



UNIVERSITÀ DEGLI STUDI DELL'AQUILA

Prof. Vincenzo Stornelli

Curriculum scientifico

(Aggiornato il 2023/01/03)

Position Vincenzo Stornelli serves as Full Professor (ING-INF/01) at the Department of Industrial and information Engineering and Economics, University of L'Aquila.

Short Biography

Prof. Stornelli was born in Avezzano (L'Aquila). He obtained the laurea degree in Electronic Engineering (summa cum laude) at the University of L'Aquila with a thesis entitled: "Design and implementation of an electronic tuning preselector filter for applications in the UHF band". The thesis was conducted at the laboratories of R&D Dept. of Thales Italy. In April 2008 Prof. Stornelli obtained the PhD degree with a thesis on the analysis of semiconductor devices entitled: "Frequency-domain physics-based analysis of high-frequency semiconductor devices". In October 2011 Prof. Stornelli has joined as a Researcher the University of L'Aquila, Department of Electrical and Information Engineering where serves as Full Professor. Actually he teaches in the Electronic and Electronic Devices courses at the University of L'Aquila. Prof. Stornelli has several research national and international collaborations with Universities and research institutes: he had continues visiting professorship positions and cultural exchange period in international enterprises and Universities. He is author also co-inventor of 5 national patents and one international patent, 45 manuscripts on International Journals; 80 International Conference papers; 10 book chapters and 50 Italian Conference papers. Prof. Stornelli is actually member of the advisory and scientific board of the Microwave Engineering Center for Space Applications (MECSA), and is actually founder and CEO of the SENSing srl, University of L'Aquila spin-off. He is an IEEE Senior Member and serves as associate editor and as reviewer for the most important journals and international conferences in the field of electronics and is member of the editorial board of national and international scientific societies and scientific groups and has held numerous management and representation positions.

Research Activity

The scientific activity of Prof. Stornelli in the last ten years is focused in the field of analog and mixed-signal integrated circuits and architectures for information, biomedical and industrial applications, sensor interfaces and high frequency circuit and systems. The activity is documented by continuous and copious scientific publications in the following fields:

- energy harvesting systems and architectures for autonomous apparatus- The research studies in the field have been conducted on novel circuitry and architecture for high efficiency energy conversion stages and power management strategy. RF energy converter and power manager blocks have been widely investigated and developed both at discrete and integrated circuit level. Also thermoelectric and piezoelectric harvester are

under developing. In particular, different specific multi-channel RF system were developed and optimized, while an innovative strategy and system for the recovery of available RF energy was also recently developed.

- Design of analog integrated circuits for LF, RF and microwave applications- In these fields the main research activity has concerned and still concerns the design of analog integrated circuits, both in bipolar and CMOS technology, operating at low supply voltages (low-voltage, LV) and with reduced power consumption (low power, LP). The LV and LP design aspects are actually distinct but can be combined together. As far as the LV is concerned, the activity has been continuous and the consequent copious scientific production demonstrates the theoretical studies also developed during a visiting professorship research period at the Thales Italia R&D dept.

- study analysis and simulation of physics based semiconductor devices for microwave and millimeter-wave- The research activity mainly focuses on the reformulation of the equations that allow the study and prediction of the behavior of semiconductor active devices.

- "current mode" approach design- In most applications, the traditional voltage-mode technique can be replaced by the current-mode one, having the recognized advantage of overcoming the limitation of the gain-bandwidth product, typical of operational amplifiers. As integrated circuits have been implemented and fabricated with a microelectronic design in CMOS standard technology at the transistor level, several new CCII topologies, operating at low voltage and low power, with almost ideal characteristics thanks to its particular topologies.

Participation, Responsibilities, Organization and Coordination in research activities and projects:

2004 Participant in the Italian MIUR Project: ?Portable system for gas environmental monitoring with intelligent A/D integrated interface for the optimization of sensor resolution and accuracy?.

2004 Task leader for the Thales Italy group in the ARTEMOS project ?Agile RF Transceivers and Front-Ends for Future Smart Multi-Standard Communications Applications?.

2005 Participant in the Italian MIUR Project: ?High selectivity gas detection system with modulated temperature regime?.

2008 Participant in a research activity for an ASIC design and RF for a DCR Radio receiver with the Thales Italia.

2008 Participant in the Italian MIUR Project: ?Design and fabrication of a high resolution system for the measurement of small concentrations of gases (methane and ethylene) based on the use of a new analog integrated lock-in, a microsystem black body and a carbon nanotube bolometer?.

2012 Scientific Responsible and coordinator of a research activity for the study and design of innovative wide band power amplifiers with the GEM Elettronica.

2013 Scientific Responsible and coordinator of a research activity for the study and design of innovative wide band power amplifiers with the Thales Italia s.p.a.

2014 Scientific Responsible and coordinator of a research activity on Energy harvesting architectures for outdoor ambient monitoring financed by the CARISPAQ bank.

2014 Scientific Responsible and coordinator of the MISE Project: ?Innovative Domotics System over IP?.

2015 Scientific Responsible and coordinator of the industrial Italian Project: ?Studio e ricerca di soluzioni innovative per l'integrazione in fase di produzione/installazione di sistemi domotici e ICT per la gestione

energetica intelligente dell'edificio e della sua struttura".?

2015 Scientific Responsible and coordinator of the industrial Italian Project: ?Ricerca di algoritmi ed interface avanzate tra i sistemi che compongono le macchine industriali?.

2015 Scientific Responsible and coordinator of the industrial Italian Project: ?Sistemi di stampa digitale con elevato grado di innovazione tecnologica funzionanti su diverse tipologie di supporti?.

2015 Scientific Responsible and coordinator of the industrial Italian Project: ?Studio E Caratterizzazione Di Tecnologie Elettroniche e Materiali Per Trasmissione Dati In Modalità Ultrabroadband?.

2016 Scientific Responsible and coordinator of the POR-FESR Regional Project: ?STAMPAMI?.

2016 Participant in H2020 Project: ?CELTA : Convergence of Electronics and Photonics Technologies for Enabling Terahertz Applications?.

2017 Participant in H2020 Life Project: ?BITMAPS: Pilot technology for aerobic Biodegradation of spent TM AH Photoresist solution in Semiconductor industries?.

2017 Scientific Responsible and coordinator of the regional POR-FESR Project: ?Sviluppo di materiali composito ad elevate prestazioni e ridotto impatto ambientale a Base di matrici ecosostenibili?.

2018 Scientific Responsible and coordinator of the SME Project: ?Circuiti, sistemi e apparati per reti 5G?.

Editorial Boards and committee:

2004 -Today: Reviewer for the major journals and conferences in the electronics and Microelectronics filed as, among others, IEEE Transactions on Circuits and Systems I e II, IEEE MTT, Journal of Circuits Systems and Computers, Radioengineering, Microelectronic Journal, ