

Massimo Leonardo Filograno

LIST OF PUBLICATIONS

A. Ph.D. Thesis

Development of optical fiber sensors applied to the high speed railway environment (November, 2013, first class with distinction and remission of registration fee).

B. M.Sc. Thesis

Analysis of trains passing signals in high speed railway using sensors based in FBG (September 2011, first class with distinction and remission of registration fee).

C. Peer-review Journal Publications

1. "Real Time Monitoring of Railway Traffic Using Fiber Bragg Grating Sensors", April 27-29, 2010 pages 493-500, ISSN: 978-0-7918-4907-1, Urbana-Champaign, IL, USA
2. "Real Time Monitoring of Railway Traffic Using Fiber Bragg Grating Sensors", IEEE Sensors Journal, 05 April 2011, pages 85-92, ISSN: 1530-437X, **several times in the "top 25 download" of the Sensors Journal during 2011 and 2012.**
3. "Real Time Monitoring of Railway Traffic Using Fiber Bragg Grating Sensors", Encuentro de Investigadores en Infraestructuras Inteligentes (EI3), pages 121-124, 17April 2011 ISSN: 978-84-8138-911-1, Universidad de Alcalá, Servicio de Publicaciones, Plaza de San Diego s/n, 28801 Alcalá de Henares
4. "Medida no intrusiva de la presión interna de las tuberías mediante redes de Bragg", URSI'11 - XXVI Simposio de la URSI, 07/09/2011, ISBN: 978-84-933934-4-1 (abstracts), 978-84-933934-5-8 (CD-ROM), Leganés (Spain)
5. "Wheel flat detection in high-speed railway systems using fiber Bragg gratings", IEEE Sensors J. (Online Publication July 18, 2013, Volume 13, Issue 12, Dec. 2013).
6. "Coherent noise reduction in high visibility phase-sensitive optical time domain reflectometer for distributed sensing of ultrasonic waves", Journal of Lightwave Technology (Volume 31, Issue 23 2013).
7. "Phase-sensitive optical time domain reflectometer assisted by first-order Raman amplification for distributed vibration sensing over >100km", Journal of Lightwave Technology (Volume 32 Issue 8 2014).

D. Conference Proceedings

1. "Estudio de deformaciones y vibraciones en una viga en ménsula mediante redes de Bragg", 6º Optoel 2009, Málaga, 15-17 July 2009
2. "Medida de la distribución de temperatura en un transformador mediante Raman distribuido en fibra óptica", 6º Optoel 2009, Málaga, 15-17 July 2009
3. "Real Time Monitoring of Railway Traffic Using Fiber Bragg Grating Sensors", 2010 Joint Rail Conference University of Illinois, Urbana-Champaign, IL, USA, April 27-29, 2010
4. "Real time monitoring of railway traffic using fiber Bragg gratings", EWOFs 4 – 2010, Oporto (Portugal), 8-10 September 2010
5. "Low-cost, self-referenced all-fibre polarimetric current sensor for the monitoring of current in the railway catenary", EWOFs 4 – 2010, Oporto (Portugal), 8-10 September 2010
6. "Real Time Monitoring of Railway Traffic Using Fiber Bragg Grating Sensors", I Encuentro de Investigadores en Infraestructuras Inteligentes (EI3), Guadalajara (Spain), 17 March 2011
7. "Low-cost, self-referenced all-fibre polarimetric current sensor for the monitoring of current in the railway catenary", IONS 9 – 2011, Salamanca (Spain), 07-09 April 2011
8. "Wheel flat detection in high-speed railway systems using fiber Bragg gratings", OFS 21 – 2011, Ottawa (Canada), 15-19 May 2011
9. "Utilización de redes de Bragg en la monitorización del tránsito ferroviario de alta velocidad", Optoel 7 – 2011, Santander (Spain), 29/6/2011 – 1/7/2011
10. "Sensor de corriente polarimétrico auto-referenciado para la monitorización de corriente de catenaria en vías de alta velocidad", Optoel 7 – 2011, Santander (España), 29/6/2011 – 1/7/2011
11. "Medida no intrusiva de la presión interna de las tuberías mediante redes de Bragg", URSI'11 - XXVI Simposio de la URSI, Leganés (Spain), 7/09/2011 – 9/09/2011
12. "Fiber Bragg gratings technology for the wheel flat detection in high speed railway", IONS 11 – 2012, Paris (France), 22/02/2012 – 25/02/2012
13. "Non-intrusive measurement of the fluid flow in a pipe using fiber Bragg gratings", EUROPT(R)ODE XI – XI Conference on optical chemical sensors and biosensors, Barcelona (Spain), 01/04/2012 – 04/04/2012

14. "Field testing of a low-cost, self-referenced all-fibre polarimetric current sensor for the monitoring of current in the high-speed railway catenary", Photonics Europe – 2012, Brussels, Belgium, 16/04/2012 - 19/04/2012
15. "Temperature and strain effects discrimination into composite materials with embedded dual type I-IA fibre Bragg gratings", ECCM15 - 15th European Conference on Composite Materials, Venice, Italy, 24/06/2012 – 28/06/2012
16. "High visibility phase-sensitive optical time domain reflectometer for distributed sensing of ultrasonic waves", EWOF5, European Workshop on Optical Fibre Sensors, Kraków, Poland 19/05/2013-22/05/2013.
17. "Non-Intrusive Measurement of Internal Pressure and Flow in Pipelines Using Fiber Bragg Gratings", Photonics North 2013 - Ottawa, Canada, June 3-5, 2013.
18. "Several FBGs configuration embedded into laminate for multiple solicitations discrimination", 8ª Reunión Española de Optoelectrónica, OPTOEL'13 10-12 July 2013.
19. "Medida no intrusiva de la presión interna y del caudal de agua en tuberías mediante redes de Bragg", 8ª Reunión Española de Optoelectrónica, OPTOEL'13 10-12 July 2013.
20. "Characterization of a phase-sensitive optical time domain reflectometer used for distributed sensing of vibrations and its performance limits due to modulation instability", 8ª Reunión Española de Optoelectrónica, OPTOEL'13 10-12 July 2013.
21. "Comparison of the use of first and second-order Raman amplification to assist a phase-sensitive optical time domain reflectometer in distributed vibration sensing over 125 km", 23rd International Conference on Optical Fibre Sensors June 2, 2014.
22. "Fiber Sensors for the High Speed Railway Environment", invited paper, Advanced Photonics, July 27-31, 2014, Specialty Optical Fibers & Applications (SOF).
23. "Identification of a "thermodynamic consistent" model of magneto-mechanical hysteresis", May 11-15, 2015, INTERMAG 2015 Beijing, China.
24. "Triaxial Fiber-optic Magnetic Field Sensor for MRI applications", 31 May- 03 June 2016 EWOF5 6, European Workshop on Optical Fibre Sensors.