

Curriculum Vitae

Personal Information

First Name Aldo
Surname Minardo
Date of birth November 18, 1974
Place of birth Napoli - Italia
Office address Department of Engineering – University of Campania Luigi Vanvitelli Via
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Work experience

2008-2015 Assistant Professor in Electronics at the Department of Information Engineering –
Second University of Naples
2003 Visiting scientist at the EPFL Lausanne - Switzerland
2015-2019 Associate Professor of Electronics at the Department of Information Engineering -
Second University of Naples
2019- pres. Full Professor of Electronics at the Dept of Engineering - University of Campania
Luigi Vanvitelli
2018 Visiting Professor at University of Cluj-Napoca (Romania)

Management experience

2014-2019 Member of the Management Committee of the COST Action TU1402 “Quantifying
the value of structural health monitoring” of the European Union

Education and training

March 2000 Degree in Electronic Engineering, summa cum laude, from University of Naples
Federico II
December 2003 Ph.D. in Electronic Engineering - Second University of Naples
November 2000 Professional Engineering Certificate from University of Naples Federico II

Awards

2005 Best Doctoral Thesis Award in Optoelectronics” from EEE/LEOS as the Author of
the Best Ph.D. Thesis in Optoelectronics in Italy for 2003-2004.
2017 Outstanding Reviewer – Optical Society of America

Academic services

2012-2016	Member of the Research Doctorate Council in Electronic Engineering - Second University of Naples
2017-pres.	Member of the Research Doctorate Council in Information and Industrial Engineering – University of Campania Luigi Vanvitelli
2013-pres	Member of examination boards for the appointment of assistant professors in Italian Universities and Italian Research Council
2016	Member of the jury for Ph.D. thesis defense at Scuola Superiore Sant'Anna - Pisa - Italy
2018	Member of the jury for Ph.D. thesis defense at University Parthenope
2018	Member of the jury for Ph.D. thesis defense at University of Sannio
2019	Member of the jury for Ph.D. thesis defense at University of Campania <i>Luigi Vanvitelli</i>
2019	Member of the jury for Ph.D. thesis defense at Public University of Navarra - Pamplona –Spain

Editorial services

2015-2018	Member of Editorial Board of Journal of Sensors (ISSN1687-725X)
2015-pres.	Member of Editorial Board of Structural Monitoring and Maintenance (ISSN 2288- 6605)
2018-pres.	Member of Editorial Board of Sensors (1424-8220)
2015	Member of the Technical Committee of the National Conference Fotonica2015 – Turin - Italy
2016	Member of the Technical Committee of the International Conference OSA “6th Asia Pacific Optical Sensors” – Shanghai - China
2016	Member of the Technical Committee of the National Conference Fotonica2016 – Rome - Italy
2017	Member of the Technical Committee of the National Conference Fotonica2017 – Padova - Italy
2018	Member of the Technical Committee of the National Conference Fotonica2018 – Lecce - Italy
2019	General Chair of the 7 th International Symposium on Sensor Science 9–11 May 2019, Naples, Italy

Funded researches

2010	Local scientific coordinator of FP7 Project FOSAS (GA n. 255865) funded by European Union
2016-2019	Scientific coordinator of H2020 Project BRIDAS (GA n. 717064) funded by European Union
2016	Scientific coordinator of a research contract funded by MEDINOK - Italy
2018	Scientific coordinator of a research contract funded by MEDINOK - Italy
2018	Scientific coordinator of a research contract funded by NEXT GEOSOLUTIONS - Italy
2019-pres	Scientific coordinator of a research contract funded by MEDINOK – Italy

National and international patents

- 2006 R. Bernini, A. Minardo, L. Zeni, “Metodo di misura di profilo di shift Brillouin in fibra ottica basato sulla demodulazione ottica dei segnali, e relativo apparato” N. RM2006A000302
- 2007 R. Bernini, A. Minardo, L. Zeni, “Method for measuring the Brillouin shift distribution along optical fiber based on the optical demodulation of the signals, and relevant apparatus”, European Patent EP1865289
- 2008 R. Bernini, A. Minardo, L. Zeni, “Metodo di misura di deformazioni dinamiche in fibra ottica basato sullo scattering di Brillouin tra due impulsi ottici, e relativo apparato”, N. RM2008A626
- 2009 R. Bernini, A. Minardo, L. Zeni, “Method for measuring the Brillouin shift distribution along optical fiber based on the optical demodulation of the signals, and relevant apparatus”, US PATENT no. 7515273
- 2011 R. Bernini, A. Minardo, L. Zeni “Metodo di ricostruzione del profilo di shift Brillouin in fibra ottica a partire da misure di scattering di Brillouin eseguite nel dominio della frequenza”, N. RM2011A000525 Second University of Naples

Third Mission activities

- 2013 Founder of the Spinoff Company OPTOSENSING

Reviewing activities

Research projects reviewing

- 2013 Italian Ministry of University and Research projects
- 2014-2018 Swiss National Science Foundation (SNSF) projects
- 2015 Università degli studi di Roma Tor Vergata projects
- 2016 Polish Academy of Science
- 2019 Research Grants Council (RGC) - Hong Kong

Journals peer reviewing

2001-pres. Revisore per: Optics Letters, Chinese Optics Letters, Optics Express, Journal of the Optical Society of America B, IEEE Journal of Lightwave Technology, IEEE Photonics Technology Letters, Sensor and Actuators A, IEEE Sensors Journal, IEEE Photonics Journal, Measurement Science and Technology, Applied Physics B, Research Letters in Optics, Lasers in Engineering, Journal of Optics, Measurement, Optics & Laser Technology, New Journal of Physics, Nondestructive Testing and Evaluation, Journal of Zhejiang University-SCIENCE A, Journal of Visualized Experiments, Experimental Mechanics, Sensors, Journal of Selected Topics in Quantum Electronics, Applied Optics, Physical Science International Journal, Applied Sciences, IEEE Access.

Reviewer Boards

- 2017-pres. Member of the Reviewer's Board of the Italian Ministry of University and Research

PhD Thesis

- 2013 External Reviewer for University of Alcalá – Spain

2014 External Reviewer for Public University of Navarra – Spain
2017-2018 External Reviewer for University Parthenope – Italy Parthenope – Italia

Research activity

2001-pres. Optoelectronic integrated devices and biosensors
2001-pres. Optical fiber distributed sensors
2019-pres. Optical fiber acoustic sensors

Teaching activity

2005-pres. Digital Electronics at University of Campania *Luigi Vanvitelli*
2016-pres. Sensors and devices for biomedical applications at University of Campania *Luigi Vanvitelli*

International collaborations

2004-pres. Ecole Polytechnique Fédérale de Lausanne, Switzerland
2007-pres. Tel-Aviv University, Tel-Aviv, Israel
2008-pres. Wroclaw University of Technology, Poland
2010-pres. Military University, Warsaw, Poland
2010-pres. Public University of Navarra – Pamplona - Spain
2014-pres. University of Cantabria - Santander – Spain
2016-pres. Nanjing University – Nanjing - P. R. China

National collaborations

2001-pres. National Research Council – Institute for Electromagnetic Sensing of the Environment (CNR-IREA)
2006-pres. Istituto Nazionale di Geofisica e Vulcanologia - Italy

Scientific publications

2001-pres. 77 papers in international journals, 3 international book chapters, 79 international conferences proceedings, 33 national conference proceedings.

Scientific qualification (according to SCOPUS)

2001-pres. H-Index: 23; Citations: 1578; Documents: 129

Publication list:

- International Journals

AI1 R. Bernini, L. Crocco, A. Minardo, F. Soldovieri, L. Zeni, "Frequency-domain approach to distributed fiber-optic Brillouin sensing", *Opt. Lett.*, vol. 27, no. 5, pp. 288-290, Mar 2002.

AI2 R. Bernini, A. Minardo, L. Zeni, "Reconstruction technique for stimulated Brillouin scattering distributed fiber-optic sensors", *Opt. Eng.*, vol. 41, no. 9, pp. 2186-2194, Sept 2002.

AI3 R. Bernini, L. Crocco, A. Minardo, F. Soldovieri, L. Zeni, "All Frequency Domain Distributed Fiber-Optic Brillouin Sensing", *IEEE Sens. J.*, vol. 3, no. 1, pp. 36-43, Feb 2003.

AI4 R. Bernini, A. Minardo, L. Zeni, "Accuracy enhancement in Brillouin distributed fiber-optic temperature sensors using signal processing techniques", *IEEE Photonic. Tech. L.*, vol. 16, no. 4, pp. 1143-1145, Apr 2004.

AI5 R. Bernini, A. Minardo, L. Zeni, "Stimulated Brillouin scattering frequency-domain analysis in a single-mode optical fiber for distributed sensing", *Opt. Lett.*, vol. 29, no. 17, pp. 1977-1979, Sept 2004.

AI6 A. Minardo, A. Cusano, R. Bernini, L. Zeni, M. Giordano, "Response of fiber Bragg gratings to longitudinal ultrasonic waves", *IEEE Trans. Ultrason. Ferroelectr. Freq. Control*, vol. 52, no. 2, pp. 304-312, Feb 2005.

AI7 A. Minardo, R. Bernini, L. Zeni, L. Thevenaz, F. Briffod, "A reconstruction technique for long-range stimulated Brillouin scattering distributed fiber-optic sensors: experimental results", *Meas. Sci. Technol.*, vol. 16, pp. 900-908, Feb 2005.

AI8 R. Bernini, A. Minardo, L. Zeni, "Distributed fiber-optic frequency-domain Brillouin sensing", *Sens. Actuator A-Phys.*, vol. 123-124, pp. 337-342, 2005.

AI9 R. Bernini, M. Fraldi, A. Minardo, V. Minutolo, F. Carannante, L. Nunziante, L. Zeni, "Damage detection in bending beams through Brillouin distributed optic-fibre sensor", *Bridge Structures*, vol. 1, no. 3, pp. 355-363, 2005.

AI10 R. Bernini, A. Minardo, L. Zeni, "An accurate high-resolution technique for distributed sensing based on frequency domain Brillouin scattering", *IEEE Photonic. Technol. L.*, vol. 18, no. 1, pp. 280-282, Jan 2006.

AI11 R. Bernini, M. Fraldi, A. Minardo, V. Minutolo, F. Carannante, L. Nunziante, L. Zeni, "Identification of defects and strain error estimation for bending steel beams using time domain Brillouin distributed optical fiber Sensors", *Smart Mater. Struct.*, vol. 15, pp. 612-622, Mar 2006.

AI12 A. Minardo, R. Bernini, F. Mottola, L. Zeni, "Optimization of metal-clad waveguides for sensitive fluorescence detection", *Optics Express*, vol. 14, no. 8, pp. 3512-3527, Apr 2006.

AI13 A. Minardo, R. Bernini, L. Zeni, "Low distortion Brillouin slow light in optical fibers using AM modulation", *Opt. Express*, vol. 14, no. 13, pp. 5866-5876, Jun 2006.

AI14 R. Bernini, N. Cennamo, A. Minardo, L. Zeni, "Planar waveguides for fluorescence-based biosensing: optimization and analysis", *IEEE Sens. J.*, vol. 6, no. 5, pp. 1218-1226, Oct 2006.

AI15 R. Bernini, A. Minardo, L. Zeni, "Accurate high-resolution fiber-optic distributed strain measurements for structural health monitoring", *Sens. Actuator A-Phys.*, vol. 134, pp. 389-395, 2007.

AI16 R. Bernini, E. De Nuccio, F. Brescia, A. Minardo, L. Zeni, P. M. Sarro, R. Palombo, M. R. Scarfi, "Development and characterization of an integrated silicon micro flow cytometer", *Anal. Bioanal. Chem.*, vol. 386, no. 5, pp. 1267-1272, Nov 2006.

AI17 R. Bernini, A. Minardo, L. Zeni, "Self-demodulated Heterodyne Frequency Domain Distributed Brillouin Fiber Sensor", *IEEE Photonic. Tech. L.*, vol. 19, no. 6, pp. 447-449, Mar 2007.

AI18 R. Bernini, E. De Nuccio, A. Minardo, L. Zeni, "2-D MMI devices based on integrated hollow ARROW waveguides", *IEEE J. Sel. Top. Quantum Electron.*, vol. 13, pp. 194-201, 2007.

- AI19** R. Bernini, A. Minardo, G. V. Persiano, R. Vaccaro, D. Villacci, L. Zeni, 'Dynamic Loading of Overhead Lines by Adaptive Learning Techniques and Distributed Temperature Sensing', IET Gener. Transm. Dis., vol. 1, no. 6, pp. 912-919, Nov 2007
- AI20** A. Minardo, R. Bernini, L. Zeni, "Stimulated Brillouin scattering modeling for high-resolution, time-domain distributed sensing", Opt. Express, vol. 15, no. 16, pp. 10397-10407, 2007.
- AI21** R. Bernini, A. Minardo, L. Zeni, "Vectorial dislocation monitoring of pipelines by use of Brillouin-based fiber-optics sensors", Smart Mater. Struct., vol. 17, pp. 015006, 2008.
- AI22** R. Bernini, E. De Nuccio, A. Minardo, L. Zeni, P. M. Sarro, "Liquid-core/liquid-cladding integrated silicon ARROW waveguides", Opt. Comm., vol. 281, no. 8, pp. 2062-2066, 2008.
- AI23** A. Minardo, R. Bernini, W. Urbanczyk, J. Wojcik, N. Gorbatov, M. Tur, L. Zeni, "Stimulated Brillouin scattering in highly-birefringent microstructure fiber: experimental analysis", Opt. Lett., vol. 33, no. 20, pp. 2329-2331, 2008.
- AI24** L. Olivares, E. Damiano, R. Greco, L. Zeni, L. Picarelli, A. Minardo, A. Guida, R. Bernini, "An Instrumented Flume to Investigate the Mechanics of Rainfall-Induced Landslides in Unsaturated Granular Soils", Geotechnical Testing Journal, vol. 32, no. 2, Mar 2009.
- AI25** A. Minardo, R. Bernini, L. Zeni, "Brillouin optical frequency-domain single-ended distributed fiber sensor", IEEE Sens. J., vol. 9, no. 3, pp. 221-222, 2009.
- AI26** A. Minardo, R. Bernini, L. Zeni, "A simple technique for reducing pump depletion in long-range distributed Brillouin fiber sensors", IEEE Sens. J., vol. 9, no. 6, pp. 633-634, 2009.
- AI27** A. Cavallo, C. May, A. Minardo, C. Natale, P. Pagliarulo, S. Pirozzi, "Active vibration control by a smart auxiliary mass damper equipped with a fiber Bragg grating sensor", Sens. Actuator A-Phys., vol. 153, no. 2, pp. 180-186, 2009.
- AI28** R. Bernini, A. Minardo, L. Zeni, "Dynamic strain measurement in optical fibers by stimulated Brillouin scattering", Opt. Lett., vol. 34, no. 17, pp. 2613-2615, Sept 2009.
- AI29** A. Minardo, G. Testa, L. Zeni, R. Bernini, "Theoretical and experimental analysis of Brillouin scattering in single mode optical fiber excited by an intensity- and phase-modulated pump", IEEE J. of Lightw. Technol., vol. 28, no. 2, pp. 193-200, Jan 2010.
- AI30** A. Minardo, R. Bernini, L. Zeni, "Comment on "Slow Light" in stimulated Brillouin scattering: on the influence of the spectral width of pump radiation on the group index"", Optics Expr., vol. 18, no. 2, pp. 1788-1790, 2010.
- AI31** R. Bernini, A. Minardo, G. Testa, L. Zeni, "Dynamic strain measurements on a cantilever beam by stimulated Brillouin scattering", Smart Mater. and Struct., vol. 19, pp. 045024, 2010.
- AI32** A. Zornoza, A. Minardo, R. Bernini, A. Loayssa, L. Zeni, "Pulsing the probe wave to reduce nonlocal effects in Brillouin optical time domain analysis (BOTDA) sensors", IEEE Sens. J., vol. 11, no. 4, pp. 1067, 1068, Apr 2011.
- AI33** R. Bernini, A. Minardo, S. Ciaramella, V. Minutolo, L. Zeni, "Distributed strain measurement along a concrete beam via stimulated Brillouin scattering in optical fibers", International Journal of Geophysics, vol. 2011, Article ID 710941, 5 pages, 2011. doi:10.1155/2011/710941.
- AI34** A. Minardo, R. Bernini, L. Zeni, "Numerical analysis of single pulse and differential pulse-width pair BOTDA systems in the high spatial resolution regime", Optics Expr., vol. 19, no. 20, pp. 19233-19244, Sept 2011.
- AI35** R. Bernini, A. Minardo and L. Zeni, "Long-range distributed Brillouin fiber sensors by use of an unbalanced double sideband probe," Optics Expr., vol. 19, no. 24, pp. 23845-23856, Nov 2011.
- AI36** A. Minardo, R. Bernini, L. Amato, L. Zeni, "Bridge monitoring using Brillouin fiber-optic sensors", IEEE Sens. J., vol. 12, no. 1, pp. 145-150, Jan 2012.
- AI37** R. Bernini, A. Minardo, L. Zeni, "Distributed sensing at cm-scale spatial resolution by BOFDA: measurements and signal processing," IEEE Photon. J., vol. 4, no. 1, pp. 48-56, Feb 2012.

- AI38** A. Cipullo, G. Gruca, K. Heeck, F. De Filippis, D. Iannuzzi, A. Minardo, L. Zeni, “*Numerical and experimental study of a ferrule-top cantilever optical fiber sensor applied to low speed air flow velocity measurements*”, *Sens. Actuator A-Phys.*, vol. 178, pp. 17-25, May 2012.
- AI39** A. Minardo, R. Bernini, L. Zeni, “*Spatial resolution enhancement in pre-activated BOTDA schemes by numerical processing*,” *IEEE Photon. Technol. L.*, vol. 24, no. 12, pp. 1003-1005, Jun 2012.
- AI40** A. Minardo, R. Bernini, L. Zeni, “*Differential Techniques for High-Resolution BOTDA: An Analytical Approach*,” *IEEE Photon. Technol. L.*, vol. 24, no. 15, pp. 1295-1297, Aug 2012.
- AI41** A. Minardo, G. Persichetti, G. Testa, L. Zeni, R. Bernini, “*Long term structural health monitoring by Brillouin fiber-optic sensing: a real case*”, *Journal of Geophysics and Engineering*, vol. 9, pp. S64-S69, Aug 2012.
- AI42** N. Jimenez–Redondo, N. Bosso, L. Zeni, A. Minardo, F. Schubert, F. Heinicke, A. Simroth, “*Automated and Cost-Effective Maintenance for Railway (ACEM–Rail)*”, *Procedia - Social and Behavioral Sciences*, vol. 48, pp. 1058-1067, ISSN 1877-0428, 10.1016/j.sbspro.2012.06.1082, 2012.
- AI43** A. Minardo, L. Zeni, R. Bernini, “*High-spatial and spectral resolution time-domain Brillouin distributed sensing by use of two frequency-shifted optical beam pairs*”, *IEEE Photon. J.*, vol. 4, no. 5, pp. 1900-1908, Oct 2012.
- AI44** A. Minardo, A. Coscetta, S. Pirozzi, R. Bernini, L. Zeni, “*Modal analysis of a cantilever beam by use of Brillouin based distributed dynamic strain measurements*”, *Smart Mater. Struct.*, 21, 125022, 2012, Nov 2012.
- AI45** A. Minardo, R. Bernini, L. Zeni, “*Limitations and strategies to improve measurement accuracy in DPP-BOTDA sensing*”, *Appl. Opt.*, vol. 52, no. 13, pp. 3020-3026, 2013.
- AI46** A. Minardo, G. Porcaro, D. Giannetta, R. Bernini, L. Zeni, “*Real-time monitoring of railway traffic using slope-assisted Brillouin distributed sensors*”, *Appl. Opt.*, vol. 52, pp. 3770-3776, 2013.
- AI47** A. Minardo, R. Bernini, L. Zeni “*Bend-induced Brillouin frequency shift variation in a single-mode fiber*”, *IEEE Photonic. Technol. L.*, vol. 25, no. 23, pp. 2362-2364, 2013.
- AI48** A. Minardo, A. Coscetta, S. Pirozzi, R. Bernini, L. Zeni, “*Experimental modal analysis of an aluminum rectangular plate by use of the slope-assisted BOTDA method*”, *Smart Mater. Struct.*, vol. 22, 125035, 2013.
- AI49** L. Zeni, A. Minardo, G. Porcaro, D. Giannetta, R. Bernini, “*Monitoring railways with optical fibers*”, *SPIE Newsroom* (December 2013). Published Online: December 2, 2013. doi: 10.1117/2.1201311.005246.
- AI50** A. Minardo, R. Bernini, L. Zeni, “*Distributed temperature sensing in polymer optical fiber by BOFDA*”, *IEEE Photonic. Technol. L.*, vol. 26, no. 4, pp. 387-390, Feb 2014.
- AI51** A. Minardo, A. Coscetta, L. Zeni, R. Bernini “*High-spatial-resolution DPP-BOTDA by real-time balanced detection*,” *IEEE Photonic. Technol. L.*, vol. 26, no. 12, pp. 1251-1254, Jun 2014.
- AI52** A. Minardo, R. Bernini, L. Zeni, “*Experimental and numerical study on stimulated Brillouin scattering in a graded-index multimode fiber*”, *Opt. Express*, vol. 22, no. 14, pp. 17480-17489, Jul 2014.
- AI53** A. Minardo, A. Coscetta, G. Porcaro, D. Giannetta, R. Bernini, L. Zeni, “*Distributed optical fiber sensors for integrated monitoring of railway infrastructures*”, *Structural Monitoring and Maintenance*, vol. 1, no. 2, pp. 173-182, 2014, DOI: 10.12989/smm.2014.1.2.173, 2014.
- AI54** A. Minardo, A. Coscetta, R. Bernini, R. Ruiz-Lombera, J. Mirapeix Serrano, J. Miguel Lopez-Higuera, and L. Zeni, “*Structural damage identification in an aluminum composite plate by Brillouin sensing*”, *IEEE Sens. J.*, vol. 15, no. 2, pp. 659-660, Feb 2015.
- AI55** L. Zeni, L. Picarelli, B. Avolio, A. Coscetta, R. Papa, G. Zeni, C. Di Maio, R. Vassallo, A. Minardo, “*Brillouin Optical Time Domain Analysis for Geotechnical Monitoring*”, *Journal of Rock Mechanics and Geotechnical Engineering*, vol. 7, pp. 458-462, May 2015.
- AI56** E. Damiano, L. Olivares, R. Greco, A. Minardo, L. Zeni, L. Picarelli, “*Performance of Slope Behaviour Indicators in Unsaturated Pyroclastic Soils*”, *Journal of Mountain Science*, vol. 12, no. 6, pp. 1434-1447, 2015.

- AI57** A. Minardo, R. Bernini, L. Zeni, “*Analysis of SNR penalty in Brillouin Optical Time-Domain Analysis sensors induced by laser source phase noise*”, J. Opt., vol. 18, no. 2, 025601, Feb 2016.
- AI58** A. Minardo, A. Coscetta, R. Bernini, L. Zeni, “*Heterodyne Slope-Assisted Brillouin Optical Time-Domain Analysis for dynamic strain measurements*”, J. Opt., vol. 18, no. 2, 025606, Feb 2016.
- AI59** A. Minardo, A. Coscetta, S. Pirozzi, L. Zeni, “*Brillouin Optical Time Domain Analysis Sensor for Active Vibration Control of a Cantilever Beam*,” Journal of Sensors, vol. 2016, Article ID 1351378, 6 pages, 2016. doi:10.1155/2016/1351378.
- AI60** S. Carlino, M. Mirabile, C. Troise, M. Sacchi, L. Zeni, A. Minardo, M. Caccavale, V. Darányi, G. De Natale, “*Distributed-Temperature-Sensing Using Optical Methods: A First Application in the Offshore Area of Campi Flegrei Caldera (Southern Italy) for Volcano Monitoring*,” Remote Sens., vol. 8, no. 8, 674, Aug 2016.
- AI61** A. Minardo, A. Coscetta, R. Bernini, L. Zeni, “*Brillouin Optical Time Domain Analysis in silica fibers at 850 nm wavelength*”, IEEE Photonic. Technol. L., vol. 28, no. 22, pp. 2577-2580, Nov 2016.
- AI62** A. Minardo, E. Catalano, L. Zeni, “*Cost-effective method for fast Brillouin optical time-domain analysis*,” Opt. Express, vol. 24, 25424-25431, 2016.
- AI63** A. Minardo, R. Bernini, Ruben R.-Lombera, J. Mirapeix, J. M. Lopez-Higuera, L. Zeni, “*Proposal of Brillouin optical frequency-domain reflectometry (BOFDR)*”, Opt. Express, vol. 24, pp. 29994-30001, 2016.
- AI64** E. Damiano, B. Avolio, A. Minardo, L. Olivares, L. Picarelli, and L. Zeni, “*A Laboratory Study on the Use of Optical Fibers for Early Detection of Pre-Failure Slope Movements in Shallow Granular Soil Deposits*,” Geotechnical Testing Journal, <https://doi.org/10.1520/GTJ20160107>. ISSN 0149-6115, 2017.
- AI65** A. Coscetta, A. Minardo, L. Olivares, M. Mirabile, M. Damiano, M. Longo, L. Zeni, “*Wind turbine blade monitoring with Brillouin-based fiber optic sensors*,” Journal of Sensors, vol. 2017, Article ID 9175342, 5 pages, 2017. doi:10.1155/2017/9175342.
- AI66** A. Minardo, A. Coscetta, E. Catalano, L. Zeni, “*Simultaneous strain and temperature measurements by dual wavelength Brillouin sensors*,” IEEE Sens. J., vol. 17, no. 12, pp. 3714-3719, Apr 2017.
- AI67** L. Zeni, A. Coscetta, E. Catalano, A. Minardo, “*High-pass filtering for accurate reconstruction of the Brillouin Frequency Shift profile from Brillouin Optical Frequency Domain Analysis data*,” IEEE Sens. J., vol. 18, no. 1, pp. 185-192, Jan 2018.
- AI68** R. Bernini, G. Persichetti, E. Catalano, L. Zeni, A. Minardo, “*Refractive index sensing by Brillouin scattering in side-polished optical fibers*,” Opt. Lett., vol. 43, no. 10, pp. 2280-2283, 2018.
- AI69** F. Cascetta, A. Lo Schiavo, A. Minardo, M. Musto, G. Rotondo, A. Calcagni, “*Analysis of the energy extracted by a harvester based on a piezoelectric tile*,” Curr. Appl. Phys., vol. 18, pp. 905-911, May 2018.
- AI70** N. Cennamo, L. Zeni, E. Catalano, F. Arcadio and A. Minardo, “*Refractive index sensing through surface plasmon resonance in light-diffusing fibers*,” Applied Sciences, vol. 8, no. 7, 1172, Jul 2018.
- AI71** A. Minardo, E. Catalano, A. Coscetta, G. Zeni, L. Zhang, C. Di Maio, R. Vassallo, R. Coviello, G. Macchia, L. Picarelli, L. Zeni, “*Distributed Fiber Optic Sensors for the Monitoring of a Tunnel Crossing a Landslide*,” Remote Sens., vol. 10, 1291, Aug 2018.
- AI72** R. Agliata, T. A. Bogaard, R. Greco, A. Minardo, L. Mollo and S. C. Steele-Dunne, “*Non-invasive water content estimation in a tuff wall by DTS*”, Constr. Build. Mater., vol. 197, no. 10, pp. 821-829, Feb 2019.
- AI73** R. Darban, E. Damiano, A. Minardo, L. Olivares, L. Picarelli, L. Zeni, “*An experimental investigation on the progressive failure of unsaturated granular slopes*,” Geosciences, vol.9, 63, 2019.
- AI74** R. Somma, C. Troise, L. Zeni, A. Minardo, A. Fedele, M. Mirabile, G. De Natale, “*Long-term monitoring with fiber optic distributed temperature sensing at Campi Flegrei: the Campi Flegrei Deep Drilling project*”, Sensors, vol. 19, 1009, Feb. 2019.
- AI75** L. Zhang, B. Shi, L. Zeni, A. Minardo, H. Zhu, L. Jia, “*An Fiber Bragg Grating-based monitoring system for slope deformation study in geotechnical centrifuge*”, Sensors, vol. 19, no. 7, 1591, 2019.

AI76 N. Cennamo, L. Zeni, F. Arcadio, E. Catalano, A. Minardo, “A Novel Approach to Realizing Low-Cost Plasmonic Optical Fiber Sensors: Light-Diffusing Fibers Covered by Thin Metal Films,” *Fibers*, vol. 7, 34, 2019.

AI77 A. Coscetta, E. Catalano, E. Cerri, L. Zeni, A. Minardo, “High-Pass Filtering for accuracy enhancement in dark-pulse Brillouin Optical Time Domain Analysis” *IEEE Photonics Technology Letters*, vol. 31, no. 15, pp. 1213-126, 2019.

AI78 A. Coscetta, E. Catalano, E. Cerri, L. Zeni, A. Minardo, “A dual-wavelength scheme for Brillouin temperature sensing in optically heated Co^{2+} -doped fibers,” accepted for publication in *IEEE Sensors Journal*.

- Book Chapters

CL1 R. Bernini, A. Minardo, L. Zeni, “Optical fiber sensors based on stimulated Brillouin scattering” in *Encyclopaedia of Sensors* edited by C. A. Grimes, E. C. Dickey and M. V. Pishko, ISBN 1-58883-056-X, vol. 7, pp. 183-197 (2006).

CL2 R. Bernini, A. Minardo, L. Zeni, “Distributed optical fiber sensors”, in the book “*Introduction to Optoelectronic Sensors*” edited by Righini, Tajani, Cutolo, ISBN: 9812834125, Ed. World Scientific, pp. 77-94, (2008).

CL3 G. De Maria, A. Minardo, C. Natale, S. Pirozzi, L. Zeni, “*Optical fibres in aeronautics, robotics and civil engineering*”, in the book "Optical Fibre, New Developments", ISBN 978-953-7619-50-3, pp. 17-33 (2009).

- International Conferences

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