

CONVEGNO NAZIONALE SENSORI

Innovazione, attualità e prospettive

ROMA – Consiglio Nazionale delle Ricerche

15 – 17 FEBBRAIO 2012

Programma

Mercoledì, 15 Febbraio Aula Convegni			
14:00-14:20	Opening		
14:20-15:00	I1	D'Amico Dipartimento di Ingegneria Elettronica, Università Tor Vergata, Roma	Oltre la limitatezza dei nostri sensi: tecnologie, strategie, opportunità ma nuove responsabilità
15:00-15:40	I2	Rajbenbach Unit G2 - Microsystems - European Commission	From Sensors to Systems - Integration technologies at the heart of innovation - Future European opportunities
15:40-16:20	I3	Ferrera STMicroelectronics	STMicroelectronics MEMS Wave in the Consumer Market
16:20-16:40	Coffee Break		
16:40-17:00	European opportunities for sensing applications - <i>Penza</i> , COST Action TD1105 EuNetAir, European Network on New Sensing Technologies for Air-Pollution Control and Environmental Sustainability - <i>Minunni</i> , MST COST Action TD1003, Bio-inspired nanotechnologies: from concepts to applications		
17:00-18:00	Tavola rotonda - Futuro e prospettive della sensoristica in Italia		

Giovedì, 16 Febbraio Aula Convegni

8:30-9:10	I4	Turner Biosensors & Bioelectronics Centre IFM-Linköping University, Sweden	Biosensors: Sense and Sensibility
Sessione 1 - Biosensors 1			
9:20-9:45	K1	<u>Mirasoli</u> , <u>Dolci</u> , <u>Bonvicini</u> , <u>Buragina</u> , <u>Di Furio</u> , <u>Zangheri</u> , <u>Guardigli</u> , <u>Gallinella</u> , <u>Roda</u>	<i>A portable microfluidic device based on chemiluminescence contact imaging for detecting parvovirus B19 in serum samples</i>
9:45-10:00	O1	<u>Cano Quintero</u> , <u>Buonasera</u> , <u>Pezzotti</u> , <u>Giardi</u>	Multichannel fluorimeter for bio-sensor applications on environmental field
10:00-10:15	O2	<u>Fassina</u> , <u>Gallotta</u>	Optical biochips for biomarkers-IgM complexes codetermination in hepatocellular carcinoma
10:15-10:30	O3	<u>Terzi</u> , <u>Ulrici</u> , <u>Seeber</u> , <u>Secchi</u> , <u>Fiorello</u> , <u>Dispenza</u> , <u>Cantolín</u> , <u>Kuusela</u> , <u>Varriale</u> , <u>D'Auria</u> , <u>Tittonen</u> , <u>Colao</u> , <u>Menicucci</u> , <u>Nuvoli</u> , <u>Ciambelli</u> , <u>Venditto</u> , <u>Uotila</u> , <u>Maisons</u> , <u>Carras</u>	Toward a compact instrument for detecting drug precursors in different environments
10:30-10:45	O4	<u>Scarano</u> , <u>Vestri</u> , <u>Crispo</u> , <u>Ermini</u> , <u>Minunni</u>	Hepcidin detection by affinity based sensing: a possible application in clinical and anti-doping analysis
10:45-11:15	Coffee Break		
Sessione 3 - Biosensors 2			
11:15-11:30	O5	<u>Manera</u> , <u>Ferreiro-Vila</u> , <u>García-Martín</u> , <u>Armelles</u> , <u>Cebollada</u> , <u>Rella</u>	Magneto-plasmonic nanostructures for sensors application
11:30-11:45	O6	<u>D'Agata</u> , <u>Breveglieri</u> , <u>Zanoli</u> , <u>Borgatti</u> , <u>Spoto</u> , <u>Gambari</u>	Ultrasensitive surface plasmon resonance imaging for the detection of disorders in unamplified human genomic DNA
11:45-12:00	O7	<u>Ermini</u> , <u>Mariani</u> , <u>Bellissima</u> , <u>Scarano</u> , <u>Bonini</u> , <u>Minunni</u>	Coupling nanotechnology to optical affinity sensing: the case of surface plasmon resonance imaging for DNA detection
12:00-12:15	O8	<u>Rusciano</u> , <u>De Luca</u> , <u>Pesce</u> , <u>Sasso</u> , <u>Oliviero</u> , <u>Amato</u> , <u>Borbone</u> , <u>D'Errico</u> , <u>Piccialli</u> , <u>Mayol</u>	Label-free probing of g-quadruplex formation by surface-enhanced Raman scattering
12:15-12:30	O9	<u>Lamberti</u> , <u>Antoccia</u> , <u>Battocchio</u> , <u>Duconge</u> , <u>Iucci</u> , <u>Papi</u> , <u>Quagliano</u> , <u>Foglia</u>	Integrated approach to a sensitive platform for SERS aptamer biosensors, suitable for a microfluidic device

