Curriculum vitae

Dati personali

Nome	Luigi
Cognome	Zeni
Data di nascita	Dicembre 02, 1962
Luogo di nascita	Pozzuoli (Napoli) - Italia
Indirizzo ufficio	Dipartimento di Ingegneria - Università della Campania *Luigi Vanvitelli* Via Roma, 29 81031 Aversa
Telefono	+39 081 5010269
Fax	+39 081 5037042
E-mail	luigi.zeni@unicampania.it
Home page	http://www.diii.unina2.it/Persone/ProfessoriOrdinari/Zeni/tabid/155/language/en-US/Default.aspx

Esperienze lavorative

1993-1998	Ricercatore di Elettronica presso il Dipartimento di Ingegneria Elettronica - Università di Napoli Federico II
1994	Visiting scientist presso il DIMES (Delft Institute of Microelectronics and Submicrontechnology) Technical University of Delft -The Netherlands (con borsa di studio CNR)
1998-2006	Professore Associato di Elettronica presso il Dipartimento di Ingegneria dell'Informazione - Seconda Università di Napoli
2006- pres.	Professore Ordinario di Elettronica presso il Dipartimento di Ingegneria - Università della Campania *Luigi Vanvitelli*
2010-2016	Associato di Ricerca presso l'Istituto per il Rilevamento Elettromagnetico dell'Ambiente del CNR - Napoli
2015	Visiting Professor presso l'Università di Cluj-Napoca (Romania)

Attività di Gestione

2000-2012	Vice-Direttore del Dipartimento di Ingegneria dell'Informazione - Seconda Università di Napoli
2008-pres.	Presidente e membro del comitato direttivo del Consorzio di Ricerca su Sistemi di Telesensori Avanzati– CO.RI.S.T.A. (www.corista.eu) – Napoli
2006-2010	Membro del Management Committee dell'azione COST 299 “Optical fibers for new challenges facing the information society” dell'Unione Europea e responsabile del gruppo “Linear and nonlinear distributed measurement”
2010-2014	Membro del Management Committee dell'azione COST TD1001 “Novel and Reliable Optical Fibre Sensor Systems for Future Security and Safety Applications” dell'Unione Europea
2013-2021	Membro del Consiglio di Amministrazione della Università della Campania *Luigi Vanvitelli*
2017-pres.	Delegato del Rettore per l'Area Ricerca e Valutazione per le attività di Trasferimento Tecnologico e Consorzi - Università della Campania *Luigi Vanvitelli*

2018-2023	Coordinatore per l'Area di Ricerca Optoelettronica e Fotonica della Società Italiana di Elettronica (SIE - www.associazione-sie.it)

Studi

Febbraio 1988	Laurea con lode in Ingegneria Elettronica presso l'Università di Napoli Federico II
Settembre 1992	Dottorato di Ricerca in Ingegneria Elettronica e Informatica - Ministero dell'Università e della Ricerca Scientifica
Novembre 1988	Abilitazione all'esercizio della professione di Ingegnere presso Università di Napoli Federico II

Premi

1995	Premio del Consiglio Nazionale delle Ricerche per attività svolte presso la Technical University of Delft – The Netherlands
2003	Best Poster Award - AISEM - Italian Association for Sensors and Microsystems per il contributo "ARROW structures for sensing applications"
2007	Best Poster Award - AISEM - Italian Association for Sensors and Microsystems per il contributo "Characterization of a silicon integrated Micro- flow cytometer"

Attività di servizio

1996-2016	Membro del Collegio dei Docenti del Dottorato in Ingegneria Elettronica e Informatica - Seconda Università di Napoli
2001-pres.	Coordinatore del Laboratorio di Optoelettronica - Seconda Università di Napoli
1996-2006	Delegato per il programma Erasmus/Socrates dell'Unione Europea presso la Seconda Università di Napoli
1998-pres.	Supervisore di 15 studenti di dottorato presso la Seconda Università di Napoli
2002-2004	Membro di commissioni di concorso per ricercatore universitario e professore associato presso università italiane
2004	Membro della commissione esaminatrice per l'attribuzione del Dottorato di Ricerca presso la Technical University of Delft – The Netherlands
2007	Membro della commissione tecnica per l'acquisto di arredi per uffici e aule presso la Seconda Università di Napoli
2008	Membro della commissione esaminatrice per l'attribuzione del Dottorato di Ricerca presso la Facultè Polytechnique de Mons - Belgium
2009-pres.	Presidente del comitato di area in Ingegneria Industriale e dell'Informazione (CAR 09) per la valutazione delle attività di ricerca presso la Seconda Università di Napoli
2009	Membro della commissione esaminatrice per l'attribuzione del Dottorato di Ricerca presso la Scuola Superiore Sant'Anna - Pisa
2011	Membro della commissione esaminatrice per l'attribuzione del Dottorato di Ricerca presso l'Università Mediterranea di Reggio Calabria

2011	Presidente della commissione di collaudo della rete dati in fibra ottica presso la Seconda Università di Napoli
2011-pres.	Supervisore di studenti di dottorato provenienti da: Public University of Navarra - Pamplona –Spain, University of Cantabria - Spain, University of Aveiro - Portugal
2012	Membro della commissione esaminatrice per l'attribuzione del Dottorato di Ricerca presso l'Università di Napoli Federico II
2012	Presidente della commissione esami di stato per l'abilitazione all'esercizio della professione di ingegnere presso la Seconda Università di Napoli
2013	Membro della commissione esaminatrice per l'attribuzione del Dottorato di Ricerca presso la Scuola Superiore Sant'Anna - Pisa
2014	Membro della commissione esaminatrice per l'attribuzione del Dottorato di Ricerca presso la Vrije University of Amsterdam – The Netherlands
2014	Membro della commissione esaminatrice per l'attribuzione del Dottorato di Ricerca presso la Public University of Navarra - Pamplona –Spain
2014	Membro della commissione esaminatrice per l'assunzione di n. 1 unità di personale con il profilo di Ricercatore a Tempo Determinato – (art. 24, comma 3, lettera a - Legge 240/2010) presso l'Università del Sannio
2015	Supervisore di un Visiting Professor proveniente dall'Università di Cluj-Napoca (Romania)
2015-pres.	Supervisore di studenti ERASMUS provenienti dall'Università di Cluj-Napoca (Romania)
2016	Presidente della commissione di concorso per l'assunzione di n. 1 unità di personale con il profilo di Ricercatore a Tempo Determinato presso la Scuola Superiore Sant'Anna - Pisa
2016	Presidente della commissione di concorso per l'assunzione di n. 2 unità di personale con il profilo di Ricercatore, III livello professionale, da assegnare al Dipartimento Ingegneria, ICT e Tecnologie per l'Energia e i Trasporti del Consiglio Nazionale delle Ricerche
2016-pres.	Membro della commissione di conferma nel ruolo di professore ordinario per il settore scientifico-disciplinare ING-INF/01
2017	Membro della commissione esaminatrice per l'assunzione di n. 1 unità di personale con il profilo di Ricercatore a Tempo Determinato – (art. 24, comma 3, lettera b - Legge 240/2010) presso l'Università di Sassari
2017	Membro della commissione esaminatrice del concorso pubblico per la copertura di n. 1 posto a tempo indeterminato della figura professionale di Funzionario tecnico – indirizzo telecomunicazioni – presso la Provincia Autonoma di Trento
2018-2021	Membro della Commissione per l'Abilitazione Scientifica Nazionale (ASN)

Servizi Editoriali

2005-pres.	Membro della Editorial Board di Sensors & Transducers Journal (ISSN 1726- 5479)
2005-pres.	Membro della Editorial Board di Sensors (ISSN 1424-8220)
2006	Membro dello Steering Committee: Bilateral China-Italy Workshop on Photonics for Communication and Sensing, Xi'an –China
2007	Guest Editor del numero speciale "Optical biosensors" per la rivista internazionale "Sensors"
2008	Membro del Comitato Scientifico della First Mediterranean Photonics Conference – Ischia – Italy

2011	Membro of Comitato Scientifico della Conferenza Nazionale Fotonica2011 – Genova
2012	Membro del Technical Program Committee della 2012 IEEE International Power Modulator and High Voltage Conference - San Diego CA - USA
2014	Membro of Comitato Esecutivo della Conferenza Nazionale Fotonica2014 – Napoli
2015	Membro del Comitato Scientifico della International Conference on Sensors Engineering and Electronics Instrumental Advances (SEIA' 2015)
2015-pres.	Membro del Technical Program Committee dell' European Workshop on Optical fiber Sensors (EWOFS)
2017	Co-Chair dell'Academic Committee del 6th International Forum on Opto-electronic Sensor-based Monitoring in Geo-engineering - November 3-5, 2017, Nanjing, China
2017	Guest Editor del numero speciale "Optical Biochemical Sensor Systems and Applications" della rivista "Sensors"
2019	General Chair del 7th International Symposium on Sensor Science 9–11 May 2019, Napoli, Italy
2024	Honorary General Chair di IEEE Sensors Application Symposium July 23-25 Napoli, Italy

Ricerche finanziate

2000	Coordinatore Nazionale di un progetto PRIN finanziato dal Ministero dell'Università e della Ricerca
2001	Coordinatore scientifico di un progetto di ricerca finanziato dall' ENEA
2004	Coordinatore scientifico di un progetto di ricerca finanziato dalla società CITEL
2005	Coordinatore Nazionale di un progetto PRIN finanziato dal Ministero dell'Università e della Ricerca
2005	Coordinatore scientifico di un progetto di ricerca finanziato dalla Regione Campania L.R. 5
2006	Coordinatore scientifico di un progetto di ricerca finanziato dall' INGV
2007	Responsabile scientifico di due progetti di ricerca finanziati dalla Regione Campania L.R. 3.17
2009	Coordinatore scientifico di un progetto di ricerca (PRIST) finanziato dalla Seconda Università di Napoli
2010	Responsabile scientifico del progetto FP7 ACEM-Rail (GA n. 265954) finanziato dall'Unione Europea
2011	Responsabile scientifico di un progetto di ricerca (PON01_01525 - MONICA) finanziato dal Ministero dell'Università e della Ricerca
2012	Coordinatore scientifico di un progetto di ricerca finanziato dalla società DIMMS Control S.p.A. - Italia
2014	Coordinatore scientifico per la Seconda Università di Napoli del contratto di sviluppo SIRENA finanziato dal Ministero dello Sviluppo Economico
2014	Coordinatore scientifico per la Seconda Università di Napoli del contratto di programma WISCH finanziato dalla Regione Campania
2014	Responsabile scientifico di un progetto di ricerca (PON03_00767 - TOP-IN) finanziato dal Ministero dell'Università e della Ricerca

2014	Coordinatore scientifico di due contratti di ricerca finanziati da RSE - Milano
2014	Coordinatore scientifico di un contratto di ricerca finanziato dall'Istituto Nazionale di Astrofisica
2015	Coordinatore scientifico di un contratto di ricerca finanziato dalla RSE - Milano
2015	Coordinatore scientifico di un contratto di ricerca finanziato dalla MEDINOK - Italia
2015	Coordinatore scientifico di un contratto di ricerca finanziato dalla NetGroup – Italia
2017	Responsabile scientifico di un contratto di ricerca finanziato dalla società Copernico – Italia
2018	Responsabile scientifico del progetto di ricerca GEOGRID finanziato dalla Regione Campania
2019	Responsabile scientifico del progetto di ricerca Quick&Smart finanziato dalla Regione Campania
2020	Coordinatore scientifico generale del progetto TRANSDAIRY finanziato dall'Unione Europea nell'ambito del programma ENI CBC Mediterranean Sea Basin - Grant Contract 1640_31082020
2020	Coordinatore scientifico di un contratto di ricerca finanziato dalla RSE – Milano
2020	Coordinatore del progetto #NOACRONYM finanziato dal MISE per la valorizzazione di brevetti di proprietà degli Atenei italiani
2022	Responsabile scientifico locale del progetto di ricerca Targeting miR129 as therapy for Amyotrophic Lateral Sclerosis (PNRR-POC-2022-12375645), finanziato dal Ministero della Salute
2022	Responsabile scientifico locale del progetto di ricerca Anti-PEG antibodies and their pathophysiological role in the personalised management of patients with hemophilia (RF-2021-12374537), finanziato dal Ministero della Salute - BANDO RICERCA FINALIZZATA 2021
2022	Coordinatore scientifico di un contratto di ricerca finanziato dalla RSE – Milano

Brevetti nazionali e internazionali

1991	A. Cutolo, S. Solimeno, L. Zeni, "Analizzatore di stabilità modale per laser pulsati" N. MI9lA001822
1991	A. Cutolo, T. Isernia, R. Pierri, L. Zeni, "Analizzatore di modi trasversi per fasci laser" N.MI9lA002056
2005	A. De Angelis, L. Zeni "Generatore di impulsi di tensione di durata e polarità variabile mediante la configurazione Blumlein" N. RM2005A000355
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
2011	A. Buonanno, M. D'Urso, C. Falessi, M. G. Labate, G. Sorrentino, L. Zeni "Interruttore fotoconduttivo" N. RM2011A000410 SELEX SISTEMI INTEGRATI S.p.A.
2011	A. Buonanno, M. D'Urso, C. Falessi, M. G. Labate, G. Sorrentino, L. Zeni **"**Apparato di irradiazione di un impulso elettromagnetico nel dominio del tempo a relativo metodo di sintesi di un impulso elettromagnetico" N. RM2011A000412 SELEX SISTEMI INTEGRATI S.p.A.
2016	N. Cennamo, G. D'Agostino, A. Donà, P. Pallavicini, M. Pesavento, L. Zeni, "Sensore ottico per la rilevazione della concentrazione di almeno una sostanza esplosiva in una soluzione acquosa e metodo di rilevazione che utilizza tale sensore" N. 0001422644 del 03-06-2016 - Seconda Università di Napoli
2016	N. Cennamo, G. D'Agostino, L. De Maria, M. Pesavento, L. Zeni, "Metodo per la rilevazione in linea della concentrazione di almeno un composto furanico e/o di suoi derivati nell'olio di trasformatori" N. 0001422844 del 16-06-2016 - Ricerca sul Sistema Energetico SpA - Milano
2022	N. Cennamo, G. Chiaretti, F. Arcadio, L. Zeni "Optical sensor, sensor system and detection system for detecting the presence and/or the concentration of an analyte in a solution, process for realising this optical sensor" WO2022144932 – Moresense SrL (Italy)
2022	R. Marfella, G. Paolisso, P. Paolisso, C. Sardu, L. Zeni, R. Vallifuoco, "Portable vessel scanner" WO2022112912 – University of Campania L. Vanvitelli (Italy)
2023	N. Cennamo, F. Arcadio, L. Zeni, G. D'Agostino, "Optical sensor, support for said optical sensor and detection system to detect the presence and/or concentration of an analyte in a solution" WO2023100203 - University of Campania L. Vanvitelli (Italy)

Terza Missione

2013	Socio fondatore dello Spinoff accademico OPTOSENSING

Attività di revisione

Progetti di ricerca

1998-pres.	Progetti del Ministero dell'Università e della Ricerca e del Ministero dello Sviluppo Economico
2011	Progetti della Israel Science Foundation (ISF)
2015	Progetti della Accademia delle Scienze Polacca
2015-pres.	Progetti dell'European Research Council

Riviste internazionali

1998-pres.	Revisore per: Solid State Electronics, Optics Letters, Journal of the Electrochemical Society, IEEE-OSA Journal of Lightwave Technology, Smart Materials and Structures, IEEE Sensor Journal, Optics Express, Journal of the Optical Society of America, Optics Communications, Measurement Science and Technology, Analytical & Bioanalytical Chemistry, Bioelectromagnetics, Sensors and Actuators, Sensors, IEEE Photonic Technology Letters, IEEE Transactions on Dielectrics and Electrical Insulation, PlosOne, Geophysical Research Letters.

Comitati di Revisione

2002-pres.	Membro dell'Albo dei Revisori del Ministero dell'Università e della Ricerca
2004-pres.	Membro dell'Albo dei Revisori per i programmi quadro dell'Unione Europea

Affiliazioni

2011-pres. Membro della SIE (Società Italiana di Elettronica)
2022-pres. Senior Member di OPTICA (ex Optical Society of America)
2023-pres. Member di IEEE

Attività di ricerca

1988-1995	Caratterizzazione di fasci laser
1992-2000	Caratterizzazione di materiali per l'elettronica e l'optoelettronica
2001-pres.	Sensori distribuiti in fibra ottica
2001-pres.	Dispositivi optoelettronici integrati e biosensori
2004-pres.	Sensori in guida d'onda dielettrica planare
2005-pres.	Generatori di impulsi elettrici ad alta tensione per applicazioni bio-elettriche
2010-pres.	Sensori basati su risonanza plasmonica in fibre ottiche polimeriche

Attività di insegnamento

1993-1998	Elettronica analogica presso l'Università di Napoli Federico II
2003-2005	Elettronica digitale presso l'Università di Napoli Parthenope
1999-pres.	Elettronica digitale e optoelettronica presso l'Università della Campania *Luigi Vanvitelli*

Collaborazioni Internazionali

1994-pres.	Delft Institute for Microelectronics and Submicron technology (DIMES) – TU-Delft, The Netherlands
1998-1999	IMEC – Leuven – Belgium
2004-pres.	Ecole Polytechnique Fédérale de Lausanne, Switzerland
2007-pres.	Frank Reidy Research Center for Bioelectrics, Old Dominion University, Norfolk, Virginia, USA
2007-pres.	Tel-Aviv University, Tel-Aviv, Israel
2008-pres.	Wroclaw University of Technology, Poland
2009-pres.	University of Southern California, USA
2010-pres.	Military University, Warsaw, Poland
2010-pres.	Public University of Navarra – Pamplona - Spain
2010-pres.	Vrije University Amsterdam, The Netherlands
2012-pres.	University of Cluj-Napoca - Romania
2013-2015	Tufts University - Boston - USA
2013-pres	INESCPORTO- Porto - Portugal
2014-pres.	University of Cantabria - Santander – Spain
2016-pres.	Nanjing University – Nanjing - P. R. China
2016-pres.	University of Aveiro – Aveiro - Portugal

Collaborazioni Nazionali

2000-pres.	National Research Council – Institute for Electromagnetic Sensing of the Environment (CNR-IREA)
2005-pres.	University of Naples Federico II
2005-pres.	Scuola Superiore Sant'Anna – Pisa - Italy
2005-pres.	National Research Council - Institute for Protein Biochemistry (CNR-IBP)
2006-pres.	Istituto Nazionale di Geofisica e Vulcanologia - Italy
2009-pres.	CIRA - Centro Italiano di Ricerche Aerospaziali - Italy
2013-pres.	University of Pavia - Department of Chemistry
2020-pres.	Istituto di Ricerche Farmacologiche Mario Negri – Milano - Italy

Pubblicazioni scientifiche

1988-pres.	222 articoli su riviste internazionali, 7 capitoli di libri internazionali, 6 articoli su riviste nazionali, 190 atti di conferenze internazionali, 40 atti di conferenze nazionali.

Qualificazione scientifica (SCOPUS)

1988-pres.	H-Index: 42 Numero complessivo di citazioni: 6858; Numero complessivo di prodotti: 439

Elenco delle pubblicazioni:

- Riviste Internazionali

AI1 R. Bruzzese, V. Berardi, F. Cappiello, S. Solimeno, N. Spinelli, A. Cutolo, L. Zeni, «Experimental investigation of macropulse fluctuations in a picosecond neodymium-doped yttrium aluminium garnet laser», JOURNAL OF PHYSICS D: APPLIED PHYSICS **21**, 1710 (1988).
AI2 A. Cutolo, L. Zeni, V. Berardi, R. Bruzzese, S. Solimeno, N. Spinelli, «Measurement of pulse lengthening with pulse energy increase in picosecond Nd:YAG laser pulses», JOURNAL OF APPLIED PHYSICS **65**, 2187 (1989).
AI3 A. Cutolo, L. Zeni, V. Berardi, R. Bruzzese, S. Solimeno, N. Spinelli, «Mode size and time duration fluctuations in a picosecond Nd:YAG laser», OPTICS LETTERS **14**, 494 (1989).
AI4 L. Zeni, A. Cutolo, S. Solimeno, «Second harmonic generation as a tool for measuring mode coupling, pulse length and mode size in short laser pulses», JOURNAL OF MODERN OPTICS, **37**, 2085 (1990).
AI5 A. Cutolo, L. Zeni, «Self induced mismatching effects in harmonic generation with ultrashort laser pulses», OPTICS AND LASER TECHNOLOGY, **23**, 109 (1991).
AI6 A. Cutolo, A. Esposito. T. Isernia, R. Pierri, L. Zeni, «Characterization of the transverse modes in a laser beam: Analysis and application to a Q-switched Nd:YAG laser», APPLIED OPTICS, **31**, 2722 (1992).
AI7 A. Cutolo, L. Zeni, «Improvements to the diagnostics of beam quality in CW and pulsed laser systems», OPTICS COMMUNICATIONS, **89**, 223 (1992).
AI8 A. Cutolo, F. Ferreri, T. Isernia, R. Pierri, L. Zeni, «Measurement of the waist and the power distribution across the transverse modes of a laser beam», OPTICAL AND QUANTUM ELECTRONICS, **24**, S963 (1992)
AI9 S. Panachia, A. Cutolo, S. Solimeno, L. Zeni, «Background free autocorrelators by counter propagating surface plasmons«, OPTICS COMMUNICATIONS, **100**, 215 (1993).
AI10 G. Breglio, A. Cutolo, P. Spirito, L. Zeni, «Interferometric measurement of electron-hole pair recombination lifetime as a function of the injection level», IEEE ELECTRON DEVICE LETTERS, **14**, 487 (1993).
AI11 G. Breglio, A. Cutolo, L. Zeni, F. Corsi, D. De Venuto, G. Portacci, «Gain switched laser diodes for the characterization of subnanosecond voltage pulses», OPTICS COMMUNICATIONS, **111**, 276 (1994).
AI12 A. Cutolo, L. Zeni, «Electrically driven supergaussian mirrors», PURE AND APPLIED OPTICS, **3**, 467 (1994).
AIl3 S. Daliento, A. Sanseverino, P. Spirito, P.M. Sarro, L. Zeni, «Recombination centers identification in very thin silicon epitaxial layers via lifetime measurements», IEEE ELECTRON DEVICE LETTERS **17**, 148 (1996)
AI14 A. Cutolo, T. Isernia, I. Izzo, R. Pierri, L. Zeni, «Transverse mode analysis of a laser beam by near and far field intensity measurements» APPLIED OPTICS, **34**, 7974 (1995)
AI15 A. Irace, G. Breglio, A. Luciano, A. Cutolo, L. Zeni, «A novel configuration for a wide range high power fiber optic current sensor», EUROPEAN TRANSACTIONS ON ELECTRICAL POWER ENGINEERING **7**, 319 (1997)
AI16 A. Cutolo, M. Della Noce, L. Zeni, «Real time measurement of transverse mode mixing effects in a Q-Switched Nd:YAG laser», APPLIED OPTICS, **35**, 2544 (1996)
AI17 R. Bernini, A. Cutolo, A. Irace, P. Spirito, L. Zeni, «Contactless characterization of the recombination process in silicon wafers: separation between bulk and surface contributions», SOLID STATE ELECTRONICS, **39**, 1165 (1996)
AI18 A. Cutolo, M. Iodice, P. Spirito, L. Zeni, «Silicon Electro-Optic Modulator Based on a Three Terminal Device Integrated in a Low-Loss Single-Mode SOI Waveguide», IEEE JOURNAL OF LIGHTWAVE TECHNOLOGY, **18**, 505-518 (1997)

AI19 A. Cutolo, M. Iodice, A. Irace, P. Spirito and L. Zeni «An electrically controlled Bragg reflector integrated in a rib SOI waveguide», APPLIED PHYSICS LETTERS, July (1997)
AI20 A. Cutolo, A. Irace, P. Spirito, L. Zeni, «Optical measurement of effective recombination lifetime in silicon epitaxial layers», APPLIED PHYSICS LETTERS, (1997)
AI21 S. Daliento, A. Sanseverino, P. Spirito, L. Zeni, «Parametric description of the effect of electron irradiation on recombination lifetime in silicon layers: an experimental approach», IEEE TRANSACTIONS ON POWER ELECTRONICS, **14**, 117 (1999)
AI22 A. Cutolo, S. Daliento, A. Sanseverino, G.F. Vitale, L. Zeni, «An optical technique to measure the bulk lifetime and the surface recombination velocity in silicon samples based on a laser diode probe system», SOLID STATE ELECTRONICS, **42**, 1035-1038 (1998)
AI23 G. Breglio, A. Cutolo, A. Irace, P. Spirito, L. Zeni, M. Iodice, P.M. Sarro, «Two silicon optical modulators realizable with a fully compatible bipolar process», IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS, **4**, 1003 (1998)
AI24 L. Zeni, R. Bernini, R. Pierri, «Reconstruction of doping profiles in semiconductor materials using optical tomography», SOLID STATE ELECTRONICS, **43**, 761-769 (1999)
AI25 P. Spirito, S. Daliento, A. Sanseverino, L. Zeni, "Comment to: Temperature dependence of carrier recombination lifetime in Si wafers", JOURNAL OF ELECTROCHEMICAL SOCIETY, **146**, 1273 (1999)
AI26 A. Irace, L. Sirleto, G.F. Vitale, A. Cutolo, L. Zeni, J. Horzel, J. Szlufcik, "Transverse probe optical lifetime measurement as a tool for in-line characterization of the fabrication process of a silicon solar cell", SOLID STATE ELECTRONICS, **45**, 2235-2242 (1999)
AI27 G. Breglio, A. Cutolo, A. Irace, P. Spirito, L. Zeni, "New experimental results of optically activated BMFET switches with different cell design", IEEE TRANSACTIONS ON POWER ELECTRONICS, **14**, 877 (1999)
AI28 L. Zeni, R. Bernini, R. Pierri**,** "Optical tomography for dielectric profiling in processing electronic and optoelectronic materials", Chemical Engineering Journal, **77**, 137-142 (2000).
AI29 R. Bernini, R. Pierri, L. Zeni, "An iterative method for optical reconstruction of graded index profiles in planar dielectric waveguides", IEEE/OSA Journal of Lightwave Technology, **18,** 729-736 (2000)
AI30 L. Zeni, S. Campopiano, A. Cutolo, G. D'Angelo, "Power semiconductor laser diode arrays characterization", Optics and Lasers in Engineering, **39**, 203-217 (2003)
AI31 A. Irace, L. Sirleto, P. Spirito, G. F. Vitale, A. Cutolo, S. Campopiano and L. Zeni, "Optical Characterization of the Recombination Process in Silicon Wafers, Epilayers and Devices", Optics and Lasers in Engineering, **39**, 219-232 (2003).
AI32 R. Bernini, S. Campopiano, L. Zeni, "Design and analysis of an integrated ARROW refractive index sensor ", Applied Optics, **41,** 70-73 (2002)
AI33 L.Sirleto, A. Irace, G.F. Vitale, L. Zeni, A. Cutolo, "Separation of the bulk lifetime and surface recombination velocity obtained by transverse optical probing and multi-wavelength technique", Optics and Lasers in Engineering, **38**, 461-472 (2002)
AI34 R. Bernini, L. Crocco, A. Minardo, F. Soldovieri, L. Zeni, "Frequency domain approach to distributed fiber-optic Brillouin sensing", Optics Letters, **27**, nr. 5, (2002*)*
AI35 R. Bernini, S. Campopiano, L. Zeni, "Silicon micromachined hollow optical waveguides for sensing applications", Journal of Selected Topics in Quantum Electronics, **8**, 106-110 (2002)
AI36 R. Bernini, A. Minardo, L. Zeni, "Reconstruction technique for stimulated Brillouin scattering distributed fiber optic sensors", Optical Engineering, **41**, nr.9, 2186-2194 (2002)
AI37 R. Bernini, L. Crocco, A. Minardo, F. Soldovieri, L. Zeni "All frequency domain distributed fiber-optic Brillouin sensing", IEEE Sensors Journal, **3**, 36-43 (2003)
AI38 L. Sirleto, A. Irace, G.F. Vitale, L. Zeni, A. Cutolo, "Separation of bulk lifetime and surface recombination velocity by multiwavelength technique", Electronics Letters, **38**, 1742-1743 (2002)
AI39 L.Sirleto, A. Irace, G.F. Vitale, L. Zeni, A. Cutolo, "All optical multi-wavelength technique for the simultaneous measurement of bulk recombination lifetimes and front/rear surface

recombination velocity in single crystal silicon samples", Journal of Applied Physics, **93**, 3407-3413 (2003)

AI40 G. Coppola, A. Irace, G. Breglio, M. Iodice, L. Zeni, A. Cutolo, P. M. Sarro, "Three terminal optoelectronics devices integrated into a silicon on silicon waveguide", Optics and Lasers in Engineering, **39**, 317-332 (2003)

AI41 R. Bernini, S. Campopiano, C. de Boer, P. M. Sarro, L. Zeni "Planar antiresonant reflecting optical waveguides as integrated optical refractometers", IEEE Sensors Journal, **3**, 652-657 (2003)

AI42 R. Bernini, A. Minardo, L. Zeni, "Accuracy enhancement in Brillouin distributed fiber-optic temperature sensors using signal processing techniques", IEEE Photonics Technology Letters, **16**, 1143-1145 (2004)

AI43 R. Bernini, S. Campopiano, L. Zeni, P.M. Sarro, "ARROW optical waveguides based sensors", Sensors and Actuators B, **100**, 143-146 (2004)

AI44 S. Campopiano, R. Bernini, L. Zeni, P.M. Sarro, "Microfluidic sensor based on integrated optical hollow waveguides", Optics Letters, **29**, 1894-1896 (2004)

AI45 R. Bernini, A. Minardo, L. Zeni, "Stimulated Brillouin scattering frequency-domain analysis in a single-mode optical fiber for distributed sensing", Optics Letters, **29**, 1977-1979 (2004)

AI46 A. Cusano, A. Minardo, L. Zeni, R. Bernini, M. Giordano, "Response of Fiber Bragg Gratings to Longitudinal Ultrasonic waves", IEEE Transactions on Ultrasonics, Ferroelectrics, and frequency Control, **52**, 304-312 (2005)

AI47 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", Measurement Science and Technology, **16**, 900-908 (2005)

AI48 R. Bernini, A. Minardo, L. Zeni, "Distributed fiber-optic frequency-domain Brillouin sensing", Sensors and Actuators A:Physical, **123**, 337-342 (2005)

AI49 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, **1**, 355-363 (2005)

AI50 R. Bernini, A. Minardo, N. Cennamo, L. Zeni, "Planar waveguides for fluorescence-based biosensing: optimization and analysis", IEEE Sensors Journal **6**, 1218-1226 (2006)

AI51 S. D'Auria, M. Staino, A. Varriale, V. Scognamiglio, M. Rossi, A. Parracino, S. Campopiano, N. Cennamo, L. Zeni, "The Odorant-binding protein from Canis familiaris: purification, characterization and new perspectives in biohazard assessment", Protein & Peptide Letters, **13**, 349-352 (2006)

AI52 R. Bernini, A. Minardo, L. Zeni, "An accurate high resolution technique for distributed sensing based on frequency domain Brillouin scattering", IEEE Photonics Technology Letters **18**, 280-282 (2006)

AI53 A. de Angelis, L. Zeni, G. Leone, "Blumlein configuration for variable length high-voltage pulse generation by simultaneous switch control", Electronics Letters, **42**, 205-206 (2006)

AI54 R. Bernini, M. Fraldi, A. Minardo, V. Minutolo, F. Carannante, L. Nunziante and L. Zeni, "Identification of defects and strain error estimation for bending steel beams using time domain Brillouin distributed optical fiber sensors", Smart Materials and Structures, **15** 612–622 (2006).

AI55 A. Minardo, R. Bernini, F. Mottola and L. Zeni, "Optimization of metal-clad waveguides for sensitive fluorescence detection", Optics Express, **14**, 3512-3527 (2006)

AI56 A. Minardo, R. Bernini, L. Zeni, "Low distortion Brillouin slow light in optical fibers using AM modulation", Optics Express **14**, 5866-5876 (2006)

AI57 R. Bernini, E. De Nuccio, F. Brescia, A. Minardo, L. Zeni, P. M. Sarro, R. Palumbo, M. R. Scarfi, "Development and characterization of an integrated silicon micro flow cytometer", Analytical & Bioanalytical Chemistry, **386**, 1267-1272 (2006)

AI58 R. Bernini, A. Minardo, L. Zeni, "Accurate high-resolution fiber-optic distributed strain measurements for structural health monitoring", Sensors & Actuators: A. Physical, **134**, 389-395 (2007)

AI59 R. Bernini, A. Minardo, L. Zeni, "Self-demodulated Heterodyne Frequency Domain Distributed Brillouin Fiber Sensor", IEEE Photonics Technology Letters, **19**, 447 - 449 (2007)

AI60 R. Bernini, E. De Nuccio, A. Minardo, L. Zeni, P. M. Sarro, "2D MMI devices based on integrated hollow ARROW waveguides", Journal of Selected Topics in Quantum Electronics, **13**, 194 - 201 (2007)

AI61 R. Bernini, A. Minardo, G.V. Persiano, A.Vaccaro, D.Villacci, L.Zeni: "Dynamic Loading of Overhead Lines by Adaptive Learning Techniques and Distributed Temperature Sensing" IET Generation Transmission and Distribution 1, 912-919 (2007)

AI62 A. Minardo, R. Bernini, and L. Zeni, "Stimulated Brillouin scattering modeling for high-resolution, time-domain distributed sensing", Optics Express, **15**, 10397-10407 (2007)

AI63 R. Bernini, M. Tonezzer, F. Mottola, L. Zeni, A. Quaranta, G. Maggioni, S. Carturan, G. Della Mea, "Volatile organic compounds detection using porphyrin-based metal-cladding leaky waveguides", Sensors & Actuators: B. Chemical **127**, 231-236 (2007)

AI64 V. Scognamiglio, V.Aurilia, N. Cennamo, P. Ringhieri, L. Iozzino, M. Tartaglia, M. Staiano, G. Ruggiero, P. Orlando, T. Labella, L. Zeni, A. Vitale, S. D'Auria, "D-galactose/D-glucose-binding Protein from Escherichia coli as Probe for a Non-consuming Glucose Implantable Fluorescence Biosensor", Sensors, **7**, 2484-2491 (2007)

AI65 R. Bernini, A. Minardo, L. Zeni, "Vectorial dislocation monitoring of pipelines by use of Brillouin-based fiber-optics sensors", Smart Materials and Structures, **17** 15006-15014 (2008).

AI66 Olga Zeni , Rosanna Palumbo, Romeo Bernini, Luigi Zeni, Maurizio Sarti and Maria Rosaria Scarfì "Cytotoxicity Investigation on Cultured Human Blood Cells Treated with Single-Wall Carbon Nanotubes" Sensors, **8**, 488-499 (2008)

AI67 R. Bernini, e. De Nuccio, A. Minardo, L. Zeni and P. M. Sarro, "Liquid-core/liquid-cladding integrated silicon arrow waveguides", Optics Communications, **281** (8), 2062-2066 (2008)

AI68 A. de Angelis, J. Kolb, L. Zeni, and K.H. Schoenbach, "Kilovolt Blumlein Pulse Generator with Variable Pulse Duration and Polarity", Review of Scientific Instruments **79**, 044301_1-044301_4 (2008)

AI69 R. Bernini, G. Testa, L. Zeni, P. M. Sarro, "Integrated optofluidic Mach-Zehnder interferometer based on liquid core waveguides", Applied Physics Letters, **93**, 011106 (2008)

AI70 A**.** Minardo, R. Bernini, W. Urbanczyk, J. Wojcik, N. Gorbatov, M. Tur, L. Zeni, "Stimulated Brillouin scattering in highly-birefringent microstructure fiber: experimental analysis", Optics Letters, .**33**, n. 20, 2329-2331 (2008)

AI71 L. Olivares, E. Damiano, L. Picarelli, R. Greco, R. Bernini, A. Minardo, L. Zeni, "An instrumented flume for investigation of the mechanics of rainfall-induced landslides in unsaturated granular soils", Geotechnical Testing Journal, **32**, No. 2, 108-118 (2009)

AI72 A. Minardo, R. Bernini, L. Zeni, "Brillouin optical frequency-domain single-ended distributed fiber sensor", IEEE Sensors Journal, **9**, no. 3, 221-222, 10.1109/JSEN.2008.2011962 (2009)

AI73 A. Minardo, R. Bernini, L. Zeni, "A simple technique for reducing pump depletion in long-range distributed Brillouin fiber sensors", IEEE Sensors Journal, **9**, no.6, 633-634 (2009)

AI74 A. Minardo, R. Bernini, L. Zeni, "Dynamic strain measurement in optical fibers by stimulated Brillouin scattering", Optics Letters, **34** n.17, 2613-2615 (2009)

AI75 L. Picarelli, L. Zeni, Discussion on "Test on application of distributed fibre optic sensing technique into soil slope monitoring" by B. J. Wang, K. Li, B. Shi and G. Q. Wei", Landslides, 6:361–363 DOI 10.1007/s10346-009-0169-0 (2009)

AI76 R. Bernini, G. Testa, L. Zeni, P. M. Sarro, "A 2x2 optofluidic multimode interference coupler", IEEE Journal of Selected Topics in Quantum Electronics, **15**, Issue 5, 1478-1484 (2009)

AI77 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/OSA Journal of Lightwave Technology, **28** 193-200 (2010)

AI78 R. Bernini, A. Minardo, G. Testa, L. Zeni, "Dynamic strain measurements on a cantilever beam using stimulated Brillouin scattering", Smart Materials and Structures, **19**, 045024 (2010)

AI79 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 Express, **18**, 1788-1790 (2010)

AI80 G. Testa, Y. Huang, L. Zeni, P. M. Sarro, R. Bernini, "Liquid core ARROW waveguides by atomic layer deposition", IEEE Photonics Technology Letters, **22**, Issue 9, 616-618 (2010)

AI81 L. Nunziante, M. Fraldi, M.C. Pernice, A. Gesualdo, L. Zeni and K.M. Mahmoud, "Distributed optical fibre sensor measurements on rods and bridge cable wires – Part II: Experimental", Bridge Structures **6**, 49–63, DOI:10.3233/BRS-2010-002 (2010)

AI82 S. Romeo, M. Sarti, M. R. Scarfi`, L. Zeni, "Modified Blumlein Pulse-Forming Networks for Bioelectrical Applications", Journal of Membrane Biology 236:55–60, DOI 10.1007/s00232-010-9273-2 (2010)

AI83 G. Testa, Y. Huang, P. M. Sarro, L. Zeni, R. Bernini, "Integrated silicon optofluidic ring resonator", Applied Physics Letters, **97** (13) (2010)

AI84 G. Testa, Y. Huang, P. M. Sarro, L. Zeni, R. Bernini, "High visibility optofluidic Mach-Zehnder interferometer**",** Optics Letters **35** (10), pp. 1584-1586 (2010)

AI85 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 Sensors Journal, 1530-437X, Vol. 4, 1067-1068, DOI: 10.1109/JSEN.2010.2078805 (2011)

AI86 A. Cipullo, L. Zeni, F. De Filippis, "Temperature Measurements of the Air Plasma Flow using Optical Emission Spectroscopy", Journal Of Thermophysics And Heat Transfer (JTHT), **25**, pp. 354-360 (2011)

AI87 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, doi:10.1155/2011/710941(2011)

AI88 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 Express, vol. 19, no. 20, 19233-19244, September 2011.

AI89 R. Bernini, A. Minardo and L. Zeni, "Long-range distributed Brillouin fiber sensors by use of an unbalanced double sideband probe*,"*, Optics Express, vol. 19, no. 24, 23845–23856, November 2011.

AI90 S. Romeo, L. Zeni, M. Sarti, A. Sannino, M. R. Scarfi, P. T. Vernier, O. Zeni "DNA Electrophoretic Migration Patterns Change after Exposure of Jurkat Cells to a Single Intense Nanosecond Electric Pulse" PLoS ONE 6(12): e28419. doi:10.1371/journal.pone.0028419 (2011)

AI91 N. Cennamo, D. Massarotti, L. Conte, L. Zeni, "Low cost Sensors based on SPR in Plastic optical Fiber for biosensors implementation", Sensors, **11**, 11752-11760 doi:10.3390/s111211752 (2011)

AI92 A. Minardo, R. Bernini, L. Amato, L. Zeni, "Bridge monitoring using Brillouin fiber-optic sensors", IEEE Sensor Journal, 12 (1), 145-150 (2012)

AI93 A. Minardo, R. Bernini, L. Zeni, "Distributed sensing at cm-scale spatial resolution by BOFDA: measurements and signal processing", IEEE Photonics Journal, 4(1), 48-56 (2012)

AI94 A. Cipullo, G. Gruca, K. Heeck, F. De Filippis, D. Iannuzzi, A. Minardo, L. Zeni, "Numerical study of a ferrule-top cantilever optical fiber sensor for wind-tunnel applications and comparison with experimental results ", Sensors and Actuators, A: Physical 178, pp. 17-25 DOI:10.1016/j.sna.2012.01.044 (2012)

AI95 A. Minardo, R. Bernini, L. Zeni, "Spatial resolution enhancement in preactivated BOTDA schemes by numerical processing**",** IEEE Photonics Technology Letters 24 (12) , art. no. 6176202 , pp. 1003-1005 (2012)

AI96 A. Minardo, R. Bernini, L. Zeni, "Differential Techniques for High-Resolution BOTDA: An Analytical Approach", IEEE Photonics Technology Letters, **24** (15), pp. 1295-1297, 10.1109/LPT.2012.2202223 (2012)

AI97 G. Testa, Y. H., L. Zeni, P. M. Sarro, R. Bernini, "Hybrid Silicon-PDMS Optofluidic ARROW Waveguide", IEEE Photonics Technology Letters 24 (15), pp. 1307-1309 10.1109/LPT.2012.2202645 (2012)

AI98 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 Materials & Structures **21** DOI: 10.1088/0964-1726/21/12/125022 (2012)

AI99 N. Cennamo, A. Varriale, A. Pennacchio, M. Staiano, D. Massarotti, L. Zeni, S. D'Auria, "An Innovative Plastic Optical Fiber-based Biosensor for new Bio/applications. The Case of Celiac Disease", Sensors & Actuators: B. Chemical, 176, 1008-1014 10.1016/j.snb.2012.10.055 (2013)

AI100 N. Cennamo, D. Massarotti, R. Galatus, L. Conte, L. Zeni, "Performance Comparison of Two Sensors Based on Surface Plasmon Resonance in a Plastic Optical Fiber", Sensors, 13, 721-735 (2013)

AI101 A. Minardo, G. Porcaro, D. Giannetta, R. Bernini, and L. Zeni, "Real-time monitoring of railway traffic using slope-assisted Brillouin distributed sensors", Appl. Opt. 52, 3770-3776 (2013)

AI102 S. Romeo, C. D'Avino, O. Zeni, L. Zeni, "A Blumlein-type Nanosecond Pulse Generator with Interchangeable Transmission Lines for bioelectrical applications", IEEE Transactions on Dielectrics and Electrical Insulation, Vol. 20, Issue 4, pp. 1224-1230 (2013)

AI103 N. Cennamo, G. D'Agostino, R. Galatus, L. Bibbò, M. Pesavento and L. Zeni, "Sensors based on surface plasmon resonance in a plastic optical fiber for the detection of trinitrotoluene" Sensors & Actuators: B. Chemical, Vol. 188, pp. 221-226, DOI:10.1016/j.snb.2013.07.005 (2013)

AI104 A. Minardo, R. Bernini, L. Zeni, "Bend-induced Brillouin frequency shift variation in a single-mode fiber", IEEE Photonics Technology Letters, Vol. 25, pp. 2362-2364, doi: 10.1109/LPT.2013.2285283 (2013)

AI105 R. Galatus, T. Marita, A. Seceleanu, N. Cennamo and L. Zeni, "A Simple Optical Sensor Based Approach for Early Stage Dry Eye Symptoms Detection" Wulfenia Journal, Vol. 20, n. 9, pp. 55-75 (2013)

AI106 A. Minardo, R. Bernini, L. Zeni, "Limitations and strategies to improve measurement accuracy in DPP-BOTDA sensing", Applied Optics **52,** n.13, doi: 10.1364/AO.52.003020 pp. 3020-3026 (2013)

AI107 N. Cennamo, G. D'Agostino, A. Donà, G. Dacarro, P. Pallavicini, M. Pesavento and L. Zeni, "Localized surface plasmon resonance with five-branched gold nanostars in a plastic optical fiber for bio-chemical sensor implementation", Sensors, vol. 13, 14676-14686, 10.3390/s131114676 2013

AI108 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 Materials & Structures, Vol. 22, pp. 1-8, DOI:10.1088/0964-1726/22/12/125035 (2014)

AI109 N. Cennamo, G. Alberti, M. Pesavento, G. D'Agostino, F. Quattrini, R. Biesuz, L. Zeni, " A simple small size and low cost sensor based on Surface Plasmon Resonance for selective detection of Fe(III)", Sensors, Vol. 14, pp. 467-4671, doi:10.3390/s140304657 (2014)

AI110 A. Minardo, R. Bernini, L. Zeni, "Distributed temperature sensing in polymer optical fiber by BOFDA", IEEE Photonics Technology Letters 26 (4) pp. 387 - 390, doi: 10.1109/LPT.2013.2294878 (2014)

AI111 N. Cennamo, G. D'Agostino, M. Pesavento, L. Zeni, "High selectivity and sensitivity sensor based on MIP and SPR in tapered plastic optical fibers for the detection of l-nicotine", *Sensors and Actuators, B: Chemical,* Vol. 191 pp. 529 - 536 doi: 10.1016/j.snb.2013.10.067 (2014)

AI112 A. Minardo, R. Bernini, L. Zeni, "Experimental and numerical study on stimulated Brillouin scattering in a graded-index multimode fiber", Optics Express, Vol. 22, n. 14, pp. 17480-17489 DOI:10.1364/OE.22.017480 (2014)

AI113 A. Minardo, A. Coscetta, G. Porcaro, D. Giannetta, R. Bernini, and L. Zeni, "Distributed optical fiber sensors for integrated monitoring of railway infrastructures", Structural Monitoring and Maintenance, Vol. 1, No. 2, pp. 173-182, DOI: http://dx.doi.org/10.12989/smm.2014.1.2.173 (2014)

AI114 A. Minardo, A. Coscetta, L. Zeni, R. Bernini "High-spatial-resolution DPP-BOTDA by real-time balanced detection," IEEE Photonics Technology Letters, vol. 26, no. 12, pp. 1251-1254, June (2014)

AI115 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 Sensors Journal, 5 (2), 2364072, pp. 659-660 (2015)

AI116 N. Cennamo, A. Donà, P. Pallavicini, G. D'Agostino, G. Dacarro, L. Zeni, M. Pesavento, "Sensitive detection of 2,4,6-trinitrotoluene by tridimensional monitoring of molecularly imprinted polymer with optical fiber and five-branched gold nanostars", Sensors and Actuators, B: Chemical 208, pp. 291-298 (2015)

AI117 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 (JRMGE), ISSN:1674-7755, Vol. 7, No. 4, (2015)

AI118 N. Cennamo, L. De Maria, G. D'Agostino, L. Zeni, M. Pesavento, "Monitoring of Low Levels of Furfural in Power Transformer Oil with a Sensor System Based on a POF-MIP Platform", Sensors, Vol. 15, pp. 8499-8511, doi:10.3390/s150408499 (2015)

AI119 P. Lamberti, S. Romeo, A. Sannino, L. Zeni, O. Zeni, "The Role of Pulse Repetition Rate in nsPEF-Induced Electroporation: A Biological and Numerical Investigation ", IEEE Transactions on Biomedical Engineering, DOI:10.1109/TBME.2015.2419813, Vol. 62, No. 9, pp.2234-2243 (2015)

AI120 N. Cennamo, M. Pesavento, L. Lunelli, L. Vanzetti, C. Pederzolli, L. Zeni, L. Pasquardini, "An easy way to realize SPR aptasensors: a multimode plastic optical fiber platform for cancer biomarkers detection", Talanta, pp. 88-95, DOI: 10.1016/j.talanta.2015.03.025 (2015)

AI121 L. Picarelli, E. Damiani, R. Greco, A. Minardo, L. Olivares, L. Zeni, "Performance of slope behavior indicators in unsaturated pyroclastic soils", Journal of Mountain Science, Vol.12, Issue 6, pp. 1434-1447, DOI: 10.1007/s11629-014-3104-3 (2015)

AI122 N. Cennamo, L. Coelho, D. F. Santos, J. M. Baptista, A. Guerreiro, P. Jorge, L. Zeni, "Modal filtering for optimized surface plasmon resonance sensing in multimode plastic optical fibers", IEEE Sensor Journal, 15, 11, 1 (2015)

AI123 A. Minardo, R. Bernini, L. Zeni, " Analysis of SNR penalty in Brillouin optical time-domain analysis sensors induced by laser source phase noise", Journal of Optics, 18, 2, DOI: 10.1088/2040-8978/18/2/025601 (2015)

AI124 A. Minardo, A. Coscetta, R. Bernini, L. Zeni, "Heterodyne slope-assisted Brillouin optical time-domain analysis for dynamic strain measurements", Journal of Optics, 18, 2, DOI: 10.1088/2040-8978/18/2/025606 (2016)

AI125 N. Cennamo, F. Chiavaioli, C. Trono, S. Tombelli, A. Giannetti, F. Baldini, L. Zeni, "A complete optical sensor system based on a POF-SPR platform and a thermo-stabilized flow cell for biochemical applications", Sensors, Vol. 16, Issue 2, DOI: 10.3390/s16020196 (2016)

AI126 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 Sensing, **8**, 674, DOI:10.3390/rs8080674 (2016)

AI127 N. Cennamo, L. De Maria, C. Chemelli, A. Profumo, L. Zeni and M. Pesavento, "Markers detection in transformer oil by plasmonic chemical sensor system based on POF and MIPs", IEEE Sensor Journal, (2016)

AI128 N. Cennamo, P. Zuppella, D. Bacco, A. J. Corso, M. G. Pelizzo, L. Zeni, "SPR Sensor Platform Based on a Novel Metal Bilayer Applied on D-Shaped Plastic Optical Fibers for

Refractive Index Measurements in the Range 1.38-1.42", IEEE Sensor Journal, 6 (12), pp. 4822-4827 DOI: 10.1109/JSEN.2016.2549271 (2016)
AI129 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, DOI: 10.1155/2016/1351378 (2016)
AI130 A. Aray, F. Chiavaioli, M. Arjmand, C. Trono, S. Tombelli, A. Giannetti, N. Cennamo, M. Soltanolkotabi, L. Zeni, F. Baldini, " SPR-based plastic optical fibre biosensor for the detection of C-reactive protein in serum", Journal of Biophotonics, Vol. 9, Issue 10, pages 1077–1084, DOI: 10.1002/jbio.201500315 (2016)
AI131 A. Minardo, E. Catalano, L. Zeni, "Cost-effective method for fast Brillouin optical time-domain analysis", Optics Express, **24**, No. 22, DOI: 10.1364/OE.24.025424 (2016)
AI132 F. Sequeira, D. Duarte, L. Bilro, A. Rudnitskaya, M. Pesavento, L. Zeni, N. Cennamo, "Refractive Index Sensing with D-Shaped Plastic Optical Fibers for Chemical and Biochemical Applications", Sensors, **16**, 2119; doi:10.3390/s16122119 (2016)
AI133 A. Minardo, A. Coscetta, R. Bernini, L. Zeni, "Brillouin Optical Time Domain Analysis in silica fibers at 850 nm wavelength", IEEE PHOTONICS TECHNOLOGY LETTERS, vol. 28, p. 2577-2580, ISSN: 1041-1135, doi: 10.1109/LPT.2016.2605739 (2016)
AI134 A. Minardo, R. Bernini, R. Ruiz-Lombera, J.Mirapeix, J. M. Lopez-Higuera, L. Zeni, "Proposal of Brillouin optical frequency-domain reflectometry (BOFDR)", OPTICS EXPRESS, vol. 24, p. 29994-30001, ISSN: 1094-4087, doi: 10.1364/OE.24.029994 (2016)
AI135 N. Cennamo, G. Testa, S. Marchetti, L. De Maria, R. Bernini, L. Zeni, M. Pesavento, "Intensity-based plastic optical fiber sensor with molecularly imprinted polymer sensitive layer", Sensors and Actuators, B: Chemical, **241**, 534-54; doi: 10.1016/j.snb.2016.10.104 (2017)
AI136 A. Coscetta, A. Minardo, L. Olivares, M. Mirabile, M. Damiano, L. Zeni and M. Longo, "Wind turbine blade monitoring with Brillouin-based fiber optic sensors", Journal of Sensors (2017)
AI137 M. Pesavento, L. De Maria, D. Merli, S. Marchetti, L. Zeni, N. Cennamo, "Towards the development of cascaded surface plasmon resonance POF sensors exploiting gold films and synthetic recognition elements for detection of contaminants in transformer oil", Sensing and Bio-Sensing Research, **13**, 1, 128-135, DOI: 10.1016/j.sbsr.2017.01.003 (2017)
AI138 A. Minardo, A. Coscetta, E. Catalano, L. Zeni, "Simultaneous strain and temperature measurements by dual wavelength Brillouin sensors", IEEE Sensors Journal **17** (12), 7911244, pp. 3714-3719, DOI: 10.1109/JSEN.2017.2698001 (2017)
AI139 N. Cennamo, F. Mattiello, L. Zeni, "Slab waveguide and optical fibers for novel plasmonic sensor configurations", Sensors, 17 (7), 1488, DOI: 10.3390/s17071488 (2017)
AI140 E. Damiano, B. Avolio, A. Minardo, L. Olivares, L. Picarelli, 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, 40 (4), pp. 529-541 DOI: 10.1520/GTJ20160107 (2017)
AI141 L. Zeni, E. Catalano, A. Coscetta, A. Minardo, "High-pass filtering for accurate reconstruction of the Brillouin Frequency Shift profile from Brillouin Optical Frequency Domain Analysis data", IEEE Sensors Journal, DOI: 10.1109/JSEN.2017.2768103 (2018)
AI142 N. Cennamo, L. Zeni, P. Tortora, M. E. Regonesi, A. Giusti, M. Staiano, S. D'Auria, A. Varriale, "A High Sensitivity Biosensor to detect the presence of perfluorinated compounds in environment", Talanta, Vol. 178, pp. 955-961, DOI: 10.1016/j.talanta.2017.10.034 (2018)
AI143 L. Zeni, M. Pesavento, S. Marchetti, N. Cennamo, "Slab plasmonic platforms combined with Plastic Optical Fibers and Molecularly Imprinted Polymers for chemical sensing", Optics and Laser Technology, DOI: 10.1016/j.optlastec.2018.06.028 (2018)
AI144 N. Cennamo, G. D'Agostino, G. Porto, A. Biasiolo, C. Perri, F. Arcadio, L. Zeni, "A molecularly imprinted polymer on a plasmonic plastic optical fiber to detect perfluorinated compounds in water", Sensors, Vol. 18, Issue 6 DOI: 10.3390/s18061836 (2018)

AI145 R. Bernini, G. Persichetti, E. Catalano, L. Zeni, A. Minardo, "Refractive index sensing by brillouin scattering in side-polished optical fibers", Optics Letters, Vol. 43, Issue 10, DOI: 10.1364/OL.43.002280 (2018)

AI146 N. Cennamo, F. Mattiello, R. Galatus, E. Voiculescu, L. Zeni, "Plasmonic Sensing in D-Shaped POFs with Fluorescent Optical Fibers as Light Sources", IEEE Transactions on Instrumentation and Measurement, Vol. 67, Issue 4, DOI: 10.1109/TIM.2017.2745018 (2018)

AI147 N. Cennamo, L. Zeni, E. Catalano, F. Arcadio, A. Minardo, "Refractive index sensing through surface plasmon resonance in light-diffusing fibers", Applied Sciences, Vol. 8, Issue 7, DOI: 10.3390/app8071172 (2018)

AI148 N. Cennamo, G. D'agostino, F. Sequeira, F. Mattiello, G. Porto, A. Biasiolo, R. Nogueira, L. Bilro, L. Zeni, "A simple and low-cost optical fiber intensity-based configuration for perfluorinated compounds in water solution", Sensors, Vol. 18, Issue 9, DOI: 10.3390/s18093009 (2018)

AI149 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 Sensing, Volume 10, Issue 8, 1, DOI: 10.3390/rs10081291 (2018)

AI150 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, Issue 2, DOI: 10.3390/geosciences9020063 (2019)

AI151 R. Somma, C. Troise, L. Zeni, A. Minardo, A. Fedele, M. Mirabile, G.De Natale, "Long-Term Monitoring with Fiber Optics Distributed Temperature Sensing at Campi Flegrei: The Campi Flegrei Deep Drilling Project", Sensors, Vol. 19, Issue 5, DOI: 10.3390/s19051009 (2019)

AI152 N. Cennamo, L. Zeni, E. Ricca, R. Isticato, V. M. Marzullo, A. Capo, M. Staiano, S. D'Auria, A. Varriale, "Detection of naphthalene in sea-water by a label-free plasmonic optical fiber biosensor", Talanta, Vol. 194, Pages 289-297, DOI: 10.1016/j.talanta.2018.10.051 (2019)

AI153 M. Pesavento, S. Marchetti, L. De Maria, L. Zeni, N. Cennamo, "Sensing by molecularly imprinted polymer: Evaluation of the binding properties with different techniques", Sensors, Volume 19, Issue 6, 2 DOI: 10.3390/s19061344 (2019)

AI154 L. Zhang, B. Shi, L. Zeni, A. Minardo, H. Zhu, L. Jia, "An FBG-based monitoring system for slope deformation studies in geotechnical centrifuges", Sensors, Volume 19, Issue 7, 1 DOI: 10.3390/s19071591 (2019)

AI155 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, Volume 7, Issue 4, 1 DOI: 10.3390/fib7040034 (2019)

AI156 N. Cennamo, L. Zeni, M. Pesavento, S. Marchetti, V. Marletta, S. Baglio, S. Graziani, A. Pistorio, B. Andò, "A Novel Sensing Methodology to Detect Furfural in Water, Exploiting MIPs, and Inkjet-Printed Optical Waveguides", IEEE Transactions on Instrumentation and Measurement, Volume 68, Issue 5, DOI: 10.1109/TIM.2018.2879170 (2019)

AI157 F. Sequeira, N. Cennamo, A. Rudnitskaya, R. Nogueira, L. Zeni, L. Bilro, "D-Shaped POF Sensors for Refractive Index Sensing-The Importance of Surface Roughness", Sensors, Volume 19, Issue 11, 30 DOI: 10.3390/s19112476 (2019)

AI158 A. Coscetta, E. Catalano, E. Cerri, L. Zeni, A. Minardo "High-Pass Filtering for Accuracy Enhancement in Dark-Pulse Brillouin Optical Time Domain Analysis", EEE Photonics Technology Letters,Volume 31, Issue 15, DOI: 10.1109/LPT.2019.29223341 (2019)

AI159 N. Cennamo, C. Trigona, S. Graziani, L. Zeni, F. Arcadio, G. Di Pasquale, A. Pollicino, "An eco-friendly disposable plasmonic sensor based on bacterial cellulose and gold", Sensors,Volume 19, Issue 22, DOI: 10.3390/s19224894 (2019)

AI160 M. Pesavento, A. Profumo, D. Merli, L. Cucca, L. Zeni, N. Cennamo "An optical fiber chemical sensor for the detection of copper(II) in drinking water", Sensors, Volume 19, Issue 23, 1 DOI: 10.3390/s19235246 (2019)

AI161 N. Cennamo, L. Pasquardini, F. Arcadio, L. Vanzetti, A. Bossi, L. Zeni, "D-shaped plastic optical fibre aptasensor for fast thrombin detection in nanomolar range", Scientific Reports,Volume 9, Issue 1, 1 DOI: 10.1038/s41598-019-55248-x (2019)

AI162 A. Coscetta, E. Catalano, E. Cerri, L. Zeni, A. Minardo, "A Dual-Wavelength Scheme for Brillouin Temperature Sensing in Optically Heated Co2+-Doped Fibers", IEEE Sensors Journal, Volume 20, Issue 3, 1 DOI: 10.1109/JSEN.2019.2948298 (2020)

AI163 N. Cennamo, L. Zeni, "Polymer Optical Fibers for Sensing", Macromolecular Symposia, Volume 389, Issue 1, 1 DOI: 10.1002/masy.201900074 (2020)

AI164 A. Coscetta, E. Catalano, E. Cerri, L. Zeni, A. Minardo, "Theoretical and experimental comparison of a distributed acoustic sensor at 850- And 1550-nm wavelengths", Applied Optics Volume 59, Issue 8, 10, pp. 2219-2224 DOI: 10.1364/AO.382907 (2020)

AI165 N. Cennamo, G. D'Agostino, F. Arcadio, C. Perri, G. Porto, A. Biasiolo, L. Zeni, "Measurement of MIPs Responses Deposited on Two SPR-POF Sensors Realized by Different Photoresist Buffer Layers", IEEE Transactions on Instrumentation and Measurement, Volume 69, Issue 4, pp. 1464-1473 DOI: 10.1109/TIM.2020.2967864 (2020)

AI166 N. Cennamo, D. Maniglio, R. Tatti, L. Zeni, A. M. Bossi, "Deformable molecularly imprinted nanogels permit sensitivity-gain in plasmonic sensing", Biosensors and Bioelectronics, Volume 156, 15 DOI: 10.1016/j.bios.2020.112126 (2020)

AI167 N. Cennamo, F. Arcadio, A. Minardo, D. Montemurro, L. Zeni, "Experimental characterization of plasmonic sensors based on lab-built tapered plastic optical fibers", Applied Sciences, Volume 10, Issue 12 DOI: 10.3390/app10124389 (2020)

AI168 L. Zeni, C. Perri, N. Cennamo, F. Arcadio, G. D'Agostino, M. Salmona, M. Beeg, M. Gobbi, "A portable optical-fibre-based surface plasmon resonance biosensor for the detection of therapeutic antibodies in human serum", Scientific Reports, Volume 10, Issue 1 DOI: 10.1038/s41598-020-68050-x (2020)

AI169 A. Coscetta, A. Minardo, L. Zeni, L., Distributed dynamic strain sensing based on brillouin scattering in optical fibers", Sensors, Volume 20, Issue 19, 1 DOI: 10.3390/s20195629 (2020)

AI170 L. De Maria, J. Borghetto, N. Cennamo, F. Scatiggio, M. Pesavento, L. Zeni, "Frequency dielectric spectroscopy and an innovative optical sensor to assess oil-paper degradation", IEEE Transactions on Dielectrics and Electrical Insulation, Volume 27, Issue 5 DOI: 10.1109/TDEI.2020.008848 (2020)

AI171 N. Cennamo, F. Arcadio, F. Capasso, A. Biasiolo, L. Zeni, "Toward Smart Selective Sensors Exploiting a Novel Approach to Connect Optical Fiber Biosensors in Internet", IEEE Transactions on Instrumentation and Measurement, Volume 69, Issue 10 DOI: 10.1109/TIM.2020.2987403 (2020)

AI172 A. Coscetta, E. Catalano, E. Cerri, N. Cennamo, L. Zeni, A. Minardo, "A C-OTDR Sensor for Liquid Detection Based on Optically Heated Co2+-Doped Fibers", IEEE Sensors Journal, Volume 20, Issue 17, 1 DOI: 10.1109/JSEN.2020.2991224 (2020)

AI173 N. Cennamo, G. D'agostino, C. Perri, F. Arcadio, G. Chiaretti, E. Parisio, G. Camarlinghi, C. Vettori, F. Di Marzo, R, Cennamo, G. Porto, L. Zeni, "Proof of concept for a quick and highly sensitive on-site detection of sars-cov-2 by plasmonic optical fibers and molecularly imprinted polymers", Sensors, Volume 21, Issue 5, Pages 1-17 DOI: 10.3390/s21051681 (2021)

AI174 N. Cennamo, F. Arcadio, V. Marletta, S. Baglio, L. Zeni, B. Ando "A Magnetic Field Sensor Based on SPR-POF Platforms and Ferrofluids", EEE Transactions on Instrumentation and Measurement, Volume 70, n. 9245530 DOI: 10.1109/TIM.2020.3035114 (2021)

AI175 N. Cennamo, M. Pesavento, L. Zeni, "A review on simple and highly sensitive plastic optical fiber probes for bio-chemical sensing", Sensors and Actuators, B: Chemical, Volume 331, Article number 129393 DOI: 10.1016/j.snb.2020.129393 (2021)

AI176 N. Cennamo, C. Trono, A. Giannetti, F. Baldini, A. Minardo, L. Zeni, S. Tombelli "Biosensors exploiting unconventional platforms: The case of plasmonic light-diffusing fibers", Sensors and Actuators, B: Chemical, Volume 337, Article number 129771 DOI: 10.1016/j.snb.2021.129771 (2021)

AI177 L. Pasquardini, N. Cennamo, G. Malleo, L. Vanzetti, L. Zeni, D. Bonamini, R. Salvia, C. Bassi, A. M. Bossi, "A surface plasmon resonance plastic optical fiber biosensor for the detection of pancreatic amylase in surgically-placed drain effluent", Sensors, Volume 21, DOI 10.3390/s21103443 (2021)

AI178 N. Cennamo, L. Pasquardini, F. Arcadio, L. Lunelli, L. Vanzetti, V. Carafa, L. Altucci, L. Zeni "SARS-CoV-2 spike protein detection through a plasmonic D-shaped plastic optical fiber aptasensor", Talanta, Volume 233 DOI 10.1016/j.talanta.2021.122532 (2021)

AI179 E. Catalano, A. Coscetta, E. Cerri, N. Cennamo, L. Zeni, A. Minardo, "Automatic traffic monitoring by φ-OTDR data and Hough transform in a real-field environment", Applied Optics, Volume 60, DOI 10.1364/AO.422385 (2021)

AI180 M. Pesavento, L. Zeni, L. De Maria, G. Alberti, N. Cennamo "SPR-Optical Fiber-Molecularly Imprinted Polymer Sensor for the Detection of Furfural in Wine", Biosensors, Volume 1,1 DOI 10.3390/bios11030072 (2021)

AI181 N. Cennamo, F. Arcadio, D. Del Prete, G. Buonanno, A. Minardo, S. Pirozzi, L. Zeni "A simple and efficient Plasmonic Sensor in Light Diffusive Polymer Fibers", IEEE Sensors Journal, DOI 10.1109/JSEN.2021.3075300 (2021)

AI182 N. Cennamo, C. Trigona, S. Graziani, L. Zeni, F. Arcadio, L. Xiaoyan, G. Di Pasquale, A. Pollicino, "Green LSPR Sensors Based on Thin Bacterial Cellulose Waveguides for Disposable Biosensor Implementation", IEEE Transactions on Instrumentation and Measurement, Volume 70 DOI 10.1109/TIM.2021.3070612 (2021)

AI183 F. Arcadio, L. Zeni, D. Montemurro, C. Eramo, S. Di Ronza, C. Perri, G. D'agostino, G. Chiaretti, G. Porto, N. Cennamo "Biochemical sensing exploiting plasmonic sensors based on gold nanogratings and polymer optical fibers" Photonics Research 9(7), pp. 1397-1408 DOI: 10.1364/PRJ.424006 (2021)

AI184 A. Coscetta, E. Catalano, E. Cerri, N. Cennamo, L. Zeni, A. Minardo "Hybrid Brillouin/Rayleigh sensor for multiparameter measurements in optical fibers", Optics Express, 29(15), pp. 24025-24031 DOI: 10.1364/OE.426427 (2021)

AI185 C. Perri,, F. Arcadio, G. D'Agostino, N. Cennamo, G. Porto, L. Zeni "Chemical and Biological Applications Based on Plasmonic Optical Fiber Sensors", IEEE Instrumentation and Measurement Magazine", 24(5),9491004, pp. 50-55 DOI: 10.1109/MIM.2021.9491004 (2021)

AI186 A. Coscetta, E. Catalano, E. Cerri, R. Oliveira, L. Bilro, N. Cennamo, A. Minardo "Distributed static and dynamic strain measurements in polymer optical fibers by rayleigh scattering", Sensors, 21(15),5049 DOI: 10.3390/s21155049 (2021)

AI187 F. Arcadio, L. Zeni, A. Minardo, C. Eramo, S. Di Ronza, C. Perri, G. D'Agostino, G. Chiaretti, G. Porto, N. Cennamo "A nanoplasmonic-based biosensing approach for wide-range and highly sensitive detection of chemicals", Nanomaterials11(8),1961 DOI: 10.3390/nano11081961 (2021)

AI188 N. Cennamo, L. Saitta, C. Tosto, F. Arcadio, L. Zeni, M. E. Fragalá, G. Cicala "Microstructured surface plasmon resonance sensor based on inkjet 3d printing using photocurable resins with tailored refractive index", Polymers DOI: 10.3390/polym1315251813(15),2518 (2021)

AI189 F. Arcadio, L. Zeni, C. Perri, G. D'Agostino, G. Chiaretti, G. Porto, A. Minardo, N. Cennamo "Bovine serum albumin protein detection by a removable SPR chip combined with a specific mip receptor", Chemosensors, 9(8),218 DOI: 10.3390/chemosensors9080218 (2021)

AI190 N. Cennamo, F. Arcadio, L. Zeni, E. Catalano. D. Del Prete, G. Buonanno, A. Minardo "The role of tapered light-diffusing fibers in plasmonic sensor configurations", Sensors, 21(19),6333 DOI: 10.3390/s21196333 (2021)

AI191 N. Cennamo, F. Arcadio, L. Noel, L. Zeni, O. Soppera "Flexible and Ultrathin Metal-Oxide Films for Multiresonance-Based Sensors in Plastic Optical Fibers", ACS Applied Nano Materials, 4(10), pp. 10902-10910 DOI: 10.1021/acsanm.1c02345 (2021)

AI192 A. Minardo, E. Catalano, A. Coscetta, G. Zeni, C. Di Maio, R. Vassallo, L. Picarelli. R. Coviello, G. Macchia, L. Zeni "Long-term monitoring of a tunnel in a landslide prone area by Brillouin-based distributed optical fiber sensors", Sensors, 21(21),7032 DOI: 10.3390/s21217032 (2021)

AI193 M. Pesavento, N. Cennamo, L. Zeni, L. De Maria "A molecularly imprinted polymer based spr sensor for 2-furaldehyde determination in oil matrices", Applied Sciences, 11(21),10390 DOI: 10.3390/app112110390 (2021)

AI194 A. Minardo, L. Zeni, A. Coscetta, E. Catalano. G. Zeni. E. Damiano, M. De Cristofaro, L. Olivares "Distributed optical fiber sensor applications in geotechnical monitoring", Sensors, 21(22),7514 DOI: 10.3390/s21227514 (2021)

AI195 N. Cennamo, A. M. Bossi, F. Arcadio, D. Maniglio, L. Zeni "On the Effect of Soft Molecularly Imprinted Nanoparticles Receptors Combined to Nanoplasmonic Probes for Biomedical Applications", Frontiers in Bioengineering and Biotechnology, 9,801489 DOI: 10.3389/fbioe.2021.801489 (2021)

AI196 A. Minardo, L. Zeni, R. Bernini, E. Catalano, R. Vallifuoco "Quasi-Distributed Refractive Index Sensing by Stimulated Brillouin Scattering in Tapered Optical Fibers", Journal of Lightwave Technology, Volume 40, Issue 8, Pages 2619 - 2624 DOI 10.1109/JLT.2022.3140553 (2022)

AI197 F. Arcadio, L. Zeni, N. Cennamo "Exploiting Plasmonic Phenomena in Polymer Optical Fibers to Realize a Force Sensor", Sensors, Volume 22, Issue 6 DOI 10.3390/s22062391 (2022)

AI198 E. Catalano, R. Vallifuoco, L. Zeni, A. Minardo "Distributed Liquid Level Sensor Based on Brillouin Optical Frequency-Domain Analysis", IEEE Sensors Journal, Volume 22, Issue 7, Pages 6601 – 6605 DOI 10.1109/JSEN.2022.3150075 (2022)

AI199 F. Arcadio, M. Seggio, D. Del Prete, G. Buonanno, J. Mendes, L. Coelho, P. Jorge, L. Zeni, A. M. Bossi, N. Cennamo "A Plasmonic Biosensor Based on Light-Diffusing Fibers Functionalized with Molecularly Imprinted Nanoparticles for Ultralow Sensing of Proteins", Nanomaterials, Volume 12, Issue 9 DOI 10.3390/nano12091400 (2022)

AI200 N. Cennamo, F. Arcadio, D. Del Prete, L. Zeni "A Temperature Sensor Exploiting Plasmonic Phenomena Changes in Multimode POFs", IEEE Sensors Journal,Volume 22, Issue 13, Pages 12900 – 129051, DOI 10.1109/JSEN.2022.3178753 (2022)

AI201 R. Zahoor, E. Cerri, R. Vallifuoco, L. Zeni, A. De Luca, F. Caputo, A. Minardo, "Lamb Wave Detection for Structural Health Monitoring Using a ϕ-OTDR System", Sensors,Volume 22, Issue 16, DOI 10.3390/s22165962 (2022)

AI202 G. Alberti, M. Pesavento, L. De Maria, N. Cennamo, L. Zeni, D. Merli "An Optical Fiber Sensor for Uranium Detection in Water", Biosensors, Volume 12, Issue 8, DOI 10.3390/bios12080635 (2022)

AI203 F. Arcadio, D. Del Prete, D. D'Ettore, L. Zeni, N. Cennamo "A novel plasmonic sensor based on light-diffusing fibers with built-in measuring cell", Optical Fiber Technology, Volume 72, DOI 10.1016/j.yofte.2022.103002 (2022)

AI204 E. Catalano, R. Vallifuoco, R. Bernini, L. Zeni, A. Minardo "Brillouin scattering for refractive index sensing in non-adiabatic tapers", Optics Express, Volume 30, Issue 22, Pages 39868 – 3987624, DOI 10.1364/OE.467839 (2022)

AI205 G. Alberti, F. Arcadio, M. Pesavento, C. Marzano, L. Zeni, N. A. Zeid, N. Cennamo "Detection of 2-Furaldehyde in Milk by MIP-Based POF Chips Combined with an SPR-POF Sensor", Sensors,Volume 22, Issue 21, DOI 10.3390/s22218289 (2022)

AI206 N. Cennamo, F. Arcadio, M. Seggio, D. Maniglio, L. Zeni, A. M. Bossi "Spoon-shaped polymer waveguides to excite multiple plasmonic phenomena: A multisensor based on antibody and molecularly imprinted nanoparticles to detect albumin concentrations over eight orders of magnitude", Biosensors and Bioelectronics,Volume 2171, 10.1016/j.bios.2022.114707 DOI (2022)

AI207 N. Cennamo, F. Arcadio, L. Zeni, G. Alberti, M. Pesavento "Optical-chemical sensors based on plasmonic phenomena modulated via micro-holes in plastic optical fibers filled by molecularly imprinted polymers", Sensors and Actuators B: Chemical, Volume 3721, DOI 10.1016/j.snb.2022.132672 (2022)

AI208 D. Bencivenga, F. Arcadio, A. Piccirillo, M. Annunziata, F. Della Ragione, N. Cennamo, A. Borriello, L. Zeni, L. Guida, "Plasmonic optical fiber biosensor development for point-of-care detection of malondialdehyde as a biomarker of oxidative stress", Free Radical Biology and Medicine, Volume 199, Pages 177 – 188 (2023)

AI209 N. Cennamo, A. Piccirillo, D. Bencivenga, F. Arcadio, , M. Annunziata, F. Della Ragione, L. Guida, L. Zeni, A. Borriello, "Towards a point-of-care test to cover atto-femto and pico-nano molar concentration ranges in interleukin 6 detection exploiting PMMA-based plasmonic biosensor chips", Talanta, Volume 2561 (2023)

AI210 Arcadio F., Noël L., Del Prete D., Maniglio D., Seggio M., Soppera O., Cennamo N., Bossi A.M., Zeni L., "Soft molecularly imprinted nanoparticles with simultaneous lossy mode and surface Volume 13, DOI: 10.1038/s41598-023-38262-y (2023)

AI211 Catalano E., Vallifuoco R., Zeni L., Dufour A., Marin E., Girard S., Minardo A., "Tuning of the Brillouin scattering properties in microstructured optical fibers by liquid infiltration", Scientific Reports, Volume 13, DOI: 10.1038/s41598-023-37345-0 (2023)

AI212 Alberti G., Spina S., Arcadio F., Pesavento M., De Maria L., Cennamo N., Zeni L., Merli D., "MIP-Assisted 3-Hole POF Chip Faced with SPR-POF Sensor for Glyphosate Detection", Chemosensors, Vulume 11, DOI: 10.3390/chemosensors11070414 (2023)

AI213 Arcadio F., Marzano C., Del Prete D., Zeni L., Cennamo N., "Analysis of Plasmonic Sensors Performance Realized by Exploiting Different UV-Cured Optical Adhesives Combined with Plastic Optical Fibers", Sensors, Volume 23, DOI: 10.3390/s23136182 (2023)

AI214 Guida L., Bencivenga D., Annunziata M., Arcadio F., Borriello A., Della Ragione F., Formisano A., Piccirillo A., Zeni L., Cennamo N., "An optical fiber-based point-of-care test for periodontal MMP-8 detection: A proof of concept", Journal of Dentistry, Volume 134, DOI: 10.1016/j.jdent.2023.104553 (2023)

AI215 Pitruzzella R., Rovida R., Perri C., Chiodi A., Arcadio F., Cennamo N., Pasquardini L., Vanzetti L., Fedrizzi M., Zeni L., D'Agostino G., "Polymer Doping as a Novel Approach to Improve the Performance of Plasmonic Plastic Optical Fibers Sensors", Sensors, Volume 23, DOI: 10.3390/s23125548 (2023)

AI216 Arcadio F., Oliveira R., Prete D.D., Minardo A., Zeni L., Bilro L., Cennamo N., Nogueira R.N., "A Novel Microchannel-in-a-Fiber Plasmonic Sensor", IEEE Sensors Journal, Volume 23, DOI: 10.1109/JSEN.2023.3268002 (2023)

AI217 Arcadio F., Seggio M., Zeni L., Bossi A.M., Cennamo N., "Estradiol Detection for Aquaculture Exploiting Plasmonic Spoon-Shaped Biosensors", Biosensors, Volume 13, DOI: 10.3390/bios13040432 (2023)

AI218 Pitruzzella R., Arcadio F., Perri C., Del Prete D., Porto G., Zeni L., Cennamo N., "Ultra-Low Detection of Perfluorooctanoic Acid Using a Novel Plasmonic Sensing Approach Combined with Molecularly Imprinted Polymers", Chemosensors, Volume 11, DOI: 10.3390/chemosensors11040211 (2023)

AI219 Calabrese A., Battistoni P., Ceylan S., Zeni L., Capo A., Varriale A., D'Auria S., Staiano M., "An Impedimetric Biosensor for Detection of Volatile Organic Compounds in Food", Biosensors, Volume 13, DOI: 10.3390/bios13030341 (2023)

AI220 Zahoor R., Catalano E., Vallifuoco R., Zeni L., Minardo A., "Automated Damage Detection Using Lamb Wave-Based Phase-Sensitive OTDR and Support Vector Machines", Sensors, Volume 23, DOI: 10.3390/s23031099 (2023)

AI221 Saitta L., Arcadio F., Celano G., Cennamo N., Zeni L., Tosto C., Cicala G., "Design and manufacturing of a surface plasmon resonance sensor based on inkjet 3D printing for simultaneous measurements of refractive index and temperature", International Journal of Advanced Manufacturing Technology, Volume 124, DOI: 10.1007/s00170-022-10614-4 (2023)

AI222 Arcadio F., Prete D.D., Minardo A., Marzano C., Zeni L., Cennamo N., "Micro-liquid volume measurements exploiting specialty optical fibers and plasmonic phenomena", IEEE Transactions on Instrumentation and Measurement, DOI: 10.1109/TIM.2023.3298414 (2023)

AI223 Annunziata, M., Arcadio, F., Borriello, A., Bencivenga, D., Piccirillo, A., Stampone, E., Zeni, L., Cennamo, N., Della Ragione, F., Guida, L., "A novel plasmonic optical-fiber-based point-of-care test for periodontal MIP-1α detection", iScience, 26 (12), art. no. 108539 DOI: 10.1016/j.isci.2023.108539 (2023)

AI224 Prete, D.D., Marzano, C., Arcadio, F., Cicala, G., Saitta, L., Zeni, L., Cennamo, N., "A Femtomolar Detection Range via Plasmonic Biosensors Based on V-Shaped Optical Adhesives Waveguides", IEEE Sensors Journal, 23 (24), pp. 30325-30334 DOI: 10.1109/JSEN.2023.3329587 (2023)

AI225 Pasquardini, L., Cennamo, N., Arcadio, F., Perri, C., Chiodi, A., D'agostino, G., Zeni, L., "Immuno-SPR biosensor for the detection of Brucella abortus", Scientific Reports, 13 (1), art. no. 22832 DOI: 10.1038/s41598-023-50344-5 (2023)

AI226 Pasquardini, L., Vanzetti, L., Canteri, R., Cennamo, N., Arcadio, F., Perri, C., D'Agostino, G., Pitruzzella, R., Rovida, R., Chiodi, A., Zeni, L., "Optimization of the immunorecognition layer towards Brucella sp. on gold surface for SPR platform", Colloids and Surfaces B: Biointerfaces, 231, art. no. 113577 DOI: 10.1016/j.colsurfb.2023.113577 (2023)

AI227 Cennamo, N., Arcadio, F., Minardo, A., Prete, D.D., Zeni, L., Pesavento, M., Alberti, G., Marletta, V., Ando, B., "Analysis of Low-Cost Inkjet-Printed Optical Platforms Covered by Molecularly Imprinted Polymers to Detect Furfural in Water", IEEE Sensors Journal, 23 (19), pp. 22169-22179 DOI: 10.1109/JSEN.2023.3306705 (2023)

AI228 Arcadio, F., Noël, L., Del Prete, D., Seggio, M., Zeni, L., Bossi, A.M., Soppera, O., Cennamo, N., "Sensing Approaches Exploiting Molecularly Imprinted Nanoparticles and Lossy Mode Resonance in Polymer Optical Fibers", Nanomaterials, 13 (16), art. no. 2361 DOI: 10.3390/nano13162361 (2023)

AI229 Catalano, E., Vallifuoco, R., Bernini, R., Zeni, L., Minardo, A., "Multi-taper array for dynamic strain measurements by a Brillouin optical frequency-domain analysis", OSA Continuum, 2 (1), pp. 54-64 DOI: 10.1364/OPTCON.473362 (2023)

AI330 Arcadio, F., Tavoletta, I., Marzano, C., Renzullo, L.P., Cennamo, N., Zeni, L., "Toward the Development of Plasmonic Biosensors to Realize Point-of-Care Tests for the Detection of Viruses and Bacteria", Engineering Proceedings, 56 (1), art. no. 113 DOI: 10.3390/ASEC2023-15277 (2023)

AI331 Catalano, E., Vallifuoco, R., Zeni, L., Cappelletti, M., Galtarossa, A., Palmieri, L., Minardo, A., "Distributed modal birefringence measurement in a few-mode fiber based on stimulated Brillouin scattering", Journal of Lightwave Technology, pp. 1-7 DOI: 10.1109/JLT.2023.3337654 (2023)

AI332 Zahoor, R., Vallifuoco, R., Catalano, E., Bernini, R., Zeni, L., Minardo, A., "Distributed Vibration Sensing through a Network Analysis Optical Frequency-Domain Reflectometer", Journal of Lightwave Technology, pp. 1-7 DOI: 10.1109/JLT.2023.3326772 (2023)

AI333 Cennamo, N., Arcadio, F., Ando, B., Marletta, V., Prete, D.D., Cesaro, M., De Matteis, A., Zeni, L., "Optimization of a Force Sensor Realized by Modified Plastic Optical Fibers Integral With a Cantilever", IEEE Transactions on Instrumentation and Measurement, 72, art. no. 100110 DOI: 10.1109/TIM.2023.3324692 (2023)

AI334 Lopes, G., Cennamo, N., Zeni, L., Singh, R., Kumar, S., Fernandes, A.J.S., Costa, F., Pereira, S.O., Marques, C., "Innovative optical pH sensors for the aquaculture sector: Comprehensive characterization of a cost-effective solution", Optics and Laser Technology, 171, art. no. 110355 DOI: 10.1016/j.optlastec.2023.110355 (2024)

AI335 Cennamo, N., Bencivenga, D., Annunziata, M., Arcadio, F., Stampone, E., Piccirillo, A., Della Ragione, F., Zeni, L., Guida, L., Borriello, A., "Plasmon resonance biosensor for interleukin-1β point-of-care determination: A tool for early periodontitis diagnosis", iScience, 27 (1), art. no. 108741 DOI: 10.1016/j.isci.2023.108741(2024)

AI336 Vallifuoco, R., Catalano, E., Zeni, L., Minardo, A., "Hotspot Detection by Phase-Modulated Pump-Based Brillouin Scattering", IEEE Photonics Technology Letters, 36 (2), pp. 95-98 DOI: 10.1109/LPT.2023.3337003 (2024)

AI337 Seggio, M., Arcadio, F., Cennamo, N., Zeni, L., Bossi, A.M., "A plasmonic gold nano-surface functionalized with the estrogen receptor for fast and highly sensitive detection of nanoplastics", Talanta, 267, art. no. 125211 DOI: 10.1016/j.talanta.2023.125211 (2024)

- Capitoli di Libri Internazionali

CL1 R. Bernini, A. Minardo, L. Zeni, "Optical fiber sensors based on stimulated Brillouin scattering" in *Encyclopedia of Sensors* edited by C. A. Grimes, E. C. Dickey and M. V. Pishko, **7**, 183-198 (2006)

CL2 R. Bernini, S. Campopiano, L. Zeni, "Antiresonant reflecting optical waveguides-based refractive index sensors" in *Encyclopedia of Sensors* edited by C. A. Grimes, E. C. Dickey and M. V. Pishko, **1**, 257-274 (2006)

CL3 R. Bernini, A. Minardo, L. Zeni, "Distributed optical fiber sensors", in "*An Introduction to Optoelectronic Sensors",* Ed. World Scientific Publishing Company, ISBN-10: 9812834125 ISBN-13: 978-9812834126 (2009)

CL4 G. De Maria, A. Minardo, C. Natale, S. Pirozzi, L. Zeni, "Optical fibres in aeronautics, robotics and civil engineering" Optical Fibre, New Developments; ISBN: 978-953-7619-50-3; IN-TECH; Pagg. 17-33 (2009)

CL5 R. Bernini, L. Zeni "Optoelectronics" In: Aaron R. Hawkins and Holger Schmidt. Handbook of Optofluidics. CRC Press Taylor & Francis Group, ISBN/ISSN: ISBN: 9781420093544(2010).

CL6 N. Cennamo and Luigi Zeni, "Bio and chemical sensors based on surface plasmon resonance in a plastic optical fiber", "Optical Sensor", IN-TECH, ISBN 980-953-307-1132-1(2014)
CL7 A. Minardo, M. Caccavale, A. Coscetta, G. Esposito, F. Matano, M. Sacchi, R. Somma, G. Zeni, L. Zeni, Monitoring Test of Crack Opening in Volcanic Tuff (Coroglio Cliff, Italy) Using Distributed Optical Fiber Sensor, Geophysics: Principles, Applications and Emerging Technologies, ISBN: 978-1-63484-852-7 Nova Science Publishers (2016)

- Riviste Nazionali

AN1 A. Cutolo, L. Zeni, C. di Lisio, S. Solimeno, «Tecniche di misura di durata di impulsi laser ultracorti», OPTOLASER, anno 3, n.4 ,39 (1990).
AN2 A. Cutolo, G. Breglio, L. Zeni, «Diagnostica di componenti e circuiti elettronici veloci con impulsi laser ultracorti», ALTA FREQUENZA, **3**, 37 (1991).
AN3 R. Bernini, A. Cutolo, A. Irace, P. Spirito, L. Zeni, «Quantitative analysis of surface effects in the measurement of bulk recombination lifetime in silicon wafers», ALTA FREQUENZA, **7**, 72 (1995)
AN4 S. Daliento, A. Sanseverino, P. Spirito, L. Zeni, «Experimental investigation on the effect of electron irradiation on the distribution of recombination centers in silicon epitaxial layers», ALTA FREQUENZA, **5**, 54 (1996)
AN5 L. Sirleto A. Irace L. Zeni, G. F. Vitale, A. Cutolo, "Separation of bulk lifetime and surface recombination velocity by transverse optical probing and multi wavelength technique", ALTA FREQUENZA, (2001)

- Conferenze Internazionali

CI1 A. Cutolo, L. Zeni, S. Solimeno, «A new technique for measuring mode coupling, pulse length and mode size in pico and femtosecond laser pulses», Laser '89 Conference New Orleans, Louisiana, 3-8 Dicembre (1989).
CI2 G. Breglio, A. Cutolo, L. Zeni, «Non invasive ultrafast optoelectronic sampling of GaAs devices», GAAS '90 Gallium Arsenide Application Symposium, Roma, 19-20 Aprile (1990).
CI3 A. Cutolo, T. Isernia, R. Pierri, L. Zeni, «A novel approach for the characterization of the transverse modes of a laser resonator», Huygens' Principle 1690 - 1990: Theory and Applications, The Hague, The Netherlands, 19-22 Novembre (1990).
CI4 F. Ferraro, G. Di Vita, M. Marchetti, A. Cutolo, L. Zeni, «Laser processing of thermoplastic matrix filament wound composities», Fourth European Conference on Composite Materials, Stuttgard, FRG, 25-28 Settembre (1990).
CI5 A. Cutolo, L. Zeni, «Real time diagnostics of beam quality in C.W. and pulsed laser systems», Laser '91 Conference, San Diego, California, 8-13 Dicembre (1991).
CI6 A. Cutolo, G. Breglio, L. Zeni, «Non invasive characterization of electronic devices», MIKON 91, 9th Microwave Conference, Warsaw, 20-24 Maggio (1991) (invited paper).
CI7 A. Cutolo, S. Panachia, S. Solimeno, L. Zeni, «Surface second harmonic generation for the diagnostics of short laser pulses», Laser '91 Conference San Diego, California, 8-13 Dicembre (1991).
CI8 A. Cutolo, S. Panachia, S. Solimeno, L. Zeni, «Background-free autocorrelators based on surface second harmonic generation», International School on Nonlinear Photonics and Optical Physics, Capri, 1-5 Giugno (1992).
CI9 G. Breglio, A. Cutolo, L. Zeni, «Characterization of ultrafast voltage pulses by picosecond

laser diode», Laser '92 Conference, Houston (Texas), 7-11 Dicembre (1992).
CI10 A. Cutolo, G. Calafiore, L. Zeni, «Supergaussian mirrors based on thermooptical effect», OE LASE '93 Conference, Los Angeles (California), 16-23 Gennaio (1993).
CI11 A. Cutolo. G. Breglio, M. della Noce, L. Zeni, «Real time measurements of fluctuations in C.W. and pulsed laser systems», Workshop on Laser Beam Characterization, Madrid (Spain), 14-16 Giugno (1993).
CI12 A. Cutolo, T. Isernia, R. Pierri, L. Zeni, «Measurement of the power distribution across the transverse modes of a laser resonator», Workshop on Laser Beam Characterization, Madrid (Spain), 14-16 Giugno (1993).
CI13 A. Cutolo, L. Zeni, «Electrically driven supergaussian mirrors», Workshop on Laser Resonators with Graded Reflectance Mirrors, Firenze, Settembre (1993).
CI14 A. Cutolo, L. Zeni, «Lithium Niobate Electrically Controlled Supergaussian Mirrors», OE/LASE 94, Los Angeles (California), 22-28 Gennaio (1994).
CI15 G. Breglio, A. Cutolo, P. Spirito, L. Zeni, «A novel contactless approach for accurate measurements of electron-hole recombination lifetimes», First International Symposium on Semiconductor Processing and Characterization with Lasers - Application in Photovoltaics, Suttgard (Germany), 18-20 Aprile (1994).
CI16 G. Breglio, A. Cutolo, L. Zeni, F. Corsi, D. De Venuto, G. V. Portacci, «Contactless frequency measurement and sampling reconstruction of electronic signals with picosecond resolution», IMEKO XIII World Congress, Torino, 5-9 Settembre (1994).
CI17 G. Breglio, A. Cutolo, P. Spirito, L. Zeni, «Optical switching of Bipolar Mode Field Effect Transistors», SPIE's International Symposium on Photonics for Industrial Applications», Boston - Massachusetts, 31 Ottobre-4 Novembre (1994).
CI18 A. Cutolo, T. Isernia, R. Pierri. L. Zeni, «Infrared laser beam diagnostics: Analysis and applications», III International Workshop on Advanced Infrared Technology and Applications, Capri, 19-20 Settembre (1995).
CI19 R. Bernini, A. Cutolo, A. Irace, S. Schettino, P. Spirito, L. Zeni, «Contactless measurement of bulk recombination lifetime and surface recombination velocity in silicon wafers», European Solid State Device Research Conference- ESSDERC '95 - The Hague - the Netherlands, 25-27 Settembre (1995)
CI20 S. Daliento, A. Sanseverino, P. Spirito, L. Zeni, «Spatial distribution of recombination centers in electron irradiated silicon epitaxial layers», IEEE International Conference on Microelectronics Test Structures, Trento, 25-28 Marzo (1996).
CI21 F. Corsi, D. De Venuto, G. Breglio, A. Cutolo, L. Zeni, «Optical probing of internal signals in silicon IC's», MELECON '96, Bari, 13-16 Maggio (1996).
CI22 G. Di Sciascio, M. Iacovacci, V. Silvestrini, A. Cutolo, A. Irace, L. Zeni, G. de Cesare, F. Irrera, F. Palma, «Technical performances of silicon solar cells as Cherenkov photon detector» The Padova Workshop on Tev-Gamma-Ray Astrophysics, Padova, 11-13 Settembre (1995).
CI23 G. Breglio, A. Cutolo, M. Iodice, P. Spirito, L. Zeni, «All-silicon phase-amplitude modulator based on a BMFET structure», European Solid State Device Research Conference- ESSDERC '96 - Bologna, 9-11 Settembre (1996).
CI24 A. Cutolo, S. Daliento, A. Irace, A. Sanseverino, P. Spirito, L. Zeni, «Optical and Electrical measurement of bulk recombination lifetime regardless of surface conditions», 7th European Conference on Power Electronics and Applications, 8-10 September, Trondheim, Norway (1997).
CI25 A. Cutolo, S. Daliento, A. Irace, P. Spirito, L. Zeni, «Recombination lifetime degradation in thermally stressed N-type bulk silicon wafers», 7th European Conference on Power Electronics and Applications, 8-10 September, Trondheim, Norway (1997).
CI26 S. Daliento, A. Sanseverino, P. Spirito, L. Zeni, C. Peschke, «Optimized test device for the measurement of process-dependent lifetime profile in FZ silicon layers», 14th European Photovoltaic Solar Energy Conference and Exhibition Barcelona -Spain 30 June - 4 July (1997).
CI27 G. Breglio, A. Cutolo, M. Iodice, P.M. Sarro, P. Spirito, L. Zeni, «Simulation and analysis of

silicon electro-optic modulator utilizing a three terminal active device and integrated in a Silicon-On-Insulator low loss single mode waveguide» Proceedings of SPIE, San Jose, California February (1997)

CI28 S. Daliento, A. Sanseverino, P. Spirito, G.F. Vitale, L. Zeni, «A new test structure for the measurement of recombination lifetime profile in processed silicon wafers», 15th European Photovoltaic Solar Energy Conference and Exhibition Vienna, -Austria 6-10 July (1998).

CI29 L. Zeni, R. Bernini, R. Pierri, «Optical tomography for dielectric profiling in processing electronic and optoelectronic materials», 1st World Congress on Industrial Process Tomography , Buxton (U.K.) April (1999).

CI30 L. Zeni, P. Corrado, A. Cutolo, «Semiconductor laser diode characterization measuring the M^2 quality factor», Workshop on Optoelectronic Materials and their Applications, Havana, Cuba (1998)

CI31 L. Zeni**,** A. Cutolo, R. Pierri «Semiconductor laser diode array characterization by means of field intensity measurements», Optoelectronics '99, San Jose, California (1999)

CI32 L. Zeni, R. Bernini, R. Pierri, "Characterisation of doping profiles in Silicon wafers", Analytical techniques for semiconductor materials and process characterisation (Altech III), ECS Symposium joint with ESSDERC 1999, Leuven, Belgium, September 16-17 (l999).

CI33 A. Irace, L. Sirleto, G. F. Vitale, A. Cutolo, L. Zeni, "Multi-wavelength optical characterization of the fabrication process of a silicon solar cell", Sixteenth European Photovoltaic Solar Energy Conference and Exhibition, Glasgow, 1-5 May (2000)

CI34 L. Sirleto, A. Irace, G. F. Vitale, A. Cutolo and L. Zeni, " Simultaneous measurement of bulk and surface recombination lifetimes on asymmetrical silicon samples ", International Symposium on Applied Photonics, Conference on Optical Diagnostic for industrial applications, Glasgow 22-25 May (2000)

CI35 R. Bernini, L. Zeni, R. Pierri , "Optical characterization of doping profiles in silicon", International symposium on Optical Science and Technology SPIE, San Diego (CA), 30 July to 4 August (2000).

CI36 G. Breglio, S. Campopiano, A. Irace L. Sirleto, P. Spirito, G.F. Vitale, A. Cutolo, L. Zeni, "Measurement of recombination time in epitaxial layers", Workshop on ADVANCES IN SILICON TECHNOLOGY AND DEVICES, Padova, 13-14 maggio 2000

CI37 S. Campopiano, A. Irace, L. Sirleto, G. Vitale, L. Zeni, A. Cutolo, "Optical Measurement Of Bulk Recombination Lifetime In High-Injection Regime", *3rd International conference on Materials for Microelectronics*, Dublin Castle, Rep. Of Ireland, 16-17 October 2000

CI38 A. Minardo, L. Zeni, A. Cusano, G. Coppola, A. Calabrò, M. Giordano, L. Nicolais, A. Cutolo, G. Breglio, "Analysis of feasibility on the use of a fiber bragg grating as an ultrasound detector", *Proceedings of SPIE - The International Society for Optical Engineering* 4328, pp. 224-232, Newport, 4-8 Marzo 2001

CI39 S. Campopiano, L. Zeni, A. Irace, A. Cutolo, G. d'Angelo, "Extension of beam quality definition to laser diodes arrays: application to a high power device" , 6th International Workshop on laser beam and optics characterization, Munich – Germany-18-20 June (2001)

CI40 R. Bernini, S. Campopiano, L. Zeni, "ARROW waveguides integrated refractometer sensor ", ODIMAP III – Pavia (Italy) September (2001)

CI41 R. Bernini, S. Campopiano, L. Zeni, "ARROW waveguides based refractometer for chemical and biochemical sensing applications ", Proceedings of SPIE - The International Society for Optical Engineering 4578, pp. 454-461, Boston – USA (2001)

CI42 L. Zeni, R. Bernini, A. Minardo, "Novel data analysis approach for temperature and strain profile reconstruction in distributed fiber optics sensors based on Stimulated Brillouin Scattering ", Proceedings of SPIE - The International Society for Optical Engineering 4576, pp. 108-121, Boston (MA) – USA (2001)

CI43 R. Bernini, L. Crocco, A. Minardo, F. Soldovieri, L. Zeni, "Frequency domain analysis of distributed fiber-optic Brillouin sensors: a novel approach", First European Workshop on Structural

Health Monitoring", Paris July 10-12 (2002)

CI44 R. Bernini, G. Breglio, A. Cutolo, A. Irace, G. V. Persiano, L. Zeni, " Dopant profiling in silicon wafers by Fourier transform infrared spectroscopy", 11th International Symposium on Nondestructive Characterization of Materials, Berlin, (2002)

CI45 R. Bernini, A. Minardo, L. Zeni, "A reconstruction technique for Stimulated Brillouin Scattering fiber-optic sensors for simultaneous measurement of temperature and strain", IEEE-Sensors 2002, Orlando Florida, June 2002

CI46 R. Bernini, S. Campopiano, C. De Boer, P.M. Sarro, L. Zeni, "Planar Antiresonant Reflecting Optical Waveguides as Sensors for Liquid Substances", IEEE-Sensors 2002, Orlando Florida, June 2002

CI47 A. Minardo, R. Bernini, L. Zeni, "Accurate distributed temperature measurements by Brillouin Scattering fiber-optic sensor", IEEE sensors 2003, Toronto, Canada, October 22-24, 2003

CI48 R. Bernini, S. Campopiano, P.M. Sarro, L. Zeni, "ARROW Optical Waveguides based refractometer", E-MRS Meeting 2003, Strasbourg (France), June 2003

CI49 R. Bernini, S. Campopiano, P.M. Sarro, L. Zeni, "Integrated Optical Refractometer based on Rib-ARROW Waveguides", Eurosensors 2003, Guimares Portugal, September 2003

CI50 S. D'Auria, V. Scognamiglio, M. Rossi, M. Staiano, S. Campopiano, N. Cennamo, L. Zeni, "Odor binding protein as probe for a refractive index-based biosensor: new perspectives in biohazard assessment", Proceedings of SPIE - The International Society for Optical Engineering 5321, pp. 258-264, San Jose California (USA), 24-29 January 2004

CI51 R. Bernini, A. Minardo, L. Zeni, F. Soldovieri, L. Crocco, "*Distributed fiber-optic sensing in the frequency domain based on stimulated Brillouin scattering*", ODIPMON 2004, Bacoli, Italy, March 2004

CI52 Bernini, A. Minardo, L. Zeni, F. Soldovieri, L. Crocco, "*Distributed fiber-optic Brillouin sensing in the frequency domain*", Proceedings of SPIE - The International Society for Optical Engineering 5502, pp. 500-503, Santander, Spain, June 2004

CI53 A. Minardo, R. Bernini, A. Cusano, L. Zeni, M. Giordano, "*Fiber Bragg gratings as ultrasonic waves sensors*", Proceedings of SPIE - The International Society for Optical Engineering 5502, pp. 84-87, Santander, Spain, June 2004

CI54 Bernini R., Minardo A., Zeni L., Soldovieri F., Crocco L., "Distributed fiber-optic frequency-domain Brillouin sensing", Proc. Eurosensors XVIII, Palombie Editor, Rome 12-15 Sept., 2004, pp.755-757, ISBN: 88-7621-282

CI55 Campopiano S., Bernini R., Zeni L., Sarro P.M., Integrated Antiresonant Hollow Waveguide Liquid Sensor", Proc. Eurosensors XVIII, Palombie Editor, Rome 12-15 Sept., 2004, pp.765-766, ISBN: 88-7621-282-

CI56 R. Bernini, N. Cennamo, A. Minardo, L. Zeni, "Polymer-on-glass waveguide structure for efficient fluorescence-based optical biosensors", SPIE Photonics West 2005 - Progress in Biomedical Optics and Imaging - Proceedings of SPIE 5728, pp. 101-111

CI57 R. Bernini, N. Cennamo, A. Minardo, L. Zeni, "Silicon planar waveguides for absorption based biosensors" , Proc. of 1st Int. Workshop on Advances in sensors and interfaces, D. De Venuto and B. Courtois, ed. (Laterza, Bari, 2005), pp. 138-142

CI58 R. Bernini, A. Minardo, L. Zeni, "High-resolution distributed fiber-optic frequency-domain Brillouin sensing", OFS17, Proceedings of SPIE - The International Society for Optical Engineering 5855 PART II, art. no. 141, pp. 579-582, Bruges 2005.

CI59 R. Bernini, A. Minardo, L. Zeni, "Frequency-domain analysis of stimulated Brillouin scattering in single-mode optical fibers", WFOPC, Proceedings of WFOPC2005 - 4th IEEE/LEOS Workshop on Fibres and Optical Passive Components 2005, art. no. 1462159, pp. 382-387, Palermo 2005.

CI60 R. Bernini, E. De Nuccio, F. Mottola, A. Minardo, P. M. Sarro, L. Zeni, "Design, fabrication and characterization of integrated antiresonant hollow core waveguides for photonics integrated circuits", Proceedings of WFOPC2005 - 4th IEEE/LEOS Workshop on Fibres and Optical Passive Components 2005, art. no. 1462135, pp. 254-259, Palermo 2005.

CI61 R. Bernini, E. De Nuccio, F. Mottola, A. Minardo, P. M. Sarro, L. Zeni, "Integrated antiresonant hollow core waveguides as a platform for microoptical-microfluidic μTAS applications", Eurosensors, Barcelona 2005.

CI62 R. Bernini, A. Minardo, L. Zeni, "Distributed strain measurements by fiber-optic Brillouin sensing for structural monitoring", Eurosensors, Barcelona 2005

CI63 R. Bernini, M. Fraldi, A. Minardo, V. Minutolo, F. Carannante, L. Nunziante, L. Zeni, "Optical-fiber sensor measurements for safety assessment and monitoring of bridges and large structure", NYCBC, New York 2005.

CI64 R. Bernini, M. Fraldi, A. Minardo, V. Minutolo, F. Carannante, L. Nunziante, L. Zeni, "Damage detection in bending beams through Brillouin distributed optical fiber sensor", 5th IWSHM, Stanford - California 2005.

CI65 R. Bernini, A. Minardo, L. Zeni, "*Optical fiber distributed sensing by frequency-domain stimulated Brillouin scattering*", OPTICAL MICROSYSTEMS, European Optical Society Topical Meeting, 15 – 18 September Capri Italy, 2005.

CI66 R. Bernini, E. De Nuccio, F. Mottola, A. Minardo, P.M. Sarro, L. Zeni, "*Integrated silicon Optical sensors based on hollow core waveguides*", OPTICAL MICROSYSTEMS, European Optical Society Topical Meeting, 15 – 18 September Capri Italy, 2005.

CI67 R. Bernini, M. Fraldi, A. Minardo, V. Minutolo, F. Carannante, L. Nunziante, and L. Zeni, "*Damage detection in bending beams through Brillouin distributed optic-fiber sensor*", New York City Bridge Conference, 2005.

CI68 R. Bernini, E. De Nuccio, A. Minardo, L. Zeni, "Integrated optofluidic devices based on hollow core Antiresonant Reflecting Optical Waveguides for sensing application", EUROPT(R)ODE VIII, Tubingen, Germany, April 2006.

CI69 R. Bernini, M. Fraldi, A. Minardo, V. Minutolo, F. Carannante, L. Nunziante, L. Zeni, "Structural health monitoring by distributed optical fiber sensors based on stimulated Brillouin scattering", **invited paper**, Bilateral China-Italy Workshop on Photonics for Communication and Sensing, Xi'an –China- (2006)

CI70 R. Bernini, A. Minardo, L. Zeni, "Sub-meter resolution distributed sensing based on frequency domain Brillouin scattering", **invited paper,** Bilateral China-Italy Workshop on Photonics for Communication and Sensing, Xi'an –China- (2006)

CI71 R. Bernini, A. Minardo, L. Zeni, "Structural Health Monitoring by High-Resolution Brillouin-based Strain Measurements", 18th International Conference on Optical Fiber Sensors, Cancun, Mexico (2006)

CI72 R. Bernini, E. De Nuccio, A. Minardo, L. Zeni, "Integrated silicon optical sensors based on hollow core waveguide" Proceedings of SPIE **6477** Silicon Photonics II, Joel A. Kubby, Graham T. Reed, Editors, 647714 (2007) – **Invited Paper**-

CI73 L. Zeni, A. Minardo, Z. Petrillo, M. Piochi, R. Scarpa, R. Bernini, "Distributed optical fiber sensors: an approach for monitoring the thermal gradient at the Campi Flegrei caldera" European Geosciences Union Conference EGU-2007, April 15-20, Wien (Austria) (2007)

CI74 A. Minardo, R. Bernini, F. Mottola, L. Zeni, "Fluorescence detection by metal-clad optical leaky waveguides", OPTICAL MICROSYSTEMS, European Optical Society Topical Meeting, September 30 – 3 October Capri Italy, 2007.

CI75 J. F. Kolb, A. de Angelis, S. Scarlett, C. Osgood, L. Zeni, and K. H. Schoenbach, "Nanosecond Pulse Generator with variable pulse duration for the study of pulse induced biological effects", 28th Power Modulator Conference, May 27-31, Las Vegas (USA) 2008

CI76 G. De Maria, A. Minardo, C. Natale, S. Pirozzi, L. Zeni "*Optoelectronic Tactile Sensor Based on Micromachined Scattering Wells*", FIRST MEDITERRANEAN PHOTONICS CONFERENCE, European Optical Society Topical Meeting, 25–28 June Ischia Italy (2008)

CI77 A. Minardo, R. Greco, L. Zeni e L. Picarelli, "Advanced monitoring criteria for precocious alerting of rainfall-induced flowslides", 10th International Symposium on Landslides, Xi An China, (2008)

CI78 L. Zeni, A. Minardo, R. Bernini, E. Damiano, L. Olivares, L. Picarelli, "Distributed optical fiber sensors for precocious alerting of rainfall-induced flowslides, World Landslides Forum, Tokyo Japan (2008)

CI79 L. Zeni, "Optical fiber distributed sensors based on stimulated Brillouin scattering for structural and environmental monitoring", invited paper, Bilateral Italy-Korea Workshop on Photonics for Communication and Sensing , Seoul Korea (2008)

CI80 R. Bernini, R. Gravina, A. Minardo, L. Zeni, Z. Petrillo, M. Piochi, R. Scarpa, "Long-term temperature-depth profile monitoring by distributed optical fiber sensors: an experimental approach at the high-risk campi flegrei volcano (ITALY)", IAVCEI'08, Reykjavik, Iceland, 17 - 22 August 2008.

CI81 R. Bernini, R. Gravina, A. Minardo, L. Zeni, Z. Petrillo, M. Piochi, R. Scarpa, "The measurements of 4d temperature distribution in earth science by distributed optical fiber sensors: an experimental approach to monitoring temperature and heat transfer dynamics at the campi flegrei volcano *(ITALY)*", EG '08, Malta, September 2008.

CI82 L. Zeni, A. Minardo, R. Bernini, E. Damiano, L. Olivares, L. Picarelli, "Distributed optical fiber sensors for precocious alerting of rainfall-induced flowslides", Proceedings of The First World Landslide Forum, United Nations University, Tokyo, 18-21 November 2008, pp. 697-700.

CI83 R. Bernini, A. Minardo, L. Zeni, "Pump depletion reduction technique for extended-range distributed Brillouin fiber sensors", Proceedings of SPIE - The International Society for Optical Engineering 7356, ISSN: 0277-786X (2009)

CI84 A. Minardo, G. Testa, L. Zeni, R. Bernini, "Dynamic strain measurement at randomly addressed optical fiber positions using stimulated Brillouin scattering, Optical Microsystems (2009)

CI85 A. Minardo, R. Bernini, L. Zeni, "Dynamic strain measurement at randomly addressed optical fiber positions using a time-domain Brillouin sensing system" 20th International Conference on Optical Fibre Sensors, Vol. 7503 Edinburgh (2009)

CI86 A. Minardo, R. Bernini, L. Amato, L. Zeni, "Bridge monitoring by Brillouin based distributed strain measurements", Proceedings of SPIE - The International Society for Optical Engineering - The Fourth European Workshop on Optical Fibre sensors, Vol. 7653, pp. 44.1-44.3, ISSN: 0277-786X (2010)

CI87 G. Testa, Y. Huang, L. Zeni, P. M. Sarro, R. Bernini, "Waveguide based optofluidics**",** Proceedings of SPIE - The International Society for Optical Engineering, Vol. 7606, ISSN: 0277-786X (2010)

CI88 A. Minardo, R. Bernini, L. Zeni, "Extension of the maximum measuring range in distributed Brillouin fiber sensors by tuning the Stokes/anti-Stokes power ratio", Proceedings of SPIE - The International Society for Optical Engineering-The Fourth European Workshop on Optical Fibre sensors,Vol. 7653, pp. 3D.1-3D.3, ISSN: 0277-786X (2010)

CI89 C. Falessi, A. Buonanno, M. D'Urso, M. G. Labate, L. Zeni, G. Calzolaio, N. Vacca, *"Direct Energy STOpper – DESTO" ,* 6th European Symposium on Non-Lethal Weapons, May 16-18, Stadthalle Ettlingen, Germany (2011)

CI90 M. G. Labate, A. Buonanno, M. D'Urso, G. Calzolaio, A. Vacca, L. Zeni, G. Leone, G. Riccardo, "High-speed photoconductive switches at high voltage bias in radar systems**",** IEEE National Radar Conference - Proceedings , art. no. 5960657 , pp. 850-852 (2011)

CI91 A. Cipullo, G. Gruca, K. Heeck, F. De Filippis, D. Iannuzzi, L. Zeni, "Ferrule-top cantilever optical fiber sensor for velocity measurements of low speed air flows**",** Proceedings of SPIE - The International Society for Optical Engineering 7753 , art. no. 77534O (2011)

CI92 R. Bernini, L. Amato A. Minardo, L. Zeni, "Bridge monitoring by distributed strain measurement using a time-domain Brillouin sensing system**"** Lecture Notes in Electrical Engineering 91 LNEE, pp. 439-442 (2011)
CI93 G. Testa, L. Zeni, Y. Huang, P. M. Sarro, R. Bernini, "High sensitivity Mach-Zehnder interferometer for sub-nanoliter liquid sensing**",** Lecture Notes in Electrical Engineering 91 LNEE, pp. 305-309 (2011)
CI94 G. Testa, L. Zeni, Y. Huang, P. M. Sarro, R. Bernini, "Liquid core integrated ring resonator**"** Proceedings of SPIE - The International Society for Optical Engineering 7943 , art. no. 794309 (2011)
CI95 N. Cennamo, D. Massarotti, L. Conte, L. Zeni, "SPR in plastic optical fibers: a simple geometry for low-cost biosensors", 4th EOS Topical Meeting on Optical Microsystems, Capri – Italy, 26-28 September, ISBN 978-3-00-033710-9 (2011)
CI96 G. Testa, Y. Huang, L. Zeni, P. M. Sarro, R. Bernini, "Optofluidics: Waveguides and devices**",** Proceedings of SPIE - The International Society for Optical Engineering 8264 , art. no. 826415 (2012)
CI97 R. Bernini, A. Minardo, L. Zeni, "Distributed strain and temperature sensing at CM-scale spatial resolution by BOFDA**",** Lecture Notes in Electrical Engineering 109 LNEE , pp. 235-239 (2012)
CI98 Noemi Jimenez–Redondo, Nicola Bosso, Luigi Zeni, Aldo Minardo, Frank Schubert, Franziska Heinicke, Axel Simroth, "Automated and Cost Effective Maintenance for Railway (ACEM–Rail)", Procedia - Social and Behavioral Sciences, Volume 48, Pages 1058–1067 doi: 10.1016/j.sbspro.2012.06.1082 (2012)
CI99 Gruca, G., Chavan, D., Cipullo, A., Babaei Gavan, K., De Filippis, F., Minardo, A., Rector, J., Heek, K.a, Zeni L, Iannuzzi, D. "Development of fiber optic ferrule-top cantilevers for sensing and beam-steering applications**"** Proceedings of SPIE - The International Society for Optical Engineering 8439 , art. no. 84390E (2012)
CI100 N. Cennamo, L. Conte, L. Bibbò and L. Zeni, "Comparative analysis between two simple experimental configurations for SPR sensors in plastic optical fibers", 5th EOS Topical Meeting on Optical Microsystems, Capri 12-14 September 2013, ISBN 978-3-9815022-6-8;
CI101 N. Cennamo, G. D'Agostino, M. Pesavento and L. Zeni, "A low cost sensor based on molecularly imprinted polymer and surface plasmon resonance in plastic optical fibers for the detection of small molecules", 5th EOS Topical Meeting on Optical Microsystems, Capri 12-14 September 2013, ISBN 978-3-9815022-6-8;
CI102 Testa, G., Persichetti, G., Zeni, L., Sarro, P.M., Bernini, R., Optofluidics: A new tool for sensing, *Proceedings of SPIE - The International Society for Optical Engineering* 8794, doi: 10.1117/12.2026027(2013)
CI103 Minardo, A., Coscetta, A., Pirozzi, S., Bernini, R., Zeni, L., Modal analysis of a cantilever beam by use of the slope-assisted BOTDA method for damage identification, *Proceedings of SPIE - The International Society for Optical Engineering* 8794 doi: 10.1117/12.2025992 (2013)
CI104 Minardo, A., Porcaro, G., Giannetta, D., Bernini, R., Zeni, L., Railway traffic monitoring using Brillouin distributed sensors, *Proceedings of SPIE - The International Society for Optical Engineering* 8794 doi: 10.1117/12.2025991(2013)
CI105 Cennamo, N., Pesavento, M., D'Agostino, G., Galatus, R., Bibbo, L., Zeni, L., Detection of trinitrotoluene based on SPR in molecularly imprinted polymer on Plastic Optical Fiber, *Proceedings of SPIE - The International Society for Optical Engineering* 8794, doi: 10.1117/12.2025695 (2013)
CI106 Minardo, A., Porcaro, G., Giannetta, D., Bernini, R., Zeni, L., "Railway traffic monitoring by use of distributed optical fiber sensors", *Civil-Comp Proceedings* 102 (2013)
CI107 Cipullo, A., Gruca, G., Heeck, K., De Filippis, F., Iannuzzi, D., Minardo, A., Zeni, L., "Numerical and experimental characterization of a ferrule-top cantilever optical fiber sensor for

flow velocity measurements" *Lecture Notes in Electrical Engineering* 162 LNEE PP. 337 - 341 doi: 10.1007/978-1-4614-3860-1_60 (2014)

CI108 Cennamo, N., Massarotti, D., Conte, L., Zeni, L., "Sensors based on SPR in plastic optical fiber: Numerical analysis and experimental results", *Lecture Notes in Electrical Engineering* 162 LNEE PP. 391 - 395 doi: 10.1007/978-1-4614-3860-1_70 (2014)

CI109 Bernini, R., Minardo, A., Zeni, L., "Novel approaches for CM-scale resolution and long-range sensing by stimulated Brillouin scattering in optical fibers", *Lecture Notes in Electrical Engineering* 162 LNEE PP. 333 - 336, doi: 10.1007/978-1-4614-3860-1_59 (2014)

CI110 Maria Pesavento, Nunzio Cennamo, Alice Donà, Piersandro Pallavicini, Girolamo D'Agostino and Luigi Zeni, A new approach for selective optical fiber sensors based on localized surface plasmon resonance of gold nanostars in molecularly imprinted polymer, submitted on International Conference on Chemical Engineering and Materials Science (CEMS 2014), March 15-17, 2014, Venice (Italy).

CI111 N. Cennamo, L. Coelho, A. Guerreiro, P. A.S Jorge, L. Zeni, SPR sensors in POF: a new experimental configuration for extended refractive index range and better SNR, submitted on 23rd International Conference on Optical Fiber Sensors OFS23, June 2-6, 2014, Santander.

CI112 N. Cennamo, L. Coelho, D. Massarotti, A. Guerreiroc, P. A.S Jorge, L. Zeni, " Optimization of low cost SPR biosensor platform using modal filtering", Europtrode 2014 - XII Conference on Optical Chemical Sensors & biosensors, Athens (Greece), 13-16 April 2014.

CI113 A. Minardo, L. Picarelli, A. Coscetta, G. Zeni, G. Esposito, M. Sacchi, F. Matano, M. Caccavale, L. Zeni, "*Distributed Fiber Optic Sensor for Early Detection of Rocky Slopes Movements*", Geophysical Research Abstracts, Vol. 16, EGU2014-6830-1, 2014, EGU General Assembly 2014.

CI114 A. Minardo, R. Bernini, L. Zeni, "Analysis of the Brillouin Gain spectrum in a graded-index multimode fiber", Third Mediterranean Photonics Conference, ISBN: 9781479948185, pp. 1-3, Trani 7-9 May 2014.

CI115 A. Minardo, A. Coscetta, G. Porcaro, D. Giannetta, R. Bernini, L. Zeni, "*Distributed optical fiber sensors for integrated monitoring of railway infrastructures*", 23rd International Conference on Optical Fibre Sensors, edited by José Miguel López-Higuera, Julian Jones, Manuel López-Amo, José Luis Santos, Proc. of SPIE Vol. 9157, 91575W, doi: 10.1117/12.2059082, ISSN: 0277-786X, ISBN: 9781628411751, pp. 224-227 (2014)

CI116 A. Minardo , R. Bernini, L. Zeni, "*Brillouin Optical frequency domain analysis in polymer optical fiber*", 23rd International Conference on Optical Fibre Sensors, edited by José Miguel López-Higuera, Julian Jones, Manuel López-Amo, José Luis Santos, Proc. of SPIE Vol. 9157, 91576V doi:10.1117/12.2059635, ISSN: 0277-786X, ISBN: 9781628411751, pp. 571-574 (2014)

CI117 A. Minardo, L. Picarelli, B. Avolio, A. Coscetta, R. Papa, G. Zeni, C. Di Maio, R. Vassallo, L. Zeni, "Fiber optic based inclinometer for remote monitoring of landslides: On site comparison with traditional inclinometers," Geoscience and Remote Sensing Symposium (IGARSS), 2014 IEEE International pp. 4078-4081, ISBN:978-1-4799-5775-0, 13-18 July 2014, doi: 10.1109/IGARSS.2014.6947382

CI118 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*", **invited paper,** 5th International Forum on Opto-electronic Sensor-based Monitoring in Geo-engineering, Oct 12-14, 2014, Nanjing, China.

CI119 L. Zeni, L. Picarelli, B. Avolio, A. Coscetta, R. Papa, G. Zeni, C. Di Maio, R. Vassallo, A. Minardo, "Distributed fibre optic sensing techniques for soil slope monitoring", invited paper, Optical Society of America - Frontiers in Optics, FiO 2014, DOI: 10.1364/FIO.2014.FTu2B.4 ISBN: 1-55752-286-3, pp. 1-3 Tucson AZ, USA (2014)

CI120 L. Zeni, S. D'Auria, M. Pesavento, L. De Maria, N. Cennamo, "Sensing platforms exploiting surface plasmon resonance in polymeric optical fibers for chemical and biochemical applications", invited paper, Optical Society of America - Advanced Photonics Congress - 27 June - 01 July 2015 Boston - USA, ISBN: 978-1-55752-000-5, doi:10.1364/SENSORS.2015.SeS2B.3 (2015)

CI121 A. D'Arco, M. Indolfi, M. A. Ferrara, N. Brancati, L. Zeni, L. Sirleto, "Femtosecond stimulated Raman spectroscopy and preliminary steps for nonlinear microscopy", rd IEEE International Conference on BioPhotonics, BioPhotonics 2015, ISBN: 978-146737926-7, DOI: 10.1109/BioPhotonics.2015.7304013 (2015)

CI122 P. Zuppella, Alain J. Corso, Maria G. Pelizzo, N. Cennamo, L. Zeni, "Refractometers for different refractive index range by surface plasmon resonance sensors in multimode optical fibers with different metals" SPIE OPTICS + PHOTONICS, 28 AUGUST–1 SEPTEMBER 2016, San Diego - California (USA) (2016)

CI123 F. Sequeira, L. Bilro, A. Rudnitskaya, M. Pesavento, L. Zeni, N. Cennamo, "Optimization of an evanescent field sensor based on D-shaped plastic optical fiber for chemical and biochemical sensing", EUROSENSORS XXX – Budapest, Hungary, September 4-7, 2016

CI124 N. Cennamo, G. Testa, S. Marchetti, L. De Maria, R. Bernini, L. Zeni, M. Pesavento, "Novel optical chemical sensor based on Molecularly Imprinted Polymer inside a hole dug in double Plastic Optical Fiber", EUROSENSORS XXX – Budapest, Hungary, September 4-7, 2016

CI125 N. Cennamo, R. Galatus, F. Mattiello, R. Sweid, L. Zeni, "Design of surface plasmon resonance sensor in plastic optical fibers based on nano-antenna arrays", EUROSENSORS XXX – Budapest, Hungary, September 4-7, 2016

CI126 G. R. Voichita, E. Voiculescu, N. Cennamo, L. Luongo, L. Zeni, "Augmented workplace for SPR sensor application", 11th IEEE Sensors Applications Symposium - SAS 2016, ISBN: 978-147997249-4, DOI: 10.1109/SAS.2016.7479824 (2016)

CI127 N. Cennamo, L. Zeni, L. De Maria, C. Chemelli, M. Pesavento, A. Profumo, " Surface plasmon resonance in a D-shaped plastic optical fibre: Influence of gold layer thickness in monitoring molecularly imprinted polymers", 11th IEEE Sensors Applications Symposium - SAS 2016, ISBN: 978-147997249-4, DOI: 10.1109/SAS.2016.7479850 (2016)

CI128 A. Minardo, L. Zeni, "Influence of laser phase noise on Brillouin optical time-domain analysis sensors", EWOFS 2016, Proceedings of SPIE - The International Society for Optical Engineering, Vol. 9916 ISSN: 0277786X ISBN: 978-151060219-9, DOI: 10.1117/12.2236619 (2016)

CI129 A. Minardo, E. Catalano, L. Zeni, "Practical limitations of the slope assisted BOTDA method in dynamic strain sensing", EWOFS 2016, Proceedings of SPIE - The International Society for Optical Engineering, Vol. 9916 ISSN: 0277786X ISBN: 978-151060219-9, DOI: 0.1117/12.2236653 (2016)

CI130 L. Picarelli, E. Damiano, A. Minardo, L. Olivares, L. Zeni, "The use of optical fibres for early prediction of slope failure", 1st IMEKO TC4 International Workshop on Metrology for Geotechnics, MetroGeotechnics 2016, Pages 269-275, ISBN: 978-929900750-1 (2016)

CI131 P. Lamberti, S. Romeo, M. R. Scarfì, V. Tucci, L. Zeni, " Numerical analysis of split dose protocols for nsPEF-electroporation", IFMBE Proceedings, Vol. 53, Pages 171-174, ISSN: 16800737 ISBN: 978-981287816-8, DOI: 10.1007/978-981-287-817-5_38 (2016)

CI132 M. A. Ferrara, M.A. A. D'Arco, M. Indolfi, N. Brancati, L. Zeni, L. Sirleto, "Light amplification and nonlinear microscopy by stimulated raman scattering ", PHOTOPTICS 2016 - Proceedings of the 4th International Conference on Photonics, Optics and Laser Technology 2016, Pages 89-95, ISBN: 978-989758174-8 (2016)

CI133 N. Cennamo, F. Chiavaioli, C. Trono, S. Tombelli, A. Giannetti, F. Baldini, L. Zeni, "A thermo-stabilized flow cell for surface plasmon resonance sensors in D-shaped plastic optical

fibers", EWOFS 2016, Proceedings of SPIE - The International Society for Optical Engineering, Vol. 9916 ISSN: 0277786X ISBN: 978-151060219-9, DOI: 10.1117/12.2236624 (2016)

CI134 N. Cennamo, P. Zuppella, D. Bacco, A. J. Corso, M. G. Pelizzo, M. Pesavento, L. Zeni, " Thin metal bilayer for surface plasmon resonance sensors in a multimode plastic optical fiber: The case of palladium and gold metal films", EWOFS 2016, Proceedings of SPIE - The International Society for Optical Engineering, Vol. 9916 ISSN: 0277786X ISBN: 978-151060219-9, DOI: 10.1117/12.2236607 (2016)

CI135 F. Matano, M. Caccavale, G. Esposito, G. M. Grimaldi, A. Minardo, G. Scepi, G. Zeni, L. Zeni, T. Caputo, R. Somma, C. Troise, G. De Natale, M. Sacchi, "An integrated approach for rock slope failure monitoring: The case study of Coroglio tuff cliff (Naples, Italy) - Preliminary results", 1st IMEKO TC4 International Workshop on Metrology for Geotechnics, MetroGeotechnics 2016, Pages 269-275, ISBN: 978-929900750-1 (2016)

CI136 P. Lamberti, S. Romeo, M. R. Scarfì, V. Tucci, L. Zeni, Numerical analysis of split dose protocols for nsPEF-electroporation, IFMBE Proceedings, Volume 53, Pages 171-174 (2016)

CI137 A. Minardo, E. Catalano, A. Coscetta, L. Zeni, "Sweep BOTDA for fast distributed sensing", IEEE 25th Optical Fiber Sensors Conference (OFS) Jeju, Jeju-Do, South Korea (2017)

CI138 N. Cennamo, M. Pesavento, L. De Maria, R. Galatus, F. Mattiello, L. Zeni, "Comparison of different photoresist buffer layers in spr sensors based on D-shaped POF and gold film", IEEE 25th Optical Fiber Sensors Conference (OFS) Jeju, Jeju-Do, South Korea (2017)

CI139 N. Cennamo, R. Galatus, E. Voiculescu, L. Zeni, "Red fluorescent optical fibers as light source for surface plasmon resonance sensors in POF", IEEE Sensors Application Symposium, March 13-15 Glassboro NJ USA (2017)

CI140 N. Cennamo, M. Pesavento, S. Marchetti, L. Zeni, "Towards Furfural detection in food by SPR sensors on plastic optical fibers and molecularly imprinted polymer", IEEE Sensors Application Symposium, March 13-15 Glassboro NJ USA (2017)

CI141 A. Minardo, L. Picarelli, E. Catalano, A. Coscetta, G. Zeni, Lei Zhang, C. Di Maio, R. Vassallo, R. Coviello, G. Macchia, L. Zeni, "Distributed fiber optic sensors for the monitoring of a tunnel crossing a landslide", European Geosciences Union - General Assembly, April 23-28, Wien Austria (2017)

CI142 Maria, L.D., Cennamo, N., Zeni, L., Scatiggio, F., Pesavento, M., "Optical chemosensors for transformers'oil degradation monitoring:case studies", 2018 110th AEIT International Annual Conference, AEIT 2018, DOI: 10.23919/AEIT.2018.8577418, (2018)

CI143 Cennamo, N., Zeni, L., D'Agostino, G., Porto, G., Biasiolo, A., "Optical chemical fiber sensor for the detection of perfluorinated compounds in water", I2MTC 2018 - 2018 IEEE International Instrumentation and Measurement Technology Conference: Discovering New Horizons in Instrumentation and Measurement, Proceedings, DOI:10.1109/I2MTC.2018.8409736 (2018)

CI144 Cennamo, N., Zeni, L., Andò, B., Baglio, S., Graziani, S., Marletta, V., Pistorio, A., Pesavento, M., Marchetti, S., "A novel chemical optical sensor based on molecularly imprinted polymer, optical fibers and inkjet printing technology, I2MTC 2018 - 2018 IEEE International Instrumentation and Measurement Technology Conference: Discovering New Horizons in Instrumentation and Measurement, Proceedings, DOI: 10.1109/I2MTC.2018.8409619 (2018)

CI145 Minardo, A., Catalano, E., Coscetta, A., Bernini, R., Persichetti, G., Zeni, L.,"Refractive index sensing based on Brillouin scattering in optical fibers", IET Conference Publications (2018)

CI146 Darban, R., Damiano, E., Minardo, A., Olivares, L., Zhang, L., Zeni, L., Picarelli, L.,"An investigation on the effects of rainwater infiltration in granular unsaturated soils through small-scale laboratory experiments" Springer Series in Geomechanics and Geoengineering, DOI: 10.1007/978-3-319-97112-4_145 (2018)

CI147 Cennamo, N., D'Agostino, G., Sequeira, F., Arcadio, F., Porto, G., Biasiolo, A., Perri, C., Nogueira, R., Bilro, L., Zeni, L., "An optical fiber intensity-based sensor configuration for the

detection of PFOA in water", Optics InfoBase Conference Papers, DOI: 10.1364/ofs.2018.the37 (2018)
CI148 Galatus, R., Farago, P., Marita, T., Zeni, L., "Integrated system SPR array sensors based on side glow MMA fibers", Optics InfoBase Conference Papers, DOI: 10.1364/BGPPM.2018.JTu2A.80 (2018)
CI149 Cennamo, N., D'Auria, S., Varriale, A., Pesavento, M., Zeni, L., "Plasmonic chemical and biological sensors based on plastic optical fibers",
Optics InfoBase Conference Papers, DOI: 10.1364/SENSORS.2018.SeW1E.1 (2018)
CI150 Cennamo, N., Mattiello, F., Jorge, P.A.S., Sweid, R., De Maria, L., Pesavento, M., Zeni, L. "Numerical Results on the Exploitation of Gold Nanostructures in Plastic Optical Fibers Based Plasmonic Sensors", Lecture Notes in Electrical Engineering, DOI: 10.1007/978-3-319-66802-4_18 (2018)
CI151 Minardo, A., Catalano, E., Coscetta, A., Zeni, L., "Dual Wavelength Botda for Strain/Temperature Discrimination", Lecture Notes in Electrical Engineering, DOI: 10.1007/978-3-319-66802-4_4 (2018)
CI152 Minardo, A., Catalano, E., Mollo, L., Greco, R., Zeni, L., "Moisture measurement in masonry materials using active distributed optical fiber sensors", Lecture Notes in Electrical Engineering, DOI: 10.1007/978-3-319-55077-0_20 (2018)
CI153 Cennamo, N., De Maria, L., Chemelli, C., Pesavento, M., Profumo, A., Galatus, R., Zeni, L. "Surface plasmon resonance sensor in plastic optical fibers. influence of the mechanical support geometry on the performances", Lecture Notes in Electrical Engineering, DOI: 10.1007/978-3-319-55077-0_18 (2018)
CI154 Cennamo, N., Pesavento, M., Profumo, A., Merli, D., De Maria, L., Chemelli, C., Zeni, L. "Chemical sensors based on surface plasmon resonance in a plastic optical fiber for multianalyte detection in oil-filled power transformer", Lecture Notes in Electrical Engineering, DOI: 10.1007/978-3-319-55077-0_17 (2018)
CI155 Cennamo, N., Zeni, L., "Novel approaches to realize plasmonic intrinsic and extrinsic optical fiber sensors with high sensitivity", 2019 Photonics and Electromagnetics Research Symposium - Fall, PIERS - Fall 2019 - Proceedings, DOI: 10.1109/PIERS-Fall48861.2019.9021926 (2019)
CI156 Cennamo, N., Arcadio, F., Perri, C., Zeni, L., Sequeira, F., Bilro, L., Nogueira, R., D'Agostino, G., Porto, G., Biasiolo, A., "Water monitoring in smart cities exploiting plastic optical fibers and molecularly imprinted polymers. the case of PFBS detection", 2019 IEEE International Symposium on Measurements and Networking, M and N 2019 - Proceedings, DOI: 10.1109/IWMN.2019.8805049 (2019)
CI157 Minardo, A., Catalano, E., Coscetta, A., Cerri, E., Zeni, L., "Coherent Phase-OTDR Operating at 850 nm Wavelength for Enhancing SNR", Progress in Electromagnetics Research Symposium, DOI: 10.1109/PIERS-Spring46901.2019.9017567 (2019)
CI158 Cennamo, N., Zeni, L., D'Auria, S., Varriale, A., Pesavento, M., Alberta, G., Profumo, A., Pasquardini, L., "Low-Cost Medical Diagnostics Exploiting Different Kinds of Receptors on Plasmonic Plastic Optical Fiber Sensors", Progress in Electromagnetics Research Symposium, DOI: 10.1109/PIERS-Spring46901.2019.9017323 (2019)
CI159 De Maria, L., Scatiggio, F., Pesavento, M., Cennamo, N., Zeni, L., "Toward an optical monitoring of chemical markers in transformers insulating oil", (Proceedings - IEEE International Conference on Dielectric Liquids, DOI: 10.1109/ICDL.2019.8796737 (2019)
CI160 Cennamo, N., Arcadio, F., Zeni, L., "Effect of the photoresist aging in D-shaped POF SPR Sensors for biochemical applications", SAS 2019 - 2019 IEEE Sensors Applications Symposium, Conference Proceedings, DOI: 10.1109/SAS.2019.8705982 (2019)
CI161 Minardo, A., Coscetta, A., Catalano, E., Bernini, R., Zeni, L., "High spatial resolution physical and chemical sensing based on BOFDA", Proceedings of SPIE - The International Society for Optical Engineering, DOI: 10.1117/12.2519934 (2019)

CI162 Minardo, A., Coscetta, A., Catalano, E., Cerri, E., Zeni, L., "Brillouin sensing in optically heated Co2+-doped fibers", Proceedings of SPIE - The International Society for Optical Engineering, DOI: 10.1117/12.2540342 (2019)
CI163 Cennamo, N., Trigona, C., Graziani, S., Zeni, L., Arcadio, F., Di Pasquale, G., Pollicino, A., "Extrinsic plasmonic optical fiber sensors based on POFs and bacterial cellulose slab waveguides", Proceedings of SPIE - The International Society for Optical Engineering, DOI: 10.1117/12.2539335 (2019)
CI164 Cennamo, N., Pesavento, M., Marchetti, S., De Maria, L., Zuppella, P., Zeni, L., "Polishing process analysis for surface plasmon resonance sensors in D-shaped plastic optical fibers", Lecture Notes in Electrical Engineering, DOI: 10.1007/978-3-030-04324-7_32 (2019)
CI165 Cennamo, N., Mattiello, F., Zeni, L., "A novel intensity-based sensor platform for refractive index sensing", Lecture Notes in Electrical Engineering, DOI: 10.1007/978-3-030-04324-7_35 (2019)
CI166 Pesavento, M., Marchetti, S., Zeni, L., Cennamo, N., "A molecularly imprinted polymer on a novel surface plasmon resonance sensor", Lecture Notes in Electrical Engineering, DOI: 10.1007/978-3-030-04324-7_33 (2019)
CI167 Minardo, A., Catalano, E., Coscetta, A., Zeni, G., Di Maio, C., Vassallo, R., Picarelli, L., Coviello, R., MacChia, G., Zeni, L., "Long-Term Monitoring of a Tunnel in a Landslide Prone Area by Distributed Optical Fiber Sensors", International Geoscience and Remote Sensing Symposium (IGARSS), DOI: 10.1109/IGARSS39084.2020.9324181 (2020)
CI168 Cennamo, N., Arcadio, F., Zeni, L., Ando, B., Baglio, S., Marletta, V., "Plastic optical fiber sensors and magnetic fluids: Plasmonic tunability and sensing properties for measurements", I2MTC 2020 - International Instrumentation and Measurement Technology Conference, Proceedings, DOI: 10.1109/I2MTC43012.2020.9129524 (2020)
CI169 Cennamo, N., Arcadio, F., Zeni, L., Di Pasquale, G., Trigona, C., Graziani, S., Pollicino, A., "An LSPR sensor based on a thin slab waveguide of bacterial cellulose", I2MTC 2020 - International Instrumentation and Measurement Technology Conference, Proceedings, DOI: 10.1109/I2MTC43012.2020.9129527 (2020)
CI170 Cennamo, N., Arcadio, F., Zeni, L., Andò, B., Baglio, S., Marletta, V., "Towards Plastic Optical Fiber Magnetic Field Sensors exploiting Magnetic Fluids and Multimode SPR-POF platforms", 2020 IEEE Sensors Applications Symposium, SAS 2020 - Proceedings, DOI: 10.1109/SAS48726.2020.9220018 (2020)
CI171 Cennamo, N., Zeni, L., Ricca, E., Isticato, R., Marzullo, V.M., Capo, A., Staiano, M., D'Auria, S., Varriale, A., "Environmental Monitoring Exploiting Optical Fiber Biosensors. The Case of Naphthalene Detection in Water", Lecture Notes in Electrical Engineering, DOI: 10.1007/978-3-030-37558-4_10 (2020)
CI172 Cennamo, N., Zeni, L., Pesavento, M., Marchetti, S., Baglio, S., Graziani, S., Marletta, V., Pistorio, A., Andò, B., "Optical Chemical Sensing Exploiting Inkjet Printing Technology and Molecularly Imprinted Polymers", Lecture Notes in Electrical Engineering, DOI: 10.1007/978-3-030-37558-4_11 (2020)
CI173 Capasso, F., Arcadio, F., Zeni, L., D'Agostino, G., Perri, C., Chiaretti, G., Porto, G., Cennamo, N., "Universal tool for surface plasmon resonance sensors realized in waveguides", 2021 IEEE Sensors Applications Symposium, SAS 2021 - Proceedings, DOI: 10.1109/SAS51076.2021.9530096 (2021)
CI174 Cennamo, N., Arcadio, F., Zeni, L., Minardo, A., Andò, B., Baglio, S., Marletta, V. "Magnetic Field Detection by an SPR Plastic Optical Fiber Sensor and Ferrofluids", Lecture Notes in Electrical Engineering, DOI: 10.1007/978-3-030-69551-4_9 (2021)
CI175 Coscetta, A., Catalano, E., Cerri, E., Cennamo, N., Zeni, L., Minardo, A., "Distributed Acoustic Sensor for Liquid Detection Based on Optically Heated CO2+-Doped Fibers", Lecture Notes in Electrical Engineering, DOI: 10.1007/978-3-030-69551-4_14 (2021)

CI176 Arcadio, F., Del Prete, D., Minardo, A., Marzano, C., Zeni, L., Cennamo, N., "Micro-liquid volume measurements realized by changing the plasmonic conditions via specialty optical fibers 2022 IEEE International Symposium on Measurements and Networking, M and N 2022 - Proceedings, DOI: 10.1109/MN55117.2022.9887653 (2022)

CI177 Catalano, E., Vallifuoco, R., Cennamo, N., Zeni, L., Minardo, A., "Brillouin scattering in optical tapers drawn from Ge-doped and F-doped silica fibers", 2022 IEEE International Symposium on Measurements and Networking, M and N 2022 - Proceedings, DOI: 10.1109/MN55117.2022.9887669 (2022)

CI178 Del Prete, D., Arcadio, F., Griffo, C., Cicatiello, D., Zeni, L., Cennamo, N., "An Arduino-based plasmonic sensor to detect rain and its analysis", 2022 IEEE International Symposium on Measurements and Networking, M and N 2022 - Proceedings, DOI: 10.1109/MN55117.2022.9887648 (2022)

CI179 Cennamo, N., Arcadio, F., Marletta, V., Del Prete, D., Andò, B., Zeni, L., Cesaro, M., De Matteis, A., "A simple and highly sensitive Force Sensor based on modified plastic optical fibers and cantilevers", 2022 IEEE Sensors Applications Symposium, SAS 2022 - Proceedings, DOI: 10.1109/SAS54819.2022.9881346 (2022)

CI180 Cicala, G., Arcadio, F., Zeni, L., Saitta, L., Tosto, C., Fragala, M.E., Del Prete, D., Cennamo, N., "Plasmonic Sensors based on 3D-printed polymer waveguides covered by a metals bilayer", 2022 IEEE Sensors Applications Symposium, SAS 2022 - Proceedings, DOI: 10.1109/SAS54819.2022.9881343 (2022)

CI181 Vallifuoco, R., Zeni, L., Minardo, A., Perfetto, D., Caputo, F., De Luca, A., "An integrated structural health monitoring system based on Lamb waves", 2022 IEEE 9th International Workshop on Metrology for AeroSpace, MetroAeroSpace 2022 - Proceedings, DOI: 10.1109/MetroAeroSpace54187.2022.9856155 (2022)

CI182 Vallifuoco, R., Cerri, E., Minardo, A., Zeni, L., Zahoor, R., Perfetto, D., Caputo, F., De Luca, A., "Lamb waves detection through phi-OTDR for structural health monitoring", 2022 IEEE 9th International Workshop on Metrology for AeroSpace, MetroAeroSpace 2022 - Proceedings, DOI: 10.1109/MetroAeroSpace54187.2022.9856164 (2022)

CI183 Soares, M.S., Rodrigues, D., Vidal, M., Facão, M., Cennamo, N., Zeni, L., Caucheteur, C., Costa, F., Leitão, C., Pereira, S.O., Santos, N.F., Marques, C., "D-shape optical fiber immunosensors based on SPR for cortisol detection: simulation and experimental procedure", Proceedings of SPIE - The International Society for Optical Engineering, DOI: 10.1117/12.2620806 (2022)

CI184 Cennamo, N., Arcadio, F., Minardo, A., Prete, D.D., Zeni, L., Pesavento, M., Alberti, G., Marletta, V., Ando, B., "Molecularly Imprinted Polymers and Inkjet-Printer technology to develop Optical-Chemical Sensors", Conference Record - IEEE Instrumentation and Measurement Technology Conference, DOI: 10.1109/I2MTC48687.2022.9806493 (2022)

CI185 Coscetta, A., Catalano, E., Cerri, E., Zeni, L., Minardo, A., "Distributed Static and Dynamic Strain Measurements in Polymer Optical Fibers", Lecture Notes in Electrical Engineering, DOI: 10.1007/978-3-031-08136-1_31 (2023)

CI186 Pesavento, M., Alberti, G., Merli, D., Profumo, A., De Maria, L., Zeni, L., Cennamo, N., "Optical Fiber Sensors for the Detection of Metal Ions in Water", Lecture Notes in Electrical Engineering, DOI: 10.1007/978-3-031-08136-1_17 (2023)

CI187 F. Arcadio, D. Del Prete, L. Zeni, M. Pesavento, G. Alberti, V. Marletta, S. Castorina, B. Andò, N. Cennamo, Optical Chemical Sensors Based on Waveguides with a Core of Molecularly Imprinted Polymer, 2023 IEEE Sensors Applications Symposium, SAS 2023

CI188 E. Catalano, R. Vallifuoco, F. Arcadio, N. Cennamo, L. Zeni, A. Minardo, C. Trono, A. Giannetti, F. Baldini, S. Tombelli, 3D Printed Flow-Cells for Brillouin-based Tapered Optical Fiber Biosensors, 2023 IEEE International Workshop on Metrology for Industry 4.0 and IoT

CI189 A. Minardo, E. Catalano, R. Vallifuoco, L. Zeni, R. Bernini, M. A. Caponero, A. Castaldo, G. De Marzi, A. Masi, C. Mazzotta, A. Polimadei, "Distributed cryogenic temperature sensing

through Brillouin optical frequency-domain analysis," Proc. SPIE 12643, European Workshop on Optical Fibre Sensors (EWOFS 2023), 126432D (23 May 2023); doi: 10.1117/12.2678097

CI190 R. Zahoor, E. Catalano, R. Vallifuoco, L. Zeni, A. Minardo, "Damage detection in an aluminum plate through a phi-OTDR sensor and support vector machines," Proc. SPIE 12643, European Workshop on Optical Fibre Sensors (EWOFS 2023), 126432B (23 May 2023); doi: 10.1117/12.2678095

CI191 E. Catalano, R. Vallifuoco, L. Zeni, A. Minardo, "Distributed measurement of modal birefringence in a few-mode fiber based on stimulated Brillouin scattering," Proc. SPIE 12643, European Workshop on Optical Fibre Sensors (EWOFS 2023), 126432C (23 May 2023); doi: 10.1117/12.2678089

CI192 F. Arcadio; F. Capasso; C. Marzano; L. Zeni;N. Cennamo, "Plasmonic plastic optical fiber chips combined with artificial intelligence to identify water or alcoholic solutions", Proc. SPIE 12643, European Workshop on Optical Fibre Sensors (EWOFS 2023), 126432C (23 May 2023) doi.org/10.1117/12.2680771

- Conferenze Nazionali

CN1 V. Berardi, R. Bruzzese, S. Solimeno, N. Spinelli, A. Cutolo, L. Zeni, «Processi di ionizzazione in campi laser molto intensi», V Congresso Nazionale di Elettronica Quantistica e Plasmi, Firenze, 16-19 Novembre (1988).
CN2 G. Breglio, A. Cutolo, L. Zeni, C. di Lisio, S. Solimeno, « Analisi in tempo reale di impulsi laser ultracorti per la caratterizzazione dei circuiti elettronici», VIII Riunione Nazionale di Elettromagnetismo Applicato, Capri, 9-12 Ottobre (1990).
CN3 R. Pierri, A. Cutolo, A. Esposito, T. Isernia, L. Zeni, «Risultati sperimentali sulla caratterizzazione dei modi trasversi in un fascio laser», VIII Riunione Nazionale di Elettromagnetismo Applicato, Capri, 9-12 Ottobre (1990).
CN4 A. Cutolo, G. Calafiore, L. Zeni, «Specchi supergaussiani controllati elettricamente», IX Riunione Nazionale di Elettromagnetismo Applicato, Assisi, 5-8 Ottobre (1992).
CN5 G. Breglio, A. Cutolo, L. Zeni, F. Corsi, «Frequenzimetro campionatore per segnali di tensione al picosecondo», Elettroottica '94, Pavia, 25-27 Maggio (1994).
CN6 R. Bernini, A. Cutolo, A. Irace, P. Spirito, L. Zeni, «Separation of bulk and surface effects in the measurement of the recombination lifetime in semiconductors», Congresso Nazionale di Fisica della Materia, Napoli, 29 Maggio-1 Giugno (1995).
CN7 G. Breglio, A. Cutolo, A. Irace, L. Zeni, «Applicazioni dell'effetto Faraday ad un sensore di corrente e ad un rotatore di polarizzazione in fibra ottica», Elettroottica '96, Milano, 29-31 Maggio (1996).
CN8 R. Bernini, S. Campopiano, L. Zeni, "Un sensore ottico ad elevata sensibilità per applicazioni chimiche", Elettroottica 2002, Montecatini Terme, 29-31 Maggio (2002)
CN9 R. Bernini, A. Minardo, L. Zeni, "Una tecnica di ricostruzione per sensori in fibra ottica basati sullo scattering stimolato di Brillouin", Elettroottica 2002, Montecatini Terme, 29-31 Maggio (2002)
CN10 R. Bernini, S. Campopiano, P.M. Sarro, L. Zeni, "ARROW structures for sensing applications", Aisem 2003, Trento 10-14 Febbraio 2003.
CN11 R. Bernini, A. Minardo, L. Zeni, "*Accuracy enhancement in Brillouin distributed fiber-optic temperature sensors using signal deconvolution*", AISEM 2004, Ferrara, Italy, February 2004
CN12 R. Bernini, N. Cennamo, A. Minardo, L. Zeni, "Optimization of planar waveguides for fluorescence based biosensors", AISEM 2005

CN13 R. Bernini, A. Minardo, L. Zeni, "High-resolution temperature/strain distributed measurements by fiber-optic Brillouin sensing", AISEM 2005

CN14 R. Bernini, E. De Nuccio, A. Minardo, P. M. Sarro, L. Zeni, "*Integrated silicon micro flow cytometer based on hollow arrow waveguides*", AISEM 2006, Lecce, Italy, February 2006.

CN15 R. Bernini, F. Mottola, A. Minardo, L. Zeni, "*Spectral interrogation of optical metal-cladding waveguides for chemical sensing*", AISEM 2006, Lecce, Italy, February 2006.

CN16 A. Minardo, R. Bernini, F. Mottola, L. Zeni, "*Sensitive fluorescence detection by metal-clad waveguides*", AISEM 2007, Napoli, 12-14 February 2007.

CN17 R. Bernini, E. De Nuccio, A. Minardo, L. Zeni, P. M. Sarro, "*Characterization of a silicon integrated micro-flow cytometer*", AISEM 2007, Napoli, 12-14 February 2007.

CN18 R. Bernini, M. Tonezzer, G. Maggioni, S. Carturan, A. Quaranta, G. Della Mea, F. Mottola, A. Minardo, L. Zeni, "*Metal-cladding leaky waveguides for chemical and biochemical sensing applications*", AISEM 2007, Napoli, 12-14 February 2007.

CN19 R. Bernini, R. Gravina, A. Minardo, L. Zeni, "G*old based peak type metal clad leaky waveguide for sensing applications*", AISEM 2008, Roma, Febbraio 2008.

CN20 R. Bernini, A. Minardo, L. Zeni**, "**Brillouin-based fiber-optics sensors for vectorial dislocation monitoring of pipelines**",** AISEM 2008, Roma, Febbraio 2008.

CN21 R. Bernini, R. Gravina, A. Minardo, L. Zeni, Z. Petrillo, M. Piochi, R. Scarpa, "Long term temperature monitoring of volcanic areas by distributed optical fiber sensors", AISEM 2008, Roma, Febbraio 2008.

CN22 R. Bernini, A. Minardo, L. Zeni, "Sensori In Fibra Ottica Per Monitoraggio Distribuito", DIACOMAST 2008, Belvedere di San Leucio, Caserta, Febbraio 2008.

CN23 R. Bernini, A. Minardo, L. Zeni, "Distributed dynamic strain measurement using a time-domain Brillouin sensing system", AISEM 2009, Pavia, 24-26 Febbraio 2009.

CN24 N. Cennamo, D. Massarotti, L. Conte and L. Zeni, "Sensors based on SPR in plastic optical fiber: numerical analysis and experimental results", Proceedings of the First National Conference on Sensors, Rome 15-17 February 2012, Springer, ISBN 978-146143859-5;

CN25 G. D'Agostino, N. Cennamo, R. Galatus, L. Bibbò, L. Zeni, M. Pesavento, "An optical sensor for trinitrotoluene based on surface plasmon resonance in a plastic optical fiber-molecularly imprinted polymer", La Giornata del Gruppo Sensori della Società Chimica Italiana (GS2013), Sestri Levante (Ge), 19-20 Settembre 2013.

CN26 N. Cennamo, L. Bibbò, L. Conte and L. Zeni, "Sensors based on surface plasmon resonance in a plastic optical fiber for biological and chemical sensing", Fotonica 2013, 15° Convegno Nazionale delle Tecnologie Fotoniche, Milano, 21-23 Maggio 2013, ISBN 9788887237160, ISBN-A 10.978.8887237/160

CN27 Nunzio Cennamo, Antonella Profumo, Daniele Merli, Girolamo D'Agostino, Maria Pesavento, Luigi Zeni, Determination Of Copper By Surface Plasmon Resonance In Pof With A D,L-Penicillamine Modified Gold Surface, Secondo Convegno Nazionale Sensori, pp. 1-4, ISBN 978-3-319-09616-2, Roma 19-21 Febbraio 2014

CN28 A. Minardo, A. Coscetta, G. Porcaro, D. Giannetta, R. Bernini, L. Zeni, "Structural Health Monitoring In The Railway Field By Fiber-Optic Sensors", 2nd National Conference on Sensors; Rome; Italy; pp. 359-362, ISBN 978-3-319-09616-2, 19 February 2014 through 21 February 2014.

CN29 A. Minardo, A. Coscetta, R. Bernini, L. Zeni, "Modal Analysis of an Aluminum Rectangular Plate by Use of the Balanced-Detection DPP-BOTDA Method", pp. 3-5, ISBN: 978-8-8872-3718-4, DOI: 10.1109/Fotonica.2014.6843913, Fotonica 2014, Napoli.

CN30 A. Minardo, E. Damiano, L. Olivares, L. Picarelli, L. Zeni, B. Avolio, A. Coscetta, "Soil slope monitoring by use of a Brillouin distributed sensor", Fotonica 2015, Torino

CN31 N. Cennamo, D. Massarotti, A. Della Monica, A. G. Di Bussolo, A. Fiorillo, L. Zeni, ”A simple arduino-based configuration for SPR sensors in plastic optical fibers*”,* Fotonica 2015, Torino

CN32 A. D'Arco, N. Brancati, M. A. Ferrara, M. Frucci, M. Indolfi, L. Zeni, L. Sirleto, “Stimulated Raman Scattering in Single Cell”, Fotonica 2016, Roma

CN33 N. Cennamo, L. De Maria, C. Chemelli, P. Zuppella, M.G. Pelizzo, A.J. Corso, Padova, M. Pesavento, F. Mattiello, L. Zeni, “SPR Sensors Based on Bilayer Metals in a D-Shaped Plastic Optical Fiber. Analysis and Experimental Results with Different Metals”, Fotonica 2016, Roma

CN34 A. Minardo, E. Catalano, L. Zeni, R. Agliata, R. Greco, L. Mollo, “Measurement of Moisture Content in Masonry Materials by Active Distributed Optical Fiber Sensors”, Fotonica 2016, Roma

CN35 N. Cennamo, M. Pesavento, L. De Maria, P. Zuppella, F. Mattiello, L. Zeni,” A novel configuration for bio-chemical sensors based on surface plasmon resonance”, Fotonica 2017, Padova

CN36 A. Minardo, E. Catalano, A. Coscetta, R. Bernini, L. Zeni, ”Characterization of silica fibers for dual-wavelength Brillouin sensors”, Fotonica 2017, Padova