

GIOVANNI SERAFINO - List of Publications and Patents

JOURNALS:

1. Laghezza F., Berizzi F., Capria A., Cacciavano A., **Serafino G.**, Ghelfi P., and Bogoni A., "Reconfigurable radar transmitter based on photonic microwave signal generation", *International Journal of Microwave and Wireless Technologies*, Vol.3, Special Issue 03, pp.383-389, March 2011, DOI:10.1017/S1759078711000262
2. Ghelfi, P.; Scotti, F.; An Truong Nguyen; **Serafino, G.**; Bogoni, A., "Novel Architecture for a Photonics-Assisted Radar Transceiver Based on a Single Mode-Locking Laser" *IEEE PTL*, Vol.23, no. 10, pp.639-641, May 2011
3. **Serafino G.**, Ghelfi P., Perez-Millan P, Villanueva G.E., Palaci J, Cruz J.L., and Bogoni, A., "Phase and Amplitude Stability of EHF-Band Radar Carriers Generated From an Active Mode-Locked Laser", *IEEE J. of Lightwave Technol.*, v.29, n.23, pp.: 3551-3559, Dec. 2011.
4. Ghelfi P., **Serafino G.**, Scotti F., Laghezza F., and Bogoni A., "Flexible Receiver for Multi-Band OFDM Signals at Millimeter-Waveband based on Optical Down-Conversion", *Optics Letters*, v.37, n.18, pp. 3924-3926, Sept. 2012.
5. Ghelfi P., Laghezza F., Scotti F., **Serafino G.**, Pinna S., Bogoni A., "Photonic generation and independent steering of multiple RF signals", invited paper, *Optics Express*, v.21, n.19, September 2013
7. Nguyen A., Porzi C., **Serafino G.**, Fresi F., Contestabile G., Bogoni A. "All-Optical Gated Wavelength Converter-Eraser Using a Single SOA-MZI" *IEEE Photonics Technology Letters (PTL)*, vol. 23, no. 21, pp. 1621 – 1623, 1 Nov. 2011.
8. **Serafino G.**, Scotti F, Berrettini G., Contestabile G., Bogoni A. "Regenerative Optical Buffer Based on SOA-Amplified Recirculating Loop", *IEEE Photonics Technology Letters (PTL)*, vol. 23, no. 22, pp. 1715 – 1717, 15 Nov. 2011.
9. Lazzeri E., Malacarne A., **Serafino G.**, Bogoni A. "Optical XOR for Error Detection and Coding of QPSK I and Q Components in PPLN Waveguide" *IEEE Photonics Technology Letters (PTL)*, vol. 24, no. 24, 2258-2261, Dec. 2012.
10. Porzi C., **Serafino G.**, Pinna S., Nguyen A.T., Contestabile G., Bogoni A. "Review on SOA-MZI-based photonic ADD/DROP and switching operations" *Frontiers of Optoelectronics*, 6 (1), pp. 6777 (2013) - Springer-Verlag.

CONFERENCES:

1. Lazzeri E., Nguyen A.T., **Serafino G.**, Kataoka N., Wada N., Bogoni A., and Potì L. "All-Optical NRZ-DPSK to RZ-OOK Format Conversion Using Optical Delay Line Interferometer and Semiconductor Optical Amplifier", *Photonics in Switching, JTUB4*, Monterey, CA, July 25, 2010 [Joint Poster Session (JTUB)]
2. Ghelfi P., **Serafino G.**, Berizzi F., Bogoni A., "Generation of Highly Stable Microwave Signals Based on Regenerative Fiber Mode Locking Laser", *CLEO 2010, JWA47*, San José, CA, USA
3. Laghezza F., Berizzi F., Capria A., Cacciavano A., Ghelfi P., **Serafino G.**, Bogoni A., "Reconfigurable Radar Transmitter Based on Photonic Microwave Signal Generation", *EuRAD 2010, EuRAD19*, Paris, France.
4. **Serafino G.**, Ghelfi P., Villanueva G.E., Palaci J., Pérez-Millán P., Cruz J.L., Porzi C., Bogoni A., "Stable Optically Generated RF Signals from a Fibre Mode-Locked Laser", *IEEE Photonics Society Annual Meeting 2010, TuK4*, Denver, Co, USA