12:30-12:45	O10	<u>Ballarini</u> , Danz, Frascella, Enrico, De Leo, Ricciardi, Rivolo, Mandracci, Dominici, Michelotti, Giorgis, Descrovi	Bloch surface waves on dielectric photonic crystals for refractometric and fluorescence sensing
12:45-13:00	O11	<u>De Stefano</u> , Rea, Orabona, Rendina	Porous silicon based hybrid microsystems for optical monitoring of biochemical events
13:00-14:15	Pranzo		
Sessione 5 - Biosensors 3			
14:15-14:40	K2	<u>Laschi</u> , Tombelli, Palchetti, Mascini, <u>Marrazza</u>	<i>New affinity biosensors as diagnostic tools for tumor markers analysis</i>
14:40-14:55	O12	<u>Tomassetti</u> , Spuri, Capesciotti, Gatta, Campanella	Catalase OPEE operating in high hydrophobic solvent: mechanism and applications
14:55-15:10	O13	<u>Zuccheri</u> , Vinelli, Onofri	Isothermal amplification methods for DNA biosensor signal enhancement
15:10-15:25	O14	<u>Ugo</u> , Silvestrini, Moretto, Bottari	Ensembles of nanoelectrodes as detection platforms for electrochemical biosensors
15:25-15:40	O15	<u>Ingrosso</u> , Bianco, Lopalco, Curri, Agostiano, Corcelli, Bruno, Striccoli, Siciliano	Chemical functionalization of single walled carbon nanotubes with mutated bacteriorhodopsin towards sensing applications
15:40-16:10	Coffee Break		
Sessione 7 - Biosensors 4			
16:10-16:35	K3	<u>Benfenati</u> , Toffanin, Capelli, Sagnella, Turatti, Pistone, Ruani, Omenetto, Kaplan, Zamboni, <u>Muccini</u>	<i>An organic field-effect platform for electronic and photonic bio-sensing</i>
16:35-16:50	O16	<u>Mulla</u> , Pistillo, Magliulo, Cotrone, Cioffi, Palazzo, Favia, Sabbatini, Torsi	Modifying organic semiconductor active layer of EGOTFT using PE-CVD for biosensors development
16:50-17:05	O17	<u>Della Ventura</u> , Schiavo, Altucci, Esposito, Velotta	Light assisted antibody immobilization for biosensing
17:05-17:20	O18	Di Carlo, Ingo, Padeletti, Zane, Bianchini, <u>Curulli</u>	Nanoparticles and nanocomposites in electrochemical sensing area
17:20-18:30	Sessione Poster 1		

Giovedì, 16 Febbraio Sala Conferenze/Sala Bisogno

Sessione 2 - Physical sensors 1

9:20-9:45	K4	<u>Luciano</u> , Sardini, Serpelloni	<i>Electromechanical generator implanted in human total knee prosthesis</i>
9:45-10:00	O19	Sardini, <u>Serpelloni</u>	T-shirt for vital parameter monitoring
10:00-10:15	O20	<u>Leone</u> , Diraco, Siciliano	Time-of-flight sensor-based platform for posture recognition in AAL applications
10:15-10:30	O21	<u>Scalise</u> , Ercoli, Marchionni	Obstacle detection by multiple ultrasonic sensing for visually impaired users
10:30-10:45	O22	Andò, Baglio, <u>Trigona</u>	Integrated “bent beam” structures for temperature measures in hermetic areas
10:45-11:30	Coffee Break		

