicast and Multicast Wavelength Converter," *IEEE Photonics Technology Letters*, vol. 25, no. 22, pp. 2178 - 2181, **2013** (ISSN: 1041-1135)

J23] N. Andriolli, S. Faralli, F. Bontempi, and ***G. Contestabile***, "A wavelength-preserving photonic integrated regenerator for NRZ and RZ signals," *Optics Express*, vol. 21, no. 18, pp. 20649-20655, **2013** (ISSN: 10944087)

J24] C. Porzi, G. Serafino, S. Pinna, A. Nguyen, ***G. Contestabile***, A Bogoni, "Review on SOA-MZI-based photonic add/drop and switching operations," *Frontiers of Optoelectronics*, vol. 1, pp. 67-77, **2013** (ISSN: 2095-2767)

J25] F. Bontempi, S. Pinna, N. Andriolli, A. Bogoni, X.J.M. Leijtens, J. Bolk, and ***G. Contestabile***, "Multifunctional Current-Controlled InP Photonic Integrated Delay Interferometer," *IEEE Journal of Quantum Electronics*, vol. 48, no. 11, pp. 1453 - 1461, **2012** (ISSN: 0018-9197)

J26] ***G. Contestabile***, Y. Yoshida, A. Maruta, and K. Kitayama, "Ultra-broad band, low power, highly efficient coherent wavelength conversion in quantum dot SOA," *Optics Express*, vol. 20, no. 25, pp. 27902-27907, **2012** (ISSN: 10944087)

J27] F. Scotti, G. Berrettini, ***G. Contestabile***, and A. Bogoni, "A Regenerative Variable Optical Buffer for NRZ and RZ Packets," *IEEE/OSA Journal of Lightwave Technology*, vol. 30, no. 9, pp. 1366 - 1372, **2012** (ISSN: 0733-8724)

J28] C. Porzi, G. Meloni, M. Secondini, L. Poti, ***G. Contestabile***, and A. Bogoni, "All-Optical Switching of QPSK Signals for 100 G Coherent Systems," *IEEE/OSA Journal of Lightwave Technology*, vol. 30, no. 18, pp. 3010 - 3016, **2012** (ISSN: 0733-8724)

J29] S. Pinna, C. Porzi, ***G. Contestabile***, A. Bogoni, "Broadband Operation of High-Speed All-Optical Gated Wavelength Shifter," *IEEE Photonics Technology Letters*, vol. 24, no. 17, pp. 1546 - 1548, **2012** (ISSN: 1041-1135)

J30] M. Presi, N. Calabretta, C. Porzi, R. Corsini, ***G. Contestabile***, and E. Ciaramella, "1 x 8 self-routing of 40 Gbit/s phase-modulated packets," *Electronics Letters*, vol.48, no. 3, pp. 169 - 171, **2012** (ISSN: 0013-5194)

J31] C. Porzi, A. Bogoni, and ***G. Contestabile***, "Regeneration of DPSK Signals in a Saturated SOA," *IEEE Photonics Technology Letters*, vol. 24, pp. 1597 - 1599, **2012** (ISSN: 1041-1135)

J32] A. Nguyen, C. Porzi, G. Serafino, F. Fresi, ***G. Contestabile***, and A. Bogoni, "All-Optical Gated Wavelength Converter-Eraser Using a Single SOA-MZI," *IEEE Photonics Technology Letters*, vol. 23, no. 21, pp. 1621 - 1623, **2011** (ISSN: 1041-1135)

J33] G. Serafino, F. Scotti, G. Berrettini, ***G. Contestabile***, and A .Bogoni, "Regenerative Optical Buffer Based on SOA-Amplified Recirculating Loop," *IEEE Photonics Technology Letters*, vol. 23, pp. 1715 - 1717, **2011** (ISSN: 1041-1135)

J34] ***G. Contestabile***, A. Maruta, S. Sekiguchi, K. Morito, M. Sugawara, and K. Kitayama, "All-Optical Wavelength Multicasting in a QD-SOA " *IEEE Journal of Quantum Electronics*, vol. 47, pp. 541 – 547, **2011** (ISSN: 0018-9197)

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Proceedings of International Conferences

(**Invited**)

C1] A. D'Errico and ***G. Contestabile***, " Next generation terabit transponder," Optical Fiber Communication Conference OFC/NFOEC, **2016**, Anaheim, CA USA

C2] ***G. Contestabile***, S. Faralli, G. Meloni, F. Gambini, A. Malacarne, P. Velha, J. Klamkin and L. Potì "Silicon Photonics Receivers for Advanced Modulation Formats" Asia Communications and Photonics Conference 2015 (ACP **2015**), Hong Kong, China

C3] ***G. Contestabile***, "All optical processing in QD-SOAs," Optical Fiber Communication Conference OFC/NFOEC, **2014**, San Francisco, USA

C4] J. Klamkin, H. Zhao, S. Faralli,P. Contu, F. Gambini, C. Campanella, A. Malacarne, G. Meloni, G. Berrettini, ***G. Contestabile***, L. Potì, "Compact Nanophotonic Devices and Photonic Integrated Circuits on Silicon for Optical Interconnect Applications," paper 9.20, 16th Photonics North Conference, **2014**, Montreal, Canada.

C5] ***G. Contestabile***, "Ultra-Broadband, Highly Efficient Coherent Wavelength Conversion in Quantum Dot SOA," IEEE Photonic Conference (PHO **2013**), Seattle, USA

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C10] T. Cassese, N. Andriolli, Marco Chiesa, Á. R. Criado Serrano, ***G. Contestabile***, "InP Photonic Integrated Comb Generator made by a cascade of Optical Modulators," paper Th1I.6, *Optical Fiber Communication Conference OFC/NFOEC*, **2018**, San Diego, USA

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C12] ***G. Contestabile***, "Wavelength Conversion of PAM signals by XGM in SOAs", Asia Communications and Photonics Conference 2016, paper AF4H.4, Wuhan, China, 2–5 November **2016**

C13] T. Cassese, G. De Angelis, P. Velha, V. Sorianello, M. Preite A. Bianchi F. Testa, ***G. Contestabile*** and M. Romagnoli, "Si Photonic Active Controller for Polarization Independent Coupling, " 13th International Conference on Group IV Photonics, paper ThD2, **2016**, Shanghai, Cina

C14] N. Andriolli, P. Velha, P. Tommasino, M. Chiesa, G. B. Preve, A. Trifiletti, M. Romagnoli, and ***G. Contestabile***, "An InP Monolithically Integrated Multiwavelength Transmitter with Direct Modulation," 21st OptoElectronics and Communications Conference/2016 International Conference on Photonics in Switching OECC/PS, paper MF2-3, **2016**, Niigata, Japan

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C27] (*Postdeadline paper*) F. Gambini, S. Faralli, A. Malacarne, G. Meloni, G. Berrettini, ***G. Contestabile***, L. Poti, J. Klamkin, "A silicon receiver for 100 Gb/s PDM-DQPSK signals," 18th OptoElectronics and Communications Conference held jointly with 2013 International Conference on Photonics in Switching OECC/PS, **2013**, Kyoto, Japan

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