Posters of session 1 « Physical, mechanical & radiation sensing »

Poster n°	Title	First author
1	Resonant fiber Bragg grating (FBG) force/strain sensor	E. Ashkenazy, Tel Aviv University
2	The use of ranged-resolved interferometry for multi-parameter sensing in a wind tunnel	J. Barrington, Cranfield University
3	Fiber optic hydrophones for underwater monitoring	F. A. Bruno, Università del Sannio - CeRICT
4	Temperature and RH response of polymer CYTOP FBG treated by gamma radiation	I. Chapalo, University of Mons
5	Expanding the sensing capabilities of forward Brillouin scattering in optical fibers by exploiting the differential response of radial and torsional-radial acoustic modes	L. A. Sanchez, Universidad de Valencia
6	A multiplexed FBG based sensor platform for flow and temperature measurements in the maritime environment	A. Dzipalski, Heriot Watt University
7	Cantilever optical fibre sensor for compression therapy applications.	J. Ell, University of Nottingham
8	Global damage index of aerospace-grade CFRP subcomponents with FBG-based sensors	S. Goossens, Vrije Universiteit Brussel
9	Response of long period gratings written in B/Ge and P-doped optical fibers to gamma radiation	F. Esposito, University of Naples Parthenope
10	Fiber optic gyroscope interrogated with three multiplexed broadened semiconductor lasers	H. Jia, Edward L. Ginzton Laboratory

11	Monitoring the technical conditions of railway vehicles during operation	D. Kacik, University of Zilina
12	Optical losses assessment for optical fiber-based strain sensing at cryogenic temperatures	K. Kandemir, CERN
13	Radiation impact on strain transfer efficiency of bonded FBGs	Ch. Landreau, Laboratoire Hubert Curien
14	Fibre Bragg gratings for fibre reinforced polymer Monitorization	D. G. Maldonado-Hurtado, Universitat Politècnica de València
15	Radiation effects on Brillouin-based sensors: temperature and strain discrimination capability using telecom-grade optical fibers	J. Perrot, Laboratoire Hubert Curien
16	Concrete curing monitoring using polymer optical fibre Bragg grating sensors	A. Pospori, Cyprus University of Technology
17	Gait monitoring system based on plastic optical fiber integrated with smartphone	J. Chen, Beijing Normal University
18	Fiber-optic Mach-Zehnder temperature sensor based on dual core fiber	S. Ma, Shantou University
19	Multicore fiber sensors for strain measurement towards traffic monitoring	A. Sanchez-Gonzalez, Public University of Navarre
20	A fibre-optical temperature sensor based on thermoresponsive polymer	R. Schilling, Bundesanstalt für Materialforschung und -prüfung
21	Lateral force sensing based on fibre Bragg gratings and Gaussian regression process	R. Fiorin, Universidad Tecnica Federico Santa Maria
22	Long-term stability study of fiber Bragg grating sensors integrated into a lithium-ion Pouch Cell	J. Unterkofler, Graz University of Technology
23	Vertical axis wind turbine monitoring using FBG sensors	B. Van Esbeen, University of Mons
24	Shape sensing with a smart elastic textile band containing pre-strained FBG sensors	B. Van Esbeen, University of Mons

25	A probe-type fiber-optic ultraviolet photodetector	Q. Yue, Shenzhen University
26	Partial discharge detection in HV and MV terminations with fiber optic sensors	A. Zadeh, Optics11
27	Equivalent phase noise analysis in broadband source sensing system using a 3×3 coupler	H. Li, Institute of Semiconductors, Chinese Academy of Sciences
28	Monitoring high-pressure silicone oil flow using fibre Bragg gratings for fast manufacturing of composite materials	Z. Lin, Guangzhou University
29	Ice detection for vibrating beams based on fibre Bragg grating sensors	J. Cheng, Guangzhou University
30	Response of differently inscribed fiber Bragg gratings to very high doses of ionizing radiation	S. Zilberman, Soreq NRC

Posters of session 2 « (Bio)chemical, medical & environmental sensing »

Poster n°	Title	First author
1	Optical fibre catheter for gastroesophageal pressure, pH and bile measurements	F. Baldini, Research National Council
2	Simulation of a temperature-compensated palladium-based fiber optic hydrogen sensor and comparison with measurements	F. Buchfellner, Munich University of Applied Sciences
3	Opto-electrochemical sensing of C-reactive protein using optical fiber lossy-mode resonance sensor	D. Burnat, Warsaw University of Technology
4	Plasmonic plastic optical fiber chips combined with artificial intelligence to identify water or alcoholic solutions	F. Arcadio, University of Campania Luigi Vanvitelli
5	Polarization dependent properties of graphene oxide-coated tilted fiber Bragg gratings for refractometry	K. Chah, University of Mons
6	Investigations on cladded U-shaped fiber optic sensors for refractive index measurements	R. Kumar Chaudhary, Indian Institute of Technology, Madras
7	Plasmonic optical fiber for insulin detection through phase analysis	H. Fasseaux, University of Mons

8	Microcavity in-line Mach-Zehnder interferometer and electrochemical assays combined for cell monitoring system	T. Gabler, Warsaw University of Technology
9	Lab-on-chip design for multiparameter phytoplankton analysis	C. Gómez, Instituto de Investigación Sanitaria Valdecilla
10	Cryogenic liquid level sensor based on long period grating	V. Hernandez-Ambato, Universitat Politècnica de València
11	Does the refractive index sensitivity matter the most? Charge of biological material and performance of label-free biosensors	M. Janik, Warsaw University of Technology
12	Tilted optical fiber Bragg grating with fluorinated graphene-like overlayer for Ammonia detection	E. Grantzioti, Foundation for Research and Technology-Hellas (FORTH)
13	Plasmonic tilted FBG biosensor read-out with a 512-pixel spectrometer	M. Lobry, University of Mons
14	Plasmonic optical fiber grating sensors: past, present and future	M. Loyez, University of Mons
15	Unclad optical fiber tips for plasmonic biosensing of heart failure biomarker	A. S. Matos Assunção, University of Aveiro
16	Dual parameters discrimination comparison between two types of optical fiber sensors during the operation of a Li-ion battery	Lucca Matuck, University of Aveiro
17	Novel side-polished balloon shaped heterocore structured plastic optical fibre ethanol sensor	S. Farheen Memon, University of Limerick
18	Optical fiber pressure sensing for biomedical applications using frequency selective technique	M. Anupamratanshanker Nagar, Politecnico di Torino
19	Optimising the design, cost, and performance of a distributed humidity fibre sensor	T. Neves, Fibersight - Smart Sensing Solutions
20	Erbium-doped fiber ring cavity for the measurement of refractive index variations	R. A. Perez-Herrera, Universidad Pública de Navarra
21	Optical fiber sensor for the vapor phase detection of Trifluoroethanol	V. Sarakatsianos, University of Crete
22	Lab-on-fiber optrodes based on all-dielectric fluorescence enhancing metasurfaces	H. Alhalaby, University of Sannio
23	Ultrasensitive fiber refractometer based on C-shaped fiber and Vernier effect	Y. Zhang, Shantou University

24	High sensitivity lab-on-fiber biosensing platform assisted by oriented antibody immobilization strategy	S. Ucci, University of Sannio
25	Optical fiber probe for prostate cancer screening: ex vivo study	A. Iele, University of Sannio
26	A facile chemical synthesis route to fabricate gold films coated fiber optic biosensors	Udiptya Saha, Indian Institute of Technology Madras
27	SERS optrode for human thyroglobulin detection in liquid biopsy	Sara Spaziani, University of Sannio
28	A Gold/MXene/MOF composite based optical fiber biosensor for haemoglobin detection	P. Thawany, CSIR-CSIO
29	Numerical model to optimize the design of plasmonic optical fiber tips towards highly sensitive biosensing	M. Vidal, University of Aveiro
30	Simplification of data extraction and measurements from tilted FBG surface plasmon resonance sensors	E. Villatoro, Carleton University
31	Investigation of polarization dependence on gold-coated multicore fiber interferometer	T. Zhu, University of Mons
32	Fiber-optic nanomechanical probe for single-cell mechanics analysis	C. Liao, Shenzhen University

Posters of session 3 « (Quasi-)distributed sensing & sensor networks »

Poster n°	Title	First author
1	Extended range of repeaterless distributed acoustic sensing with coherent OTDR interrogators utilising optical amplification	A. Allousch, LUNA Innovations
2	Ultrasonic long range underwater acoustic sensing: going beyond the standard pulse repetition rate	N. Arbel, Tel Aviv University
3	Distributed Brillouin optical fiber temperature sensor for groundwater flow measurement	M. Romanet, CNRS/FEMTO-ST Institute
4	Nonlinear amplification in φ-OTDR for distributed acoustic sensing	L. Rossi, Consiglio Nazionale delle Ricerche
5	One-year analysis of road condition using FBG arrays	I. Corera, Public University of Navarre

6	Fiber signature-domain multiplexing for high-speed shape sensing	M. Cappelletti, Università degli Studi di Padova
7	Complete characterization of multipass gas cell using a high sensitive optical frequency-domain reflectometry	S. Chin, CSEM SA
8	Estimation of sealing performance with quasi-distributed strain sensing in spiral wound gaskets	B. Cloostermans, Vrije Universiteit Brussel
9	Polarization-sensitive reflectometry-based plasma current measurement in ITER: influence of operating temperature	P. Dandu, University of Mons
10	Amplified space-time coding for ultra-long-distance Raman distributed temperature sensing	S. Faralli, Scuola Superiore Sant'Anna
11	Impact of non-Lorentzian laser phase noise on ϕ-OTDR performance	Ch. Dorize, Nokia Bell Labs
12	Towards shape-sensing using time-expanded ΦOTDR	C. Escobar-Vera, Universidad de Alcalá
13	Coherent combination method applied to distributed acoustic sensing over deployed multicore fiber	D. Orsuti, University of Padova
14	Monitoring mining induced seismicity using optical fibre sensors during mine exploitation	Kenny Hey Tow, Rise Research Institutes of Sweden
15	Power cable simulation of failure through temperature monitoring of optical fibres with a state-of-the-art distributed sensing instrument	A. Ioannou, Cyprus University of Technology
16	POF-based digital I-OFDR for strain detection in road construction	K. Königsbauer, Bundesanstalt für Materialforschung und –prüfung
17	Refractory lining health monitoring based on Raman optical time domain reflectometry	M. Lindblom, RISE Research Institutes of Sweden
18	Dual functionality of wavelength scanning coherent optical time domain reflectometer	X. Lu, Bundesanstalt für Materialforschung und –prüfung
19	Trackbed behavior analysis based on distributed acoustic sensor	A. Masoudi, University of Southampton
20	Single-photon detector based long-distance Brillouin optical time domain reflectometry	M. Romanet, Femto-ST
21	Damage detection in an aluminum plate through a phi-OTDR sensor and support vector machines	R. Zahoor, Universita' della Campania

22	Distributed measurement of modal birefringence in a few-mode fiber based on stimulated Brillouin scattering	E. Catalano, Universita' della Campania
23	Distributed cryogenic temperature sensing through Brillouin optical frequency-domain analysis	A. Minardo, Universita' della Campania
24	Correlation of El Niño 2014-2016 Episode with DTS Data	F. Ravet, Gradesens
25	From the physics to the field, using Rayleigh, Brillouin and Raman fiber optic distributed sensing for condition and environment monitoring	E. Rochat, Omnisens SA
26	Measurement of polarization fading sensitivity in FBGs-assisted phase-OTDR	F. Sandah, University of Mons
27	ϕgOTDR utilizing geometric phase	S. Shaheen, German Federal Institute for Materials Research
28	Sub-centimeter spatial resolution dynamic strain sensing using time-expanded ϕOTDR	M. Soriano-Amat, Universidad de Alcalá
29	Dynamic sensing of large arrays of draw tower gratings using code division multiplexing	M. Götten, FBGS International
30	Noise analysis of coherent and non-coherent detection in Φ-OTDR systems with chirped pulses	P. J. Vidal-Moreno, University of Alcala
31	Distributed fibre optic sensing during different anchor pullout tests	M. Winkler, Graz University of Technology
32	Study on the possibility of Φ-OTDR sensing in hollow-core fibres	Y. Yang, EPFL GFO

Posters of session 4 « New concepts & waveguide structures and material for sensing »

Poster n°	Title	First author
1	Extrinsic fiber Fabry-Perot interferometer for measuring the refractive index of waveguides inscribed in glass	M. Alonso-Murias, Centro de Investigaciones en Óptica, A.C.
2	A novel sensing technology based on intensity interrogation of orbital angular momentum mode	Z. Bai, Shenzhen University

3	Packaged sapphire fiber Bragg gratings ability to withstand temperature up to 1500°C	T. Blanchet, CEA LIST
4	Spun fibres: a quasi circularly birefringent medium	A. Gabriela Correa-Mena, EPFL
5	High temperature measurements using femtosecond written FBGs of a titanium substrate under intense heat flow	E. Deliancourt, Université Paris-Saclay
6	Long period grating fibre operating in visible range coated with porphyrin based thin film as an ammonia aqueous sensor	S. Erdody, University of Nottingham
7	Magnetic field sensing using laser written birefringent scattering medium	P. Falak, University of Southampton
8	Draw tower furnace diagnostics applying a sapphire fiber Bragg grating probe	T. Habisreuther, Leibniz Institut für Photonische Technologien
9	High-temperature-resistant vector vibration sensor based on a ring cavity laser and a multicore fiber Bragg grating	X. Xu, Shenzhen University
10	Temperature sensor based on nanoparticles deposition in plastic optical fiber	A. Fresno Hernández, Carlos III University of Madrid
11	Bragg grating inscription in BDK-doped PMMA optical fiber using femtosecond laser point-by-point technique	J. Li, Shantou University
12	Bragg grating inscription in BDK-doped PMMA optical fiber using 266 nm pulsed laser	W. Liang, Shantou University
13	Generation of lossy mode resonance in uncoated double cladding fiber	S. Choudhary, University of Naples Parthenope
14	Study of all-fiber Mach-Zehnder configuration with mode transition phenomena in double cladding fiber	A. Srivastava, University of Naples Parthenope
15	Fiber optic mirror fabrication using general-purpose metallic pigments	I. Jaso, Public University of Navarre
16	High temperature annealing behavior of femtosecond written FBGs in Ge-doped fused silica optical fibers	A. Lerner, CEA Saclay
17	Method for the interrogation of FBG thermo-hygrometer through full analog circuit	V. Romano Marrazzo, University of Naples Federico II
18	Directional bending monitoring using a multimode elliptical-core fiber and a machine learning algorithm	R. Martínez-Manuel, Centro de Investigaciones en Óptica

19	The smartphone for colorimetry: performance characterization	L. Ciaccheri, CNR - Istituto di Fisica Applicata "Nello Carrara"
20	Spectral properties of selected antiresonant fibers coupled with standard optical fibers by means of polymer microtips	M. Zuchowska, Military University of Technology
21	Aluminum coated fiber optic sensor for enhancing flow rate measurement	A. Rodriguez Rodriguez, Public University of Navarre
22	Tunable erbium-doped fiber ring laser with a polymer micro bottle resonator	A. Rout, Technological University Dublin
23	Multiparameter sensor based on hollow square core optical fiber	J. P. Fidalgo Santos, University of Aveiro
24	Numerical modeling of a novel athermal fiber optic cable	L. Schenato, University of Padova
25	An automated fiber bending machine for large scale fabrication of U-bent fiber optic sensor probes	V.V.R. Sai, Indian Institute of Technology Madras
26	Peak detection of spectrally-overlapped fibre Bragg gratings using an autoencoder convolutional neural network	G. Rudloff, Universidad Tecnica Federico Santa Maria
27	Simultaneous modal phase- and group velocity matching in multiple step-index highly GeO2-doped optical fibers	A. Tishchenko, Vrije Universiteit Brussel
28	Femtosecond laser micro/nano-machining of silica glass planar substrates for the production of Bragg gratings	M. Tunon de Lara, University of Mons
29	Microfluidic flowmeter based on liquid crystal filled nested capillary	Z. Wang, Technological University Dublin
30	Biodegradable and biocompatible microstructured optical fiber made from Poly(D,L-Lactic Acid) (PDLLA)	A. Gierej, Vrije Universiteit Brussel
31	Single-mode helical sapphire fiber Bragg grating for high-temperature sensing	J. He, Shenzhen University