



# IBERSENSOR 2010

7<sup>TH</sup> IBERO-AMERICAN CONGRESS ON SENSORS  
 NOVEMBER 9<sup>TH</sup>-11<sup>TH</sup> 2010, LISBON, PORTUGAL

## PROGRAM

### SPONSORS



## MONDAY, 8/11/10

TIME	EVENT	ROOM
8:00	REGISTRATION	<i>EDIF. FERREIRA CARDOSO, 3<sup>RD</sup> FLOOR</i>
<b>SESSION</b>	<b>2<sup>ND</sup> YOUNG RESEARCH FORUM (YRF 2010)</b>	<b>TUTORIAL - APPLIED NANOTECHNOLOGY TO SENSORS AND MICRO-SYSTEMS</b>
<b>CHAIRS</b>	Prof. P. Filipe	Prof. C. Jimenez
<b>ROOM</b>	AUDITÓRIO A	AUDITÓRIO C
<b>TIME</b>	<b>TITLE/AUTHORS</b>	<b>TITLE/AUTHORS</b>
8:30 AM		<i>Micro_NanoHerramientas para la manipulación y el estudio de células vivas.</i> Jose A. Plaza, Investigador Científico, IMB-CNM, CSIC, España
9:20 AM	Invited session: <i>Investigação e Desenvolvimento: da teoria à prática</i> <i>José Manuel da Fonseca, FCT-UNL.</i>	<i>Redes de sensores sem fios</i> Prof. Luís Bernardo e Prof. Rodolfo Oliveira, DEE-FCT-UNL, Lisboa Portugal
10:10 AM	<i>Coffee Break</i>	<i>Mediateca</i>
10:40 AM	<i>Business Intelligence Framework for Financial Support,</i> Inês Martins, Nuno Datia, Helder Pita <i>Integração de Informação Geográfica,</i> Ester Gonçalves, Paulo Araújo, Porfírio Filipe	<i>Materiales nanoestructurados para fabricación de Microsensores</i> Ernest Mendoza, Investigador, CIN2, España
11:30 AM	<i>Protocolo para Intercâmbio de Informação sobre Transportes Públicos,</i> Rodrigo Ferreira, Porfírio Filipe	<i>Técnicas Fotolitográficas Top-down para Nano fabricação</i> Prof Antonio Carlos Seabra, LSI-USP, Brasil
12:20 AM	<i>Rede Social Académica,</i> António Jorge <i>Sistema de Recomendação para Condutores de Veículos Eléctricos,</i> Pedro Romão	<i>Micro y Nano integración para diagnóstico "in situ"</i> Dra Liliana Fraigi, INTI, Argentina
13:10 AM	<i>Lunch</i>	

## MONDAY, 8/11/10

TIME	EVENT
<b>SESSION</b>	<b>WORKSHOP SENSORES</b>
<b>CHAIRS</b>	Prof. M. Niehus
<b>ROOM</b>	AUDITÓRIO C
<b>TIME</b>	<b>TITLE/AUTHOR</b>
14:30	<i>"Tecnologia e Segurança do Cartão de Cidadão"</i> <b>Dr. André Vasconcelos</b> , Agência para a Modernização Administrativa
14:55	<i>"Digital Health" Multimédia &amp; Medicina</i> <b>Eng. Jonatan Pedrosa</b> , Take the Wind
15:20	<i>Computação Física &amp; Spacebits</i> <b>Eng. Filipe Valpereiro</b> , InMotion
15:45	<i>Coffee Break</i> <span style="float: right;"><i>Mediateca</i></span>
16:15	<i>Sensores e Tecnologia Em Aeronaves Civis e de Defesa</i> <b>Eng. Paulo Venâncio</b> , OGMA – Indústria Aeronáutica de Portugal S.A.
16:40	<i>Reconversão Ambiental de Minas</i> <b>Eng. Diniz Correia</b> , Empresa de Desenvolvimento Mineiro S.A.
17:05	<i>Sensores Transparentes de Luz e de Radiação</i> <b>Prof. R. Schwarz</b> , Dept. de Física, Instituto Superior Técnico

## TUESDAY, 9/11/10

TIME	EVENT				ROOM	
8:30	REGISTRATION				Auditório principal	
9:15	Opening Session				Auditório principal	
9:45	Invited Session: <b>Amorphous silicon sensor for Lab-on chip applications</b> <b>Prof. Domenico Caputo, Universita' di Roma "La Sapienza", Rome, Italy</b>				Auditório principal	
10:30	Coffee Break				Foyer	
SESSION	I - CHEMICAL SENSORS			II - PHYSICAL SENSORS		
CHAIRS	Prof. L.M. Lechuga			Prof. A. Fantoni		
ROOM	AUDITÓRIO A			AUDITÓRIO C		
TIME	REF.	TITLE	AUTHORS	REF.	TITLE	AUTHORS
11:00	024	<i>Development of a Microfluidic pH control system using LTCC technology integrated with an ISFET sensor</i>	Juliana de Novais Schianti, M. R. Gongora-Rubio, A. C. Seabra, C. Jimenez-Jorquera	003	<i>Transductor óptico con filtro espectral integrado: aplicación a medidas de fluorescencia</i>	C..Dominguez, V.J. Cadarso, A. Llobera, P. Jiménez, C.
11:20	042	<i>Fluorescent Calix[4]Arene-Based Polymer Chemosensor For Explosives Detection</i>	Alexandra i. Costa, Luís F. V. Ferreira, José V. Prata	027	<i>Self optical gain in silicon-carbon pi'npin transducers</i>	M. A. Vieira, M. Vieira, P. Louro, J. Costa, A. Fantoni, M. Fernandes
11:40	033	<i>Experimental evidence for the preservation of ferromagnetic order in aged Co-doped TiO2 anatase nanopowders</i>	A.J. Silvestre, L.C.J. Pereira, M.R. Nunes and O.C. Monteiro	041	<i>The optimization of novel thermal conductivity sensors for wide temperature range measurements</i>	M. J. Lourenço, J. M. Serrac,d, M. J. Figueiredo, S. C. Vieira, M. M. Lopes, C. A. Nieto de Castro
12:00	059	<i>New potentiometric chemical sensors based on lignin-polyurethane composite polymers</i>	F.A.C. Faria, A. Rudnitskaya, M.T.S.R. Gomes, J.A.B.P. Oliveira, M.P.F. Graça, L. Cadillon	088	<i>Thermal Oxidation Of Heterogeneous Photonic Crystals For Sensor Applications</i>	Danilo Roque Huanca, Walter Jaimes Salcedo

**TUESDAY, 9/11/10**

TIME	EVENT						ROOM
12:20	Lunch						
14:00	Invited Session: <i>Development of biosensors for urea and acrylamide assays in foods based on amidase activity from Pseudomonas aeruginosa</i> <i>Prof. Amin Karmali, ISEL, Lisbon, Portugal</i>						Auditório principal
SESSION	III - CHEMICAL SENSORS			IV- PHYSICAL SENSORS, MATERIALS			
CHAIRS	Prof. V. Prata			Prof. O. Arias			
ROOM	AUDITÓRIO A			AUDITÓRIO C			
TIME	REF.	TITLE	AUTHORS	REF.	TITLE	AUTHORS	
15:00	071	<i>Desenvolvimento De Um Sensor Para Aniões</i>	N. I. P. Valente, P. V. Muteto, A. S. F. Farinha, A. C. Tomé, João A. B., P. Oliveira, M. T. S. R. Gomes	120	<i>Fibras ópticas especiais como sensores ambientais, químicos e biológicos</i>	M. Niehus	
15:20	104	<i>Chloride Adsorption over Gold Surface: an Amperometric Sensor of Cl-</i>	F. Almeida, S. G. dos Santos Filho	093	<i>Silicon Optical Phonon Raman Scattering Intensification In Porous Silicon Structures</i>	D. S. Raimundo, P. B. Calópe and Walter J. Salcedo	
15:40	118	<i>Synthesis and electrochemical behaviour of novel ferrocenyl hyperbranched polymers</i>	Paula Brito	016	<i>Morphological Characterization of Polystyrene (PS) Micro-Particles for Biological Sensors Applications</i>	Elis Moura Stori, L. Foti, C. L. Petzhold, M. J. Soares, W. H. Schreiner, P. P. Soares and C. K. Saul	
16:00	005	<i>Structural and compositional characterization of nano-film systems using a new technology of High Resolution Impedance Spectroscopy</i>	Hans G. L. Coster, Michael Baudouin	031	<i>Graphene based nanocomposites application as SERS substrates</i>	S. Cruz, G. Gonçalves, P. A. A. P. Marques, C. M. Granadeiro, H. I. S. Nogueira and J. Grácio	
16:20				020	<i>Optimization of Field Emission Devices by the Addition of Carbon Nanotubes</i>	E. Galeazzo, H. E. M. Peres	
TIME	EVENT						ROOM
16:40	Coffee Break – Poster Session I						Mediateca
18:00	CYTED Meeting						Auditório C

## WEDNESDAY, 10/11/10

TIME	EVENT				ROOM	
9:30	<i>Invited session: Thin-Film Silicon MEMS and MEMS Microresonators</i> <b>Dr. Virginia Chu, INESC, Lisbon, Portugal</b>				<i>Auditório principal</i>	
10:30	<i>Coffee Break</i>				<i>Foyer</i>	
SESSION	<b>V - INTELLIGENT SENSORS AND WIRELESS NETWORKS</b>			<b>VI - APPLICATIONS IN BIOMEDICINE, BIOSENSORS</b>		
CHAIRS	Prof. P. Marques			Prof. C. Dominguez		
ROOM	AUDITÓRIO A			AUDITÓRIO C		
TIME	REF.	TITLE	AUTHORS	REF.	TITLE	AUTHORS
11:00	007	Building Automation Towards Wireless Sensors	Filipe Rodrigues, C. Cardeira and J. M. F. Calado	032	<i>In Situ Impedance Monitoring of Iridium Oxide Electrodeposition for Neural Recording</i>	Marcelo Bariatto Andrade Fontes
11:20	019	<i>Alimentación inalámbrica de un móvil con arreglo de bobinas resonantes</i>	Héctor Trujillo Alvarado , Jorge Luís González Rios	056	<i>Sensitive nucleic acids detection by formation of a triple helix using SPR biosensing</i>	L. G. Carrascosa, A. Aviñób, A. Nadalc, M. Plac, R. Eritjab, and L. M. Lechuga
11:40	028	<i>Rede De Sensores Sem Fio Na Implementação De Experimento "Face" Para Estudos De Impacto Das Mudanças Climáticas Na Agricultura</i>	André Torre-Neto, Victor Bertucci Neto, Luiz Francisco de Matteo Ferraz, Danilo Mendes Dias Delfino da Silva, et al.	066	<i>System for Autofocusing of microscope for analysis of Pap Smear Images</i>	Santiago Tello mijares, J. Bescós Cano, F. Flores Garcia
12:00	060	<i>LTE Multi Antenna Bit Rate Expectation for Urban Macro-cell Networks</i>	Pedro Vieira, Paula Queluz and António Rodrigues	086	<i>Immunosensig of human growth hormone at physiological levels using silicon nanointerferometers</i>	Ana Belen Gonzalez-Guerrero, O. Hidalgo, Kirill Zinoviev, C. Dominguez, and L. M. Lechuga
12:20				018	<i>Imunosensores de Resonancia de Plasmón de Superficie (SPR) para el análisis de Tiabendazole y Bisfenol A en alimentos</i>	A. Montoya, M.J. Moreno, J. Belenguer, M.C. Estévez, J.J. Manclús, L. Lechuga

**WEDNESDAY, 10/11/10**

TIME	EVENT				ROOM	
12:20	Lunch					
14:00	Invited session: <b>Electrochemical Biosensors Based on Enzyme Inhibition</b> <b>Prof. Aziz Amine, Université Hassan II-Mohammedia, Morocco</b>				Auditório principal	
SESSION	VII - APPLIED SIGNAL-AND IMAGE PROCESSING FOR SENSORS			VIII - APPLICATIONS IN BIOMEDICINE, BIOSENSORS		
CHAIRS	Prof. M. Aceves			Prof. Karmali		
ROOM	AUDITÓRIO A			AUDITÓRIO C		
TIME	REF.	TITLE	AUTHORS	REF.	TITLE	AUTHORS
15:00	047	<i>Um Estudo Comparativo entre Árvores de Decisão e Redes Neurais para Classificação de Dados de Sensores</i>	E. Wychoski Benfatti, Fernando Nunes Bonifacio, Clodis Boscaroli	132	<i>The Weighed Matching Analysis method and the accuracy of automated retinal image processing</i>	A. D. Mora, P. M. Vieira, J. M. Fonseca
15:20	121	<i>Adaptive PID Control of the Temperature in a Laboratory Oven</i>	T. Ribeiro, J. S. Augusto	055	<i>CANTIPLASMON: Multiparameter reading by integration of SPR and nanomechanical biosensing techniques</i>	M. Alvarez, D. Fariña, A. M. Escuela Laura G. Carrascosa, J. R. Sendra, and L. M. Lechuga
15:40	103	<i>Nitrite Electrochemical Sensors Controlled by a Home-made Amperostat: High Sensibility and Reproducibility</i>	F. L. Almeida, Z.M. Rocha, M.O. Igarashi, C.S. Martínez-Cisneros, J. A.-Chamarro, A.C. Seabra, S. G. Santos Filho	105	<i>Magnetic labeling of waterborne pathogens towards a magnetoresistive-based biochip</i>	Martins SAM, Frasco M., Castro A., Martins VC, Freitas PP, Fonseca LP
16:00	037	<i>Proceso de fabricación para integrar un sensor de silicio usando SRO y la electrónica CMOS de control</i>	M. Aceves-Mijares, S. Román, J. M. Rocha, J. Pedraza, A. D.-Méndez	110	<i>Development of a biosensor for urea assay in wines by ion selective electrode based on amidase inhibition</i>	A. R. Barbosa, A. Karmali
16:20	115	Low Power Location Engine Based on Wireless Sensor Networks	L. Brás, M. Oliveira, P. Pinho, N. B. Carvalho	107	<i>New promising nanostructured material for biosensing: the bacteriophages</i>	S. Liébana, A. Lermo, D. Spricigo, P. Cortés, M. Llagostera, S. Alegret, M. I. Pividori
TIME	EVENT				ROOM	
16:40	Coffee Break – Poster Session II				Mediateca	
18:00	CYTED MEETING				Auditório C	
20:00	CONFERENCE DINNER					