5. Ghelfi P., **Serafino G.**, Fresi F., Villanueva G.E., Pérez-Millán P., Cruz J.L., Berizzi F., Bogoni A., "Photonic generation of RF multiple carriers using a mode-locked laser and a single photodiode", Photonics West 2011, 7960-27, San Francisco, USA
6. Ghelfi P., Scotti F., Nguyen A. T., **Serafino G.**, Bogoni A., "Ultra-Stable Radar Signal from a Photonics-Assisted Transceiver Based on Single Mode-Locking Laser", OFC 2011, Los Angeles 2011.
7. Ghelfi P., **Serafino G.**, Scotti F., Laghezza F., Bogoni A., "Flexible Multi-Band OFDM Receiver Based on Optical Down-Conversion for Millimeter Waveband Wireless Base Stations", P6.06, ECOC 2012, Amsterdam, The Netherlands, 2012.
8. Bogoni A., Ghelfi P., **Serafino G.**, Laghezza F., and Scotti F., "Photonics Techniques for the Flexible Generation of Ultra-Stable Microwave and Millimeterwave Radar Signals" – POEM 2012, invited talk, Wuhan, China – 2012
9. Ghelfi P., Laghezza F., Scotti F., **Serafino G.**, S. Pinna, Bogoni A. "Photonic-assisted RF transceiver", invited paper, ECOC 2013, We.4.F.3, London, UK, 2013
10. Scotti F., Ghelfi P., Laghezza F., **Serafino G.**, Pinna S., Bogoni A., "Flexible True-Time-Delay Beamforming in a Photonics-Based RF Broadband Signals Generator", ECOC 2013, Th.2.B.5, London, UK, 2013
11. Ghelfi P., Laghezza F., Scotti F., **Serafino G.**, S. Pinna, Bogoni A. "PHODIR: Photonics-based fully digital radar system", invited paper, 2013 IEEE International Topical Meeting on Microwave Photonics (MWP), Alexandria, Virginia, USA.
12. Porzi C., Nguyen A.T., **Serafino G.**, Fresi F., Contestabile G., Bogoni A. "All-Optical Selective Wavelength Shifter in a SOA-MZI" European Conference on Optical Communication (ECOC) Joint Poster Session, We.10.P1.43, September 18-22, 2011, in Geneva, Switzerland.
13. Scotti F., Berrettini G., **Serafino G.**, Contestabile G., Bogoni A. "Regenerative Re-circulating Fiber Loop for Optical Buffering" IEEE Photonics 2011 Conference (IPC – ex-LEOS), Virginia, Arlington, October, 2011.
14. Lazzeri E., Malacarne A., **Serafino G.**, Bogoni A. "All-Optical XOR gate for QPSK In-Phase and Quadrature Components based on Periodically Poled Lithium Niobate Waveguide for Photonic Coding and Error Detection Applications" Optical Supercomputing Conference (OSC) 2012 – Bertinoro (FC) 17 - 19 Luglio 2012
15. Porzi C., **Serafino G.**, Bogoni A., Contestabile G. "All-optical regeneration of 40 Gb/s NRZ-DPSK signal in a single SOA" OFC 2013, JW2A.55, Anaheim (CA), March 17-21, 2013.
16. **Serafino G.**, Malacarne A., Bogoni A. "Laser Spectral-Purity Impact in Optical Processing of QPSK Signals in PPLN Waveguide" 2013 18th OptoElectronics and Communications Conference held jointly with 2013 International Conference on Photonics in Switching (OECC/PS), ThO2-2.

PATENTS:

1. Ghelfi P., Scotti F., Laghezza F., **Serafino G.**, Pinna S., Bogoni A.; "Flexible True-Time-Delay Beamforming in a Photonics-Based RF Broadband transmitter".