Sessione 4 - Physical sensors 2

11:30-11:55	K5	<u>Andò</u> , Baglio, L'Episcopo	<i>Low cost inkjet printed sensors</i>
11:55-12:10	O23	<u>Granata</u> , Esposito, Russo, Vettoliere, Peddis, Fiorani, Russo	Nanosensors based on superconducting quantum interference device for nanomagnetism investigations
12:10-12:25	O24	<u>Candiani</u> , Argyros, Lwin, Leon-Saval, Zito, Selleri, Pissadakis	An in-fiber magnetometer implemented in a polymeric-mof utilizing ferrofluid
12:25-12:40	O25	Bernieri, <u>Betta</u> , Ferrigno, Laracca	An automatic calibration procedure for improving the metrological performances of GMR magnetometers
12:40-12:55	O26	Memarian, Concina, Faglia, <u>Vomiero</u> , Sberveglieri	Fabrication of hierarchically structured ZnO photoanodes for highly efficient dye sensitized solar cell
12:55-14:15	Pranzo		

Sessione 6 – Physical sensors 3

14:15-14:30	O27	<u>Alghisi</u> , Ferrari, Ferrari	Multi-frequency nonlinear converter array for energy harvesting in autonomous sensors
14:30-14:45	O28	<u>Dalola</u> , Faglia, Comini, Ferroni, Soldano, Zappa, Ferrari, Sberveglieri	Investigation of Seebeck effect in ZnO nanowires for micropower generation in autonomous sensor systems
14:45-15:00	O29	Di Pasquale, <u>Graziani</u> , Umana	From IPMC sensors to all-organic sensors

Sessione 8 – Optical sensors			
15:00-15:25	K6	<u>Corsi</u>	<i>Infrared: a key technology for security sensors systems</i>
15:25-15:40	O30	Baldini, Brenci, Chiavaioli, Giannetti, <u>Trono</u>	Thermostated flow cell and hybrid LPG-FBG configuration for accurate measurement of refractive index
15:40- 16:10	Coffee Break		
16:10-16:25	O31	<u>Bernini</u> , Minardo, Zeni	Novel approaches for cm-scale resolution and long-range sensing by stimulated Brillouin scattering in optical fibers
16:25-16:40	O32	<u>Cipullo</u> , Gruca, Heeck, De Filippis, Iannuzzi, Minardo, Zeni	Numerical and experimental characterization of a ferrule-top cantilever optical fiber sensor for flow velocity measurements
16:40-16:55	O33	Moccia, Pisco, Consales, Iadicicco, Cutolo, <u>Cusano</u>	Engineered acoustic sensors for underwater applications based on coated fiber Bragg gratings
16:55-17:10	O34	Candiani, <u>Sozzi</u> , Cucinotta, Selleri, Veneziano, Corradini, Marchelli, Childs, Pissadakis	Optical fiber sensor for DNA detection based on doubled-tilted Bragg grating
17:20-18:30	Sessione Poster 1		

Venerdì, 17 Febbraio Aula Convegni

8:30-9:10	15	Ozcan Electrical Engineering Department, Bioengineering Department, California NanoSystems Institute University of California, USA	Lensfree On-Chip Microscopy and Tomography Toward Telemedicine Applications
9:10-10:20	Sessione Poster 2		
Sessione 9 – Chemical Sensors 1			
10:20-10:45	K7	<u>Dalcanale</u>	<i>Supramolecular sensing with phosphonate cavitands</i>
10:45-11:00	O35	<u>Ferrari</u> , Rovati, Fabbri, Pilati	On-line pH measurements of near-neutral solutions by a disposable polymer based probe
11:00-11:35	Coffee Break		
Sessione 11 - Chemical Sensors 2			
11:35-12:00	K8	<u>Zanardi</u> , <u>Terzi</u> , <u>Zanfognini</u> , <u>Pigoni</u> , <u>Seeber</u>	<i>Development of nanostructured electrode coatings for amperometric sensors</i>
12:00-12:15	O36	<u>Tonezzer</u> , Menin, Carturan, Maggioni, Quaranta, Pinalli, Dalcanale	Luminescent cavitands as novel benzene receptors
12:15-12:30	O37	Sannicolò, <u>Mussini</u> , Bonometti, Giussani, Kutner, Benincori, Rizzo. Cirilli, Abbate, Longhi, Castiglioni, Panigati	Inherently chiral conducting polymer film electrodes
12:30-12:45	O38	<u>Scavetta</u> , Ballarin, Giorgetti, Guadagnini, Gualandi, Mignani, Monti, Tonelli	Electrochemical sensors based on layered double hydroxide thin films
12:45-13:00	O39	<u>Neri</u> , Latino, Donato, Baek, Pinna	Sensing behaviour of SnO ₂ -graphene nanocomposites
13:00-14:25	Pranzo		
Sessione 13 - Chemical Sensors 3			
14:25-14:50	K9	<u>Lvova</u> , Cao, Di Natale, Lundström, D'Amico, Paolesse	<i>Porphyrin electropolymers as opto-electrochemical probe for the detection of red-ox analytes</i>
14:50-15:05	O42	<u>De Vito</u> , Fattoruso, Massera, Miglietta, Di Francia	Electronic nose detection of CFRP surface contamination for securing composite

			bonding in lightweight aircraft
15:05-15:20	O43	<u>Capone</u> , Tufariello, Fracioso, Leone, Siciliano	Aroma analysis by GC/MS and electronic nose dedicated to Negroamaro and Primitivo typical apulian wines
15:20-15:35	O44	<u>Martinelli</u> , Polese, Dini, Paolesse, D'Amico, Lundstrom, Di Natale	The importance of latency coding in odor discrimination: an enhancement of natural paradigms in artificial olfaction
15:35-15:50	O40	<u>Ulrici</u> , Foca, Seeber	Algorithms and strategies for extracting optimal information from chemical sensing systems
15:50-16:05	O41	<u>Orsini</u> , Kar, Gatta, Pini, Palmacci, D'Amico, Falconi	Quartz crystal microbalances for on-line monitoring of nanostructures growth
16:05-16:35			Coffee Break
Sessione 15 - Chemical Sensors 4			
16:35-17:00	K10	<u>Piotto</u> , Butti, Pennelli, Bruschi	<i>Smart flow sensors based on advanced packaging techniques applied to single chip sensing devices</i>
17:00-17:15	O45	<u>Colliva</u> , Roda, Mirasoli, Di Fusco, Reschiglian Roda	Detection and differentiation of live and dead bacteria by a MOS-array olfactory sensor combined with field-flow fractionation technology
17:15-17:30	O46	<u>Daniele</u> , Battistel, Baldo, Bragato	Mesoporous platinum microelectrodes as sensors for the detection of small organic molecules (SOMS)
17:30-17:45	O47	<u>Cuscunà</u> , Convertino Zampetti, Pantalei, Pecora, Fortunato, Macagnano, Martelli	Silicon nanowires-based chemoresistive sensors
17:45-18:00	O48	Sivalingam, Magna, Catini, D'Amico, Paolesse, Martinelli, Di Natale	Enhanced selectivity in a porphyrin coated ZnO nanorods gas sensor
18:00-18:15			CONCLUSIONS

Venerdì, 17 Febbraio Sala Conferenze/Sala Bisogno

Sessione 10 – Optical Sensing Platforms/Nanostructured Optical Sensors 1

10:20-10:45	K11	<u>Ricciardi</u> , Crescitelli, Consales, Esposito, Galdi, Cutolo, Cusano	<i>Analysis of Plasmonic-Photonic Resonances in Hybrid Metallo-Dielectric Quasicrystals</i>
10:45-11:00	O55	<u>Giorgini</u> , Avino, Gagliardi, Ferraro, De Natale, Coppola, Casalino, Iodice, Homola	Surface plasmon resonance chemical sensing based on fiber-optic resonators
11:00-11:35	Coffee Break		

Sessione 12 – Optical Sensing Platforms/Nanostructured Optical Sensors 2

11:35-12:00	K12	<u>Grilli</u> , Coppola, Vespini, Merola, Finizio, <u>Ferraro</u>	<i>A novel approach for fabrication of polymer optical microresonators</i>
12:00-12:15	O51	<u>Surdo</u> , Carpignano, Giannetti, Strambini, Trono, Baldini, Merlo, Barillaro	Photonic crystal optofluidic silicon microsystems for (bio)sensing
12:15-12:30	O52	Osellame, Martinez -Vazquez, Crespi, Cerullo, <u>Ramponi</u>	Femtosecond laser micromachining for the realization of optofluidic sensors
12:30-12:45	O53	Testa, <u>Bernini</u>	Polymeric-based microflow cytometer
12:45-13:00	O50	<u>Berneschi</u> , Barucci, Brenci, Cosi, Farnesi, Nunzi Conti, Pelli, Soria, Righini	Optical microbubble resonator: a novel structure for sensing applications
13:00-14:25	Pranzo		

Sessione 14 – Optical Sensing Platforms/Nanostructured Optical Sensors 3

14:25-14:50	K13	<u>Giannetti</u> , Baldini, Ballestri, Ghini, Giambastiani, Guerrini, Sotgiu, Tombelli, Trono, Tuci, Varchi	<i>PMMA nanoparticles and carbon nanotubes for potential intracellular nanosensing and nanodelivery</i>
14:50-15:05	O49	<u>Angelini</u> , Grassini, Parvis, Palumbo, Di Mundo	Low pressure plasma processes for innovative POF sensors
15:05-15:20	O56	<u>Centi</u> , Ratto, Ravalli, Tatini, Taleat, Fusi, Marrazza, Pini	Colorimetric dot assay for cancer biomarkers using gold nanorods
15:20-15:35	O57	<u>Esposito</u> , Crescitelli, Ricciardi, Consales, Cutolo, Cusano	Lab on fiber technology enables nanophotonics within optical fibers
15:35-15:50	O54	<u>Soria</u> , Pasquardini, Barucci, Berneschi, Cosi, Lunelli, Nunzi Conti, Pederzolli	Aptamer based whispering gallery mode biosensor
15:50-16:35	Coffee Break		

Sessione 16 – Networking, Sensor Electronics and Data Processing

16:35-16:50	O59	Andò, Baglio, Dumas, Latorre, L'Episcopo, Nouet, <u>Trigona</u>	Study and experimental validation of periodically-forced “non-resonant” oscillators for energy scavenging from vibrations
16:50-17:05	O60	De Maria, Bartalesi, Pirovano, Serragli, <u>Paladino</u>	Application of optical sensors for diagnostic of electrical components of a distribution network
17:05-17:20	O61	<u>Fattoruso</u> , De Vito, Di Palma, Di Francia	Innovative system and method for monitoring energy efficiency in buildings
17:20-17:35	O62	Capriglione, <u>Ferrigno</u> , Attianese, Pietrosanto, Paciello	Experimental analysis of wireless sensor network synchronization protocols under real operating conditions
17:35-17:50	O63	De Marcellis, Ferri, <u>Mantenuto</u>	Automatic analog Wheatstone bridge for wide-range resistive sensor interfacing applications

Sessione Poster 1 - Giovedì 16 Febbraio - Ore 17:20 – 18:30

<i>P1</i>	Campanella, Gabbianelli, Gatta, Mazzone, Tomassetti	A superoxide dismutase biosensor for measuring the antioxidant capacity of blueberry based integrators
<i>P2</i>	Tomassetti, Martini, Campanella, Favero, Mazzei	Immunosensors suitable for inflammatory testing in cattle
<i>P3</i>	D'Agata, Spoto	Biofunctionalization of gold nanoparticles and their spectral properties
<i>P4</i>	Camerlingo, Delfino, Portaccio, Lepore	Univariate and multivariate analysis of Raman spectra for quantitative determination of sugars in beverage industry
<i>P5</i>	Onofri, Dalba, Spinsanti, Kilchenmann, Guiducci, Zuccheri	Formation and characterization of biological model membranes for biosensors application
<i>P6</i>	Pesavento, D'Agostino, Profumo, Biesuz, Alberti	Potentiometric sensors based on molecular imprinted polymers
<i>P7</i>	Pilolli, Ucciferri, Russino, Ditaranto, Tedeschi, Cioffi, Domenici, Nannini, Pieri	Advances in the definition of a drop-based functionalization protocol for CMOS-compatible MEMS biosensors
<i>P8</i>	Falciola, Cappelletti, Pifferi, Spadavecchia	Use of screen-printed electrodes in the determination of some environmental carcinogens
<i>P9</i>	Lanzone, Del Carlo, Sergi, Compagnone, Castagna, Minunni, Corrado	DNA-based bioassay for the detection of benzo[a]pyrene oxidation products
<i>P10</i>	Baù, Ferrari, Ferrari, Marioli, Tonoli	Contactless electromagnetic interrogation of quartz crystal resonator sensors
<i>P11</i>	Guascito, Chirizzi, Malitesta, Stabili	Spectroscopic characterization of a new antibacterial materials for sensing applications
<i>P12</i>	Picca, Ghorbani, Sellergren, Malitesta	Novel formats of molecularly imprinted polymers for the development of electrochemical sensors
<i>P13</i>	Cevenini, Michelini, Canali, Ekström, Schulze, Garle, Rane, Roda	Portable device with immobilized whole-cell bioluminescent biosensors for antidoping screening
<i>P14</i>	Roda, Canali, Michelini, Cevenini, Dolci, Simoni, Branchini	In vivo biotinylated thermostable green- and red-emitting firefly luciferases for multiplexed biosensing
<i>P15</i>	Pezzotti, Buonasera, Lavecchia, Manfredonia, Pezzotti	Biosensor platform based on 4-wells microarray systems: study, design, construction and applications
<i>P16</i>	Dardano, De Stefano, Rea, Rendina, Mocella	Large area photonic crystal biosensor for label free optical monitoring
<i>P17</i>	Arduini, Forchielli, Amine, Palleschi, Moscone	Cholinesterase biosensor for pesticide detection in waste waters based on screen printed electrodes modified with nanostructured carbon black
<i>P18</i>	Gazzola, Bonetti, Onofri, Zuccheri	An electronic DNA biosensor developed for easily manufacturable and highly integrable devices
<i>P19</i>	Giannetti, Trono, Baldini, Puntoni, Domenici, Franek, Porro	A point of care (POC) device for C-reactive protein, procalcitonin and neopterin detection
<i>P20</i>	Liberatore, Luciani, Mengali, Viola, Cardinali, Elmi, Poggi, Zampolli, Biavardi, Dalcanale, Menozzi	A new sensitive and fast detection system for amphetamine-type stimulants (ATS), based on gas-chromatography (GC) and hollow fiber infrared absorption spectroscopy (HF-IRAS)

P21	Ulrici, Calderisi, Seeber, Uotila, Secchi, Fiorello, Dispenza	A feature selection strategy for the development of a new drug sensing system
P22	Cantale, Dalmastrì, Mosiello, Caruso, Flammini, Morales, Rapone, Hianik	Nanofabrication tools and techniques for bio-inorganic interfaces
P23	Liguori, Paciello, Pietrosanto	Biosensors for automatic measurement in winemaking process monitoring
P24	Sardini, Serpelloni	Telemetric technique for resistive sensors
P25	Sardini, Serpelloni	Wearable posture monitoring sensor
P26	Betta, Esposito, Laracca, Pansini	Thin film humidity sensor based on sol-gel technology
P27	La Ferrara, Pachèrì Madathil, De Girolamo Del Mauro, Massera, Polichetti, Rametta	Assembly of zinc oxide nanostructures by dielectrophoresis for sensing devices
P28	Luschi, Pieri	A simple analytical model for the resonance frequency of perforated beams
P29	De Dominicis, Flammini, Rinaldi, Vezzoli	Integration of bluetooth handsfree sensors into a wireless body area network based on smartphone
P30	Khan, Falconi	Temperature distribution in membrane-type micro-hot-plates with circular geometry
P31	De Capua, Lugarà, Morello	A smart-sensor based on MEMS technology for monitoring landslides
P32	Piotto, Butti, Bruschi	Acoustic velocity sensors with programmable directivity
P33	Andò, Baglio, Beninato	Transducers adopting magnetic fluids
P34	Andò, Baglio, Bulsara, Trigona	Exploiting materials, novel measurement strategies and nonlinear dynamics in fluxgate magnetometers
P35	Andò, Baglio, Trigona	Development of SOI-MOEM inertial sensors based on transparent metals
P36	Guarnieri, Lorenzelli, Kujawski, Rozicka, Vasiliev, Filippov	Monitoring system for under-water pipe line
P37	Ponzoni, Depari, Comini, Faglia, Flammini, Sberveglieri	Application of temperature profile protocols to metal oxide gas sensors by a low-cost electronic system, designed for low-conductance and wide-range measurements
P38	Ferrari, Flammini, Sisinni	Development of a co-simulation tool for wirelessHART networks
P39	Donato, Aloisio, Patti, Latino, Neri, Spadaro	A low cost inkjet deposition system for sensor development
P40	Caliendo	Theoretical investigation of the temperature and pressure behavior of Rayleigh and lamb waves propagating along 3C-SiC/AlN for sensor applications
P41	Casalicchio, Olivero, Orta, Parvis, Perrone, Vallan	Low-cost fiber sensors for displacement and vibration monitoring
P42	Francioso, De Pascali, Farella, Martucci, Cretì, Siciliano	3d Kapton/PDMS flexible thermoelectric generator for ambient assisted living applications
P43	Golinelli, Perini, Barberis, Musazzi	A laser scanning system for sag detection on the overhead power lines – in field measurements

Sessione Poster 2 - Venerdì, 17 Febbraio - Ore 9:10 - 10:20

P44	Tonezzer, Tonezzer	Superior colorimetric sensor arrays based on vacuum evaporated metallo-porphyrin thin films
P45	Bonfigli, Faenov, Flora, Gaudio, Lai, Montereali, Pikuz, Reale, Richetta	Solid state lithium fluoride detectors for soft X-ray contact microscopy
P46	Badocco, Mondin, Pastore	Robust light intensity based optical sensor for molecular oxygen
P47	Scarano, Berni, Catelani	New materials for lead free sensors: a proposal for a reliability performance analysis
P48	Pennazza, Santonico, D'Uffizi, D'Amico	A gas sensor array for the characterization of aromatherapy devices
P49	Capone, Tufariello, Siciliano	Breath analysis by gas chromatography coupled to dual detectors: mass spectrometer and gas sensors
P50	Loccioni, Scalise, Tomasini	A novel optical device for end tidal air sampling in breath analysis
P51	Mardegan, Scopece, Ugo	Determination of inorganic arsenic with gold nanoelectrode ensemble
P52	Fusella, Del Carlo, Compagnone, Di Natale, Martinelli, Paolesse	Development and characterization of gas sensors system in model food model system
P53	Nisti, Dini, Catini, Capuano, Martinelli, Paolesse, Di Natale, D'Amico	An optical sensor for measuring dissolved oxygen concentration
P54	Guascito, Chirizzi, Picca, Malitesta, Siciliano, Siciliano, Micocci	Development and spectroscopic characterization of TeO ₂ nanowires for amperometric detection of hydrogen peroxide
P55	D'Amato, Viciani, Siciliani, De Cumis, Montori, De Pas, Giuntini	Constant intensity direct absorption spectroscopy applied to gas detection with a fiber apparatus
P56	Tortora, Pomarico, Nardis, Paolesse, Catini D'Amico, Di Natale	Corrole supramolecular aggregates for chemical sensors
P57	Voccia, Laschi, Palchetti, Marrazza, Mascini	Electrochemical sensors to control trace metal ionization in water distribution systems
P58	Sozzi, Selleri, Pinto, Bravo, Lopez-Amo	Polarimetric Hi-Bi PCF refractive index sensor for volatile liquids
P59	Catini, Dini, Capuano, Martinelli, Tortora, Pomarico, D'Amico, Di Natale, Paolesse	A porphyrin functionalized quartz microbalance for carbon monoxide detection
P60	Depari, De Marcellis, Flammini, Ferri	Integrable electronic interface for chemical sensor management
P61	Merli, Ravasio, Protti, Profumo	Synthesys and assembling on gold electrodes of ω -derivatized metal complexing thiols: characterization and analytical applications
P62	Adami, Pedrotti, Collini, Lorenzelli	Development of a pH sensor with integrated reference electrode for cell culture monitoring
P63	Demori, Ferrari, Poesio, Strazza, Pedrazzani, Mazzoleni, Steimberg	Microfluidic capacitive sensors for noncontact particle detection in a microchannel
P64	Trocino, Donato, Latino, Donato, Leonardi, Neri	Titania/MWCNTS nanocomposites for low temperature hydrogen sensing

P65	Orsini, Gatta, Leonardi, Medaglia, Bearzotti, Giovine, Foglietti, D'Amico, Falconi	CMOS compatible, low power, high-sensitivity zn/al layered double hydroxides humidity micro-sensor
P66	Conso, Grassi, Lombardi, Malcovati, Baschiroto	A multiplexed 20-channel 6-decade-range resistance-to-digital converter for 2d heterogeneous metal-oxide gas-sensor arrays
P67	Santonico, De Luca, Iarossi	Ultrasound based sensor for fat detection in fresh milk
P68	Mazzotta, Malitesta, Surdo, Strambini, Barillaro	Microstructured conducting polymers by light-activated electropolymerization on micromachined silicon: characterization and sensing applications
P69	Penza, Alvisi, Rossi, Suriano, Cassano, Milella, Fracassi	A mass detector coated by a polymer-Pt composite for gas sensing
P70	Penza, Suriano, Cassano, Pfister, Alvisi, Rossi, Dambroso, Trizio, De Gennaro	CO and NO _x gas detection for urban pollution monitoring by a portable chemical sensor-system
P71	Donato, Aloisio, Fulco, Neri	Sensing properties characterization of a poly(diallyldimethylammonium chloride) - based saw device
P72	Ciaccheri, Samano Baca, Brenci, Ottevaere, Thienpont, Mignani	Diffuse-light absorption spectroscopy in the near infrared for predicting the alcoholic strength of beer
P73	Conso, Grassi, Picolli, Cartasegna, Donida, Rescio, Regnicoli, Perretti, Malcovati	A fully-integrated multi-sensor system for food tracing and quality certification providing temperature, light intensity and humidity exposure history of samples
P74	Orlanducci, Cianchetta, Gugliemotti, Tamburri, Terranova	Surface enhanced Raman detection of organic volatile solvents using au/carbon nanotubes systems
P75	Cennamo, Massarotti, Conte, Zeni	Sensors based on SPR in plastic optical fiber: numerical analysis and experimental results
P76	Lettieri, Maddalena, De Tommasi, De Stefano	Physical processes and mechanisms of optical sensing by diatom frustules
P77	Taurino, Catalano, Siciliano, Cusano, Paladino, Quero, Consales, Cutolo	Focused ion beam nanofabrication for lab-on- fiber technology
P78	Carullo, Casalicchio, Olivero, Penna, Perrone, Vallan	Crack monitoring network using POF sensors
P79	Zampa, Vacchi, Feroci, Labanti, Bonvicini, Rashevsky, Zampa, Campana, Del Monte, Evangelista, Muleri, Pacciani, Rubini, Soffitta, Costa, Donnarumma, Lazzarotto, Mastropietro, Morelli, Rapisarda, Fuschino, Marisaldi, Baldazzi, Picolli, Grassi, Malcovati	X-ray imaging and spectroscopic characteristics of large-area multi-anode silicon drift detectors (SDD)
P80	Piras, Carboni, Pintus	A web platform to collect, manage and share heterogeneous sensor data
P81	Andò, Baglio, Marletta	Intelligent sensing solutions for AAL