**THURSDAY, 11/11/10**

TIME	EVENT			ROOM		
9:30	<i>Invited session: <b>Materiais Elastoméricos para Sensores Mecânico-Ópticos</b></i> <b>Prof. Helena Godinho, FCT-UNL, Lisbon, Portugal</b>			<i>Auditório principal</i>		
10:30	<i>Coffee Break</i>			<i>Foyer</i>		
SESSION	<b>IX - MICROFLUIDICS AND MICRO-ANALYSIS DEVICES</b>		<b>X- FOOD INDUSTRY AND ENVIRONMENTAL APPLICATIONS</b>			
CHAIRS	Prof. C. Jimenez		Prof. M. Rubio			
ROOM	AUDITÓRIO A		AUDITÓRIO C			
TIME	REF.	TITLE	AUTHORS	REF.	TITLE	AUTHORS
11:00	026	<i>Glass flow focusing microfluidic device for nanoliposome production</i>	Juliana de Novais Schianti, J. E. Trevisan, L. G. de la Torre, M.H.A. Santana & M. R. Gongora-Rubio	004	<i>Analysis of White Wines With a Hybrid e-tongue</i>	M. Gutiérrez, A. Llobera, A. Ipatov, F. Capdevila, C. Domingo, S. Demming, S., Büttgenbach, C. Jiménez-Jorquera
11:20	040	<i>Versatile and automated continuous flow colorimetric microanalyzer for environmental determinations</i>	C.S. Martínez-Cisneros, Z.M. Da Rocha, A.C. Seabra, M.R. Góngora-Rubio and J. Alonso	131	<i>Optical sensor for the rapid screening of antibiotics in aquaculture</i>	Joana R. G. Botelho, C. D. Matos and M. Goreti F. Sales
11:40	045	<i>Synthesis of reproducible MUA-protected gold nanoparticles in microfluidic devices based on the LTCC technology with in situ UV-vis characterization</i>	Sara Gómez-de Pedro, Mar Puyol, David Izquierdo, Íñigo Salinas and Julián Alonso	117	<i>Immunosensing Strategies For The Detection Of Gliadin In Gluten- Free Foodstuff</i>	T. Laube, S. Alegret, M.I. Pividori
12:00	069	<i>On-Chip Microfluidics For Advanced Functionalization and Operation of Microelectrode Arrays</i>	I. Burdallo, A. B. Shiraob, A. Baldia, C. Jimenez-Jorquera, R. Perez-Castillejos	102	<i>Development of a DNA-based device for detecting toxic algae</i>	Jahir Orozco Holguín, Linda K. Medlin
12:00				061	<i>Study of Operational Factors Affecting Versatile Implementation of Ferricyanide-Mediated Rapid-Assay for Biochemical Oxygen Demand</i>	María C. Bonetto, Natalia Sacco, Eduardo Cortón



## THURSDAY, 11/11/10

TIME	EVENT				ROOM	
12:20	<i>Lunch</i>					
14:00	<i>Invited session : Higly biomimetic and stable reconstituted biomembranes for preparing receptor-based biosensors</i> <i>Prof. Tommaso Ferri, Università di Roma "La Sapienza", Rome, Italy.</i>				<i>Auditório principal</i>	
<b>SESSION</b>	<b>XI - APPLICATIONS</b>			<b>XII - FOOD INDUSTRY AND ENVIRONMENTAL APPLICATIONS</b>		
<b>CHAIRS</b>	Prof. C. Saul			Prof. L. Fragi		
<b>ROOM</b>	AUDITÓRIO A			AUDITÓRIO C		
<b>TIME</b>	<b>REF.</b>	<b>TITLE</b>	<b>AUTHORS</b>	<b>REF.</b>	<b>TITLE</b>	<b>AUTHORS</b>
15:00	068	<i>Polymer fibers coated with Pd to be used as a sensitive layer</i>	Ana Neilde Rodrigues da Silva, Sebastião dos Santos Filho, Marcelo Bariatto Andrade Fontes	048	<i>Diagnóstico de Falhas em Sistemas Degradados Utilizando Técnicas de Redes Neurais Artificiais</i>	Ricardo de Carvalho Destro, Mariana Antonia Aguiar, Rogerio Akira Furucho
15:20	141	<i>Condition monitoring of electrical cables using line resonance analysis (LIRA)</i>	Paolo F. Fantoni	100	<i>Celdas de Combustible Sedimentarias para la Generación de Electricidad en Ambientes Sumergidos</i>	Sacco, Natalia, Pataccini, Gabriela; Bonetto, María Celina; Cortón, Eduardo
15:40	017	<i>Three transducers embedded into one single SiC photodetector LSP direct image sensor, optical amplifier and demux</i>	M. Vieira, P. Louro, M. A. Vieira, J. Costa, M. Fernandes	009	<i>Preparation Of Mwcnts Electrode Surfaces For Biosensing Purposes</i>	Olimpia Fuentes, Tommaso Ferri, Daniele Frasca, Valerio Paolini, Giovanni Zuccari
16:00	083	<i>Development of a Microfluidic Emulsification System For Dye Marked Microparticle Generation</i>	Lopera A. Sergio, Marcatti Gustavo, Mansano D. Ronaldo	108	<i>A novel strategy for screening-out raw contaminated milk with mycobacterium bovis in dairy farms by double-tagging pcr and electrochemical genosensing</i>	S. Alegret, A. Lermo, S. Liébana, S. Campoy, S. Fabiano, M. García, A. Soutullo, M. J. Z.umárraga, M. I. Pividori
TIME	EVENT				ROOM	
16:20	<i>Coffee Break</i>				<i>Foyer</i>	
16:50	<i>Best Student Paper Award</i>				<i>Auditório Principal</i>	
17:0	<i>Closing Session</i>				<i>Auditório Principal</i>	

## POSTERS

### 1<sup>ST</sup> POSTER SESSION, TUESDAY, 9/11/10, 17:00 (Room: Mediateca)

Topics: MEMS, Microfluidics, Intelligent Sensors, Applied Signal and Image Processing for Sensors, Materials

Ref	Title	Authors
082	Diseño, fabricación y caracterización de un encapsulado para RF-MEMS	C. Giuffrida, G. E. Pérez, P. De Cesare, M. Roberti, M. Tenorio
087	Thin-film VO <sub>2</sub> and NiCr resistors: a MEMS application	L. Malatto, G. Giménez, E. Mangano, L. Pascua, L. Di Lillo, H. Lai and L. Fraigi
021	Instrumento virtual de bajo coste para la caracterización y utilización simultánea de hasta diez sensores químicos del tipo ISFET.	Enrique E. Valdés Zaldivar, Cecilia Jiménez-Jorquera, Ernesto Alpizar Arteaga 1, Juan C. Viera 3, Carlos Domínguez Horna, Juan C. Antón
098	Galvanostat circuit developed to achieve of an Ag/AgCl pseudo-reference microelectrode on LTCC substrate	Massaki de Oliveira Igarashi, F.L.Almeida, Z.M. Rocha, J. L. Cardoso, A.C. Seabra and S. G. Santos Filho
142	Opto-electronic platforms: Potential tools for the development of novel nanobiosensing devices	Patrícia M. A. Farias, Brunno H. Santiago, Claudilene R. Chaves, Denise P. L. A. Tenório, Beate S. Santos, Adriana Fontes, Marco A. Sacilotti <sup>5</sup> , Marina F. Pillis, Luydson R. V. Silva <sup>7</sup> , Rosa F. Dutra
119	A Low-Noise Preamplifier for Mössbauer Spectroscopy	J. Alves, G. Evans, and L. P. Ferreira
124	Simulação de um oscilador controlado por tensão auto-alimentado	Vítor Fialho, Fernando Azevedo, Fernando Fortes
135	Monitoring Bridge Deck Joints Through the Traffic Sound	Manuel M. Barata, Gonçalo Martins
001	Diseño de Estación de Trabajo para la Caracterización de Estructuras Microfluídicas Sensoras de Flujo Basadas en el Principio de Presión Diferencial	Houari Cobas Gomeza, José E. Eirez Izquierdoa, Ricardo J. Alvares Suárezb, Luis A. Sobrino Fraderab, Leonel D. Plasencia Cobasb, Manuel F. Cobas Valleb, Marcio Rodrigues da Cunhac, Sonnia Pavoni Olivera & Mario Ricardo Góngora-Rubioc
038	Desarrollo de un sistema hidrodinámico basado en la botella de Mariotte para la impulsión de soluciones en sistemas de microfluidica	ROSA MARIA CAMARILLO ESCOBEDO, Valdés Perezgasga Francisco, Alonso Chamarro Julian
058	Emulsion production using glass microfluidic devices	Juliana de Novais Schianti, N. P. N. Cerize, A. M. Oliveira, M.R. Gongora-Rubio
079	Design and fabrication of centrifugal microfluidic platforms based on capillary force valves for analytical applications	Oriol Ymbern, C.S. Martínez-Cisneros, E.Soria, V. Catalan <sup>2</sup> , J. Alonso
084	Size Microcapsule Separation Using Microfluidic Systems	Camilo Vélez, Juan C. Gonzalez, Sandra C. Medina, Oscar F. Sachez, Alba Ávila, Johann F. Osma
099	Device for Microfluidic Application	C. Reyes-Betanzo, B. H. Lapizco-Encinas, A. Itzmoyotl-Toxqui, and J. M. Álvarez-Ledezma
008	Red Inalámbrica de Sensores aplicada a la Gestión Energética.	Eduardo Lluna, A. Edith Navarro, Diego Ramírez, Sivia Casans
010	sistema de monitorización y control agrícola	R. Estellés, S. Casans, A.E. Navarro, D. Ramírez, J. Sánchez
011	kit modular de teleasistencia	A. Hidalgo, S. Casans, A.E. Navarro, D. Ramírez, J. Sánchez
012	Red De Sensores Inteligentes Aplicada A La Monitorización De Un Museo Minero	N. Carbonell, S. Casans, A.E. Navarro, D. Ramírez, J. Sánchez
023	influencia de la frecuencia de resonancia sobre la potencia de salida en circuitos resonantes acoplados magnéticamente	Jorge Luis González Rios, Héctor Trujillo Alvarado
025	Esquema Resonante Paralelo con Adaptador de Impedancia Acoplado Magnéticamente, para Dispositivos RFID	Juan Carlos Cruz Hurtado, Arnaldo Del Risco Sánchez
030	Red Inalámbrica de Sensores para monitoreo de humedad enterrada	M. de J. Flores M., V. D. Velasco M., G. González C., F. Flores G.

089	Hydrogen Fuel Powered Remote Controlled Platform	P.J. Almeida, R. Pereira, J.C. Quadrado
094	Tiempo de Vida de una Red Inalámbrica de Sensores para Monitoreo de Estacionamientos	María Gabriela Calle , Jefferson Rodríguez, Esteban García, Carlos Beltán, Miguel Sierra
097	Arquitetura de Integração: Redes de Sensores e Sistemas Ciber-Físicos	Jorge R. Beingolea Garay, Sergio T. Kofuji
101	Sistema Inalambrico Para Medicion De Evaporacion De Agua	Julio Vladimir Castañeda G. , J. V. Castañeda G., M. de la Rosa R., J. E. Frias R., F. Flores G.
114	Principles and Applications of SAR Sensors to Traffic Monitoring	Paulo Marques
138	Low Power CMOS RFIC Receiver for Wireless Sensor Applications	Fernando Azevedo, Vitor Fialho, Fernando Fortes and Maria J. Rosário
013	Fabricação de Microestruturas através da Técnica de Litografia de Varredura em Campo Próximo	Mariana Pojar, Antonio Domingues dos Santosb, Antonio Carlos Seabraa,
014	Stages Of Development And Optimization Of Process Design Of Sensors Microsquid	Simone Camargo Trippe, Antônio Domingues dos Santos e Antônio Carlos Seabra1
015	Eletrodo de pasta de carbono baseado em minicavidade de contato sólido (Au): caracterização eletroquímica de nanosensores	Antonio Ap. Pupim. Ferreira, Cecílio Sadao Fugivara, Sidney José Lima Ribeiro, José Maurício Almeida Caiut, Vagner Sargentelli, Assis Vicente Benedetti
036	Conically Shaped Nanopores: An Important Analytical Tool on the Development of Nanosensors	Glauco Pilon dos Santos, Antonio A. P. Ferreira1, Hideko Yamanaka1, Maria Valnice B. Zanon1, Pu Jin, Lloyd P. Horne, Charles R. Martin
053	Smart micellar fluid: a photochromic and mechanical study of an UV-light responsive system	Marina Pereira, Catarina R. Leal, A. Jorge Parola e Ulrich M. Scheven
080	The effect of thermal annealing on the physical and optical properties of solgel WO3 thin films	M. Acosta, I. Riech, C. Vales
090	Electrical Properties Of Tungsten Oxide Based Films For Gas Sensing Applications	Ines Riech Mendez, M. Acosta, E. Flores1, V. Rejon
091	Modified titanate nanotubes as new materials for sensor applications	M.R. Nunes, V. Bem, A.J. Silvestre, O.C. Monteiro
092	Bienzymatic biosensor for l-lactate analysis based in the incorporation of lactate oxidase and horseradish peroxidase by phase inversion technique in a polysulfone/multi-wall carbon nanotube membrane	S. Pérez, S. Sánchez, E. Fàbregas
111	Synthesis and characterization of silica nanotubes	T. Díaz-Faes, M.E. Díaz-García, M.J. A. García-Calzón, R. Badía-Laíño
112	Spectroscopical and morphological characterization of gold nanorods	María Antonia Escudero-Francos, Alfonso Fernández-González, Rosana Badía-Laíño, Marta Elena Díaz-García.
113	ZnO-ormosil nanohybrids: Synthesis, properties and applications	R Machicote, L. Bruzzzone, A. Fernández González, M.E. Díaz-García, R. Badía Laíño
122	p-type cuxs thin films: spotlight on their surface and structural properties	P. Parreira, G. Lavareda, J. Valente, §F. Nunes, A. Amaral and C. Nunes de Carvalho
123	p-type CuOx Thin-Film Transistor as an Oxygen Sensor	G. Lavareda, C. Nunes de Carvalho and A. Amaral
035	Caracterizacion Estructural Y Morfológica De Polvo Nanometrico De Tio2 Obtenido Por Electrolisis	E. Pelaez, M. Valdes, D. Hernandez, A. Ruiz, E. Vigil, L. Navarrete, O. Arias, W-D Muller, C. Mochales, D. Hotza, L. Caputi
143	RF-plasma assisted PLD growth of zinc nitride thin films	R. Ayouchi, S. Bhattacharyya, R. Schwarz
144	ZnO-based line sensors for high-energy particle detectors	M. M. Brandao, C. Casteleiro, L. Bentes, R. Ayouchi, R. Schwarz

**2<sup>nd</sup> POSTER SESSION, WEDNESDAY, 10/11/10, 17:00 (Room: Mediateca)**

Topics: Physical Sensors, Chemical Sensors, Biosensors, Biomedical Applications, Food Industry Applications, Environmental Applications

Ref	Title	Authors
002	Optical Demultiplexer Device Operating in the Visible Spectrum	P. Louro, M. Vieira, M. A. Vieira, S. Amaral, J. Costa, M. Fernandes
022	Sol-gel Si <sub>3</sub> N <sub>4</sub> /SiO <sub>2</sub> as active material for light emitters in an all integrated optical sensing scheme	José A. Rodríguez Pérez, Carlos Domínguez*, César Fernández-Sánchez
029	sputtered nanocrystalline dye sensitized tio <sub>2</sub> based photodetector for the uv-vis range	Pedro Parreira, C. Nunes, E. Torres, C. Nunes de Carvalho, G. Lavareda, A. Amaral, K. Lobato, A. Joyce and M.J. Brites
034	Maximizing impedimetric biomass detection by sensitivity analysis using Finite Element Modelling	Fabián N. Moretti, Jordi Aguilo
072	Utilização De Um Cristal Piezoléctrico Para Seguir Transições De Fase	Marta I. S. Veríssimo, M. Teresa S. R. Gomes
081	Blue-Enhanced Thin-Film Photodiode for Imaging Applications	Y. Vygranenko, A. Sazonov, M. Vieira, A. Nathan
085	Sensor de Temperatura de Capa Delgada Basado en Rutenio.	Jaime Sanchez Moreno, Diego Ramirez Muñoz
136	Wavelength dependence of the a-Si:H-based Electrolyte-Insulator-Semiconductor sensor.	M. Fernandes, J. Costa, M. Vieira, G. Lavareda, C. N. Carvalho, A. Karmali
139	Medição diferencial de temperatura através de fibra óptica: uma via promissora para a análise térmica de amostras	L.C. Gonçalves, J. M. Baptista, G. González-Aguilar <sup>1</sup> , P.A. S. Jorge
140	Estrutura híbrida de cavidades Fabry-Perot em fibra óptica para detecção de índice de refração	Paula A. R. Tafulo, P. A. S. Jorge, O. Frazão
116	Multiscale Simulation of a Carbon Nanotube Field Effect Biosensor	J. Costa, A. Fantoni, P. Louro, M. Fernandes, M. Vieira
137	Avaliação de eletrodos impressos modificados com enzimas AChE imobilizadas com náfon sobre carbono-meldola blue	Paulo Roberto Brasil de O. Marques, Ronaldo Censi Faria, João Batista Fernandes
039	Miniaturized biparametric probe for in-soil nutrients monitoring	C.S. Martínez-Cisneros, N. Ibáñez-García, A. Parra and J. Alonso
043	Solid State Sensing of Explosives by a Photoluminescent Calix[4]arene-based polymer	Alexandra I. Costa, LUÍS F. V. FERREIRA, JOSÉ V. PRATA
044	Electronic tongue system based on molecularly imprinted polymer sensors for detecting methylxanthines	G.S. Braga, X. Ceto, L.G. Paterno, F.J.Fonseca*, M. del Valle
046	Analytical Microsystem based on LTCC Technology with on-line Pre-concentration and Potentiometric Detection for Lead Detection in Environmental Samples	Eva Arasa-Puig, Francisco Valdés and Julián Alonso
049	Microbial Fuel Cells as life detection sensors for terrestrial and extraterrestrial environments	Ximena C. Abrevaya, Pablo J. D. Mauas <sup>1,*</sup> and Eduardo Cortón
050	Preparação De Emulsão Óleo/Álcool Usando Micromisturadores Para A Intensificação De Processo Do Biodiesel	Marcio Rodrigues Da Cunha, Adriano Marim De Oliveira <sup>1</sup> , Antonio Carlos Seabra <sup>2</sup> , Mário Ricardo Gongora-Rubio
051	Simulation of explosives detection in a planar Micro Ion Mobility Spectrometer	Raquel Cumeras, I.Gràcia, E.Figuera, L.Fonseca, J.Santander, M.Salleras, C.Calaza, N.Sabaté, C.Cané
054	Microfabrication of $\mu$ -FFE device in Low Temperature Co-Fired Ceramics (LTCC) technology integrating glass window for optical continuous monitoring of separation process	Pedro Couceiro, Julián Alonso
057	Sistema de medición de caudal por inyección térmica implementado en tecnología LTCC.	Coto Fuentes Hesner, Camarillo Escobedo Rosa María, Valdés Perezgasga Francisco, Valdés Zaldivar Enrique Ernesto

062	Principales Resultados De Dos Electroodos Selectivos Al Ion Plomo	Ana Rosa Lazo Fraga, Marcia Bustamante Sánchez, Fransesco Punzo, Ángel Alberto Labrada Rodríguez
067	Continuous and flow-injection electronic tongues for the monitoring of metal bisorption processes	A. Florido, M. Fernández de LaBastida, C. Valderrama, D. Wilson & M. del Valle
070	Principales resultados de los electrodos selectivos al ion plomo	Ana Rosa Lazo Fraga, Marcia B. Sánchez, F. Punzo, Ángel Alberto L. Rodríguez
073	Sensor De Ondas Acústicas Para Determinar A Acetamida	Marta I. S. Veríssimo, Nelson A.F. Silvab, Amin Karmalib, Manuel Matosb, M. Teresa S. R. Gomesa
074	A voltametria de soluções de Cu <sup>2+</sup> e Pb <sup>2+</sup> utilizando um cristal piezoelétrico de quartzo como eléctrodo de trabalho.	A. Yamasaki, J.A.B. Oliveirab, A. Duarteb, M.T.S.R. Gomesb
075	Análise de amoníaco utilizando um sensor acústico	V.L.M. Antunes, J. Pimentaa, M.G.P.M.S. Nevesb, M.T.S.R. Gomes
077	Desarrollo y caracterización de electrodos de referencia embebidos de MnO <sub>2</sub> fabricados por tecnología de película gruesa	Milano Omar, H. Pérez, L. Berardo, C. Moina, L. Fraigi
106	Determinación De Biotina En Suplementos Dietarios Mediante Inmunomagnetoensayo Electroquimico	Silvina V. Kergaravat, Silvia N. Fabiano, Silvia R. Hernandez, Maria I. Pividori
125	Perturbed Angular Correlation (PAC) Study of Cobaltites for Sensor Applications	F.h.m. Cavalcante, r.f.l. Malavasi, a.w. Carbonari <sup>2</sup> , l.m. Redondo
128	New optical sensor for astringency in wine	M. Goreti F. Sales, Rafaela L. Guerreiro,Victor Freitas
129	Sol-gel membrane with imprinted sulfamethoxazole: potentiometric transduction and application to the analysis of water samples.	Tânia R. Rebelo, Sofia A. A. Almeida <sup>a,b,c</sup> , Tânia R. Rebelo <sup>a</sup> , Ana M. Heitor <sup>b</sup> , M. Conceição B. S. M. Montenegroc, M. Goreti F. Sales
134	Quantum dots com núcleo de CdTe como sensores de pH	Abel J. Duarte, Maria do Carmo V.F. Vaz e Joaquim C.G. Esteves da Silva
095	Pseudomona putida como elemento biológico de un sensor inespecífico para la determinación de toxicidad aguda en agua	Federico Figueredo, Pablo Nicolás Núñez Pölcher, Leonardo Cantoni, Eduardo Cortón
006	Biomedical Signals Monitoring Based in Mobile Computing	Nilton Serigioli, Rodrigo Reina Muñoz
052	Desarrollo De Un Sistema Integral De Medición De Parámetros Hemodinámicos In Vitro Para La Caracterización De Celulas Endoteliales	Leandro J. Cymberknop, F. M. Pessana, L. J. Cymberknop, E. E. Alvarez, L. B. Fraigi y A. Furfaro
063	Impedimetric detection of influenza A (H1N1) DNA sequence using carbon nanotubes platform and gold nanoparticles amplification	A. Bonanni, M.I. Pividori, M. del Valle
065	Development of a Blood Volume Pulse Sensor to measure Heart Rate Variability	R. Martins, J. Medeiros
096	Digitalización, tratamiento y almacenamiento en la web de imágenes de muestras clínicas	J. Castro C., J. Verdugo R., C. Sánchez G., S. Tello M., J. Bescós C, F. Flores G
126	Molecular Imprinting of Myoglobin on Silica Surfaces using silanes in Potentiometric Transduction	Felismina T.C. Moreira, Rosa A. F. Dutra, Gerardo G. Aguila <sup>3</sup> , João P. C. Noronha, M. Goreti F. Sales
133	Doppler transcraneal para monitoreo contínuo	B. Yelicich, J. Camacho y H. Gomez
064	Voltammetric electronic tongue in the analysis of cava wines	X.Cetó, X.Cetó, J.M. Gutiérrez, L. Moreno-Barón, S. Alegret, M. del Valle
076	Electrochemical method for detection of bovine milk adulteration with urea and melamine	Astrid Hilding Ohlsson, Jonathan A. Fauerbach, Eduardo Cortón
109	Multiplex Electrochemical Magneto Genosensing Of The Double-Tagged Amplicon For Pathogenic Bacteria With A Gold Nanocomposite Sensor	Susana Liébana Girona, A Lermo, S Campoy, MP Cortés, S Alegret, MI Pividori
127	Rapid screening of Norfloxacin in water	Tâmara I.B. Silva, Felismina T.C. Moreira, M. Goreti F. Sales
130	Colorimetric Sensor for Chlopromazine in aquaculture samples	Rafaela L. Guerreiro, C. D. Matos, M. Goreti F. Sales