

Proceedings of the 2nd Italian Conference on
Sensors and Microsystems

ARTIFICIAL AND NATURAL PERCEPTION

Editors

C. Di Natale

A. D'Amico

F. Davide

World Scientific

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FOREWORD

This book collects a selection of the papers that were presented at the Second Italian Conference on Sensors and Microsystems. The Conference was held on the 3 - 5 February 1997, at the Aula Convegni of the National Research Council (CNR) in Rome.

In this Conference a link between sensors fields and perception theory was attempted. Indeed the development of sensors and microsystems, currently done by academic and industrial researchers, shows many links with the latest achievements in the field of artificial and natural perception. For this reason a basic session, dedicated to this topic, has been organized, in order to provide arguments for a new definition of the sensors and microsystems science and to the role of this discipline in the whole human frame.

The content of this book also shows the pre-competitive applied research and some new aspects in the sensors field. The Conference also pointed out the benefits coming from interdisciplinary actions among researchers. This fact represents a guide line for the future planning research and developments in the sensors and microsystems discipline.

The Conference was organized by the Italian Association of Sensors and Microsystems (AISEM). At the present the AISEM gathers together more than 150 researchers representing research laboratories of universities and public research centers (75%) and industrial laboratories (25%).

Deep thanks are due to Prof. Enrico Garaci, Chairman of the CNR, for the support given to the Conference. Appreciations are also due to the members of the Scientific and Organizing Committees for their help and to Mrs. Claudia Spotorno for her cooperation to the organization of the Conference.

It is a pleasure to acknowledge the support of Telecom Italia SpA especially for promoting the session on Artificial and Natural Perception.

Corrado Di Natale
Arnaldo D'Amico
Fabrizio A.M. Davide

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DURING THE CONFERENCE THE FOLLOWING PAPERS WERE AWARDED:

A. Curulli, I. Carelli, G. Palleschi

Enzyme electrode probes obtained by electropolymerization of monomers with PMS and selected dehydrogenase enzymes

C. Di Natale, E. Proietti, R. Diamanti, A. D'Amico

Modelling and control in semiconductor manufacturing with a multisensor system and a modular neural network

G. Amato, L. Boarino, N. Brunetto, V. Iaquaniti, S. Maggi, E. Monticone, R. Steni, G. Benedetto, R. Spagnolo

Realisation of a superconducting bolometer on "silicon aerogels": an innovative process for thermal insulation of sensors

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AISEM has been founded in the 1995. Its main scope is to contribute to improve the quality of the research in the fields of Sensors and Microsystems and to strenght the links between academic and public research institutions and the small and medium companies.

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CONTENTS

Artificial and Natural Perception

F. Davide

Introduction: The Science of Sensors as the Science of Artificial Perception? 3

E. Esposito

Communicating Fiction: From Simulation to Virtuality 9

A.M. Iacono

Knowledge, Observer, Frontality. About the "F nestra Albertiana" 16

P.G. Morasso

Active Perception and Representation of Space 22

D. Parisi

The Influence of (Artificial) Organisms on their Environment 29

G.O. Longo

I Sing the Body Intelligent 34

Biosensors and Bioelectronics

E. Marconi, C. Baldino, M.C. Messina, R. Cubadda, D. Moscone, G. Palleschi

A Maltose Sensor for the Analysis of Damaged Starch in Flour 45

M. Esti, M.C. Messina, E. La Notte, E. Peluso, D. Moscone, G. Palleschi

Glycerol Biosensor for On-line Monitoring of Alcoholic Fermentation Kinetic
in Conjunction with Other Electrochemical Biosensors 50

G. Volpe, R. Draisci, G. Palleschi, R. Federico

Determination of Biogenic Amines with an Electrochemical Biosensor and its
Application in Fish Samples 55

M.A. Carsol, M. Mascini

Amperometric Detection of Uric Acid and Hypoxanthine with Xanthine Oxidase
Immobilized and Carbon Based Screen-printed Electrode for Fish Freshness
Determination 60

<i>M. Esti, M.C. Messina, P. Bertocchi, D. Moscone, G. Palleschi</i> Electrochemical Biosensors for the Quality Evaluation of Peaches and Kiwi Fruits	65
<i>I. Palchetti, A. Cagnini, M. Mascini, S. Saini, A.P.F. Turner</i> Screen-printed Electrodes for Heavy Metals Detection Using Anodic Stripping Voltammetry and Ion-exchange Voltammetry	70
<i>D. Compagnone, G. Palleschi, P. Imperiali, G. Varallo</i> Enzyme Inhibition Based Detection of Heavy Metals Using H_2O_2 Electrochemical Probes	74
<i>A. Curulli, I. Carelli, G. Palleschi</i> Enzyme Electrode Probes Obtained by Electropolymerization of Monomers with PMS and Selected Dehydrogenase Enzymes	79
<i>T.S. Berzina, S. Alliata, V.I. Troitsky, A. Yu. Tronin</i> Development of New Technique of Langmuir-Blodgett Film Deposition for Biosensor Applications	84
<i>T. Santoni, S. Storri, M. Minunni, M. Mascini</i> Immobilisation of Molecules for the Development of Piezoimmunosensors	89
<i>F.G. Perez, M. Mascini</i> Determination of Viable Bacteria Using an Immunomagnetic Procedure Coupled with FIA Amperometric Detection	94
<i>I. Zolfino, G. Calderaro, C. Del Carlo, L. Piras</i> A Microorganism Based Biosensor for the Detection of Urea by <i>Proteus Vulgaris</i>	99
<i>S. Cincotti, A. Chiabrera, M. Parodi, M. Storace</i> Molecular Microsystem for Molecular Processing of Information	104
<i>M. Bove, S. Martinoia, M. Grattarola, C.W. Stormont, G.T.A. Kovacs</i> Multi-spot Microelectrode Array for Neuronal Sub-populations Probing	109
<i>R. Raiteri, P. Buffoni, M. Grattarola, H.-J. Butt</i> Surface Stress Induced in Microcantilevers as the Sensing Mechanism of Novel Biosensors	114

ChemFET

- L. Campanella, L. Aiello, C. Colapicchioni, M.P. Sammartino, M. Tomassetti*
Analysis of Pharmaceutical Interest by New ISFET Devices 121
- B. Margesin, A. Lui, M. Zen, S. Martinoia, L. Lorenzelli, G. Massobrio*
Development of an ISFET/CMNOS Technology for H⁺-FET Sensor-Based Microsystems 126

Chemical Sensors based on Organic Materials and Conducting Polymers

- A. Mantini, C. Di Natale, A. Macagnano, U. Chiarotti, A. D'Amico, R. Paolesse*
The Kelvin Probe as Chemical Sensor: Detection of Volatile Compounds with Metalloporphyrins 133
- A. Flamini, V. Fares*
New Polycyanosubstituted Dyes as Materials for Optical Chemical Sensors 138
- E. Di Zitti, M.T. Parodi, A. Bonfiglio, A. Chiabrera*
Langmuir-Blodgett Films of Pyrrole Derivatives: Electrical Characterization by Microelectronic Test Structures for Sensor Applications 143
- M. Penza, E. Milella, V.I. Anisimkin, L. Vasaneli*
Surface Acoustic Wave NH₃ Gas Sensor Based on Langmuir-Blodgett Polypyrrole Film 148

Chemical Sensors based on Inorganic Materials

- P. Nelli, G. Faglia, G. Sberveglieri, M. Ferroni, V. Guidi, G. Martinelli*
MoO₃: A Novel Material for Detection of Environmental Pollutants 155
- P. Galinetto, A. Masini, F. Zanardini, G. Faglia*
Photo Sensitivity Activation of SnO₂ Thin Film Gas Sensors at Room Temperature 160

<i>M. Catalano, R. Rella, P. Siciliano, L. Vasanelli, G. De, A. Licciulli</i> Preparation and Characterization of Sol-gel Derived Tin Oxide Based Gas Sensors	165
<i>M. Ferroni, V. Guidi, G. Martinelli, M. Sacerdoti, P. Nelli, G. Sberveglieri</i> Structural Characterization of Innovative Materials for Gas-sensing Applications	170
<i>C. Cantalini, A.R. Phani, M. Pelino, M. Faccio, L. Lozzi, M. Passacantando, S. Di Nardo, S. Santucci</i> Controlled Growth and Microstructural Evolution of WO ₃ Thin Films on SiO ₂ and Si ₃ N ₄ Substrates	175
<i>R. Rella, P. Siciliano, M. Di Giulio, A. Cricenti, R. Generosi, M. Girasole, C. Coluzza</i> Gas Sensing Properties of Sputtered Vanadium Oxide Thin Films	180
<i>F. Cirilli, S. Kaciulis, G. Mattogno, A. Galdikas, A. Mironas, A. Setkus</i> Surface Chemistry of Gas Sensors Based on Multilayer Structures	185
<i>C. Battistoni, F. Cirilli, S. Kaciulis, G. Mattogno, A. Galdikas, S. Mickevicius, E. Bemporad</i> Interaction of Hg Vapor with Thin Films of Gold	190
<i>V.I. Ansimikin, I.M. Kotelianskii, V.I. Fedosov, C. Caliendo, P. Verardi, E. Verona</i> Advanced Pd-based SAW Hydrogen Sensors: Theoretical Approach	195
<i>V.I. Ansimikin, I.M. Kotelianskii, V.I. Fedosov, C. Caliendo, P. Verardi, E. Verona</i> Advanced Pd-based SAW Hydrogen Sensors: Experimental Approach	199

Electronic Nose and Multisensor Systems

<i>C. Di Natale, A. Macagnano, R. Paolesse, T. Boschi, F. Davide, A. D'Amico, M. Faccio, G. Ferri, F. Sinesio, F. Bucarelli, E. Moneta, G. Quaglia</i> Evaluation of Tomato Paste Quality by Means of Electronic Nose and Human Panel of Tasters	207
<i>D. Gnani, V. Guidi, M. Ferroni, G. Faglia, G. Sberveglieri</i> Quantification of a Gas Mixture Using a Novel Artificial Neural Network Topology	212

<i>C. Di Natale, E. Proietti, R. Diamanti, A. D'Amico</i> Modelling and Control in Semiconductor Manufacturing with a Multisensor System and a Modular Neural Network	217
---	-----

Fiber-Optics sensors

<i>A.G. Mignani, M. Bacci, C. Trono, A. Mencaglia</i> Optical Fibers for Monitoring the Effects of Temperature on Picture Varnishes ..	225
<i>V. Fericola, R. Galleano</i> Development and Characterization of Fibre Optic Temperature Sensors	230
<i>A.G. Mignani, R. Falciai, M. Brenici, F. Baldini, A. Mencaglia</i> Optical Fibers Probes for Spectral Measurements	235
<i>R. Falciai, A. Schena, R. Fontana, G. Innocenti</i> Optical Fiber Bragg Gratings for Automotive Applications	240
<i>F. Baldini, A. Falai, R. Coppini</i> Methyl Red Immobilized on Controlled Pore Glass as an Optical Indicator for the Determination of pH on Extended Range	245
<i>E. Biagi, L. Masotti, S. Fontani, M. Pieraccini, M. Brenici</i> Miniaturized Fiber Optic Ultrasonic Sources for Non-destructive Testing and Clinical Diagnosis	250

Infrared and Optical Sensors

<i>G. Amato, L. Boarino, N. Brunetto, V. Iaquaniti, S. Maggi, E. Monticone, R. Steni, G. Benedetto, R. Spagnolo</i> Realisation of a Superconducting Bolometer on "Silicon Aerogels": An Innovative Process for Thermal Insulation of Sensors	259
<i>G. Masini, L. Colace, F. Galluzzi, G. Assanto, T.P. Pearsall</i> Solid State Spectrum Analyzer for the Near Infrared Based on a SiGe Superlattice	264
<i>F. Naldoni, L. Capineri, P. Mazzinghi, M. Mazzoni, L. Masotti</i> A Low Cost Position Sensor for Applications with Frequency Modulated IR Laser Emission	269

<i>C. Poduti, U. Chiarotti, C. Di Natale, A. D'Amico</i> Detection of Methane by Infrared Measurements	273
<i>G. Verzellesi, G.F. Dalla Betta, G.U. Pignatelli, G. Soncini, A. Maglione</i> An NPN Bipolar Phototransistor for Optical Encoders	278
<i>F. Zappa, M. Ghioni, S. Cova, L. Varisco, V. Sinnis, A. Morrison</i> Arrays of Single-photon Avalanche Detectors	283
<i>F. Zappa, M. Ghioni, S. Cova</i> Towards Monolithic Integration of Photon-counting Detection Modules	289
Physical Sensors	
<i>M. Affronte, M. Campani, B. Morten, S. Piccinini, M. Prudenziati, M. Tamborin, O. Laborde</i> Thick Film Resistors as Cryogenic Thermometers	297
<i>D. Crescini, V. Ferrari, C. Ghidini, D. Marioli, A. Taroni</i> Thick-film on Steel Piezoresistive Pressure Transducer with Frequency and Duty-cycle Signal Conditioning	302
<i>M. Cisternino, C. Malvicino, M. Palazzetti</i> The Thermal Perception — An Instrument Device to Measure the Dry Thermal Comfort Based on a Smart Hot Film Sensor	307
<i>D. De Rossi, A. Della Santa, A. Mazzoldi</i> Piezo- and Thermoresistive Fabrics for Man-machine Interfaces	312
<i>A. Iula, P. Di Rosa, M. Pappalardo, G. Guidarelli, N. Lamberti</i> A New Multielement Planar Piezoelectric Accelerometer	317
<i>L. Capineri, L. Masotti, S. Rocchi</i> Airborne Ultrasound Transducers for Industrial Applications	322
<i>A.S. Fiorillo, M. Longo</i> Modelisation and Analysis of An Ultrasonic System Based on PVDF Piezopolymers	326

Micromechanical Systems and Related Technologies

<i>A. Mencias, M.C. Carrozza, C. Ristori, V. Rossi, G. Tiezzi, P. Dario</i> Microgrippers with Piezoelectric Actuators for a Micromanipulation Workstation	333
<i>L. Lencioni, M.C. Carrozza, A. Mencioni, D. Accoto, N. Croce, P. Dario</i> A Micromechatronic System for Oil Supply to Momentum Wheels Bearings in Space Satellites	338
<i>V. Foglietti, S. Crescentini, S. Petrocco</i> Fabrication of Micro Hot-plates with Interdigitated Fingers for Chemical Sensing Applications	343
<i>P. Bruschi, A. Diligenti, A. Nannini, F. Pieri, M. Piotta</i> A Micromachined Hotplate on a Silicon Oxide Suspended Membrane	348
<i>P. Bruschi, A. Diligenti, A. Nannini, F. Pieri, M. Piotta</i> A Micromachined Silicon Field-effect Diode with a Moving Anode	353
<i>U. Mastromatteo, B. Vigna, P. Ferrari, P. Montanini, M. Ferrera</i> Polysilicon Microstructures for New Generation IC's with Sensors on Board	358
<i>S. Crescentini, V. Foglietti, S. Petrocco, A. D'Amico</i> Device Product and FEA Simulation of a Gas Sensor Array	363
 Electronics for Sensors	
<i>A. D'Amico, C. Di Natale, M. Mariucci, G. Baccarani, M. Faccio, G. Ferri, F. Maloberti, P. Malcovati, G. Stochino</i> Active Capacitance Multiplication for Sensor Applications	371
<i>F. Alesii, M. Faccio, G. Ferri, A. D'Amico, G. Stochino</i> Low-voltage Rail-to-rail Bipolar Operational Amplifier Design for Resistive Sensor Applications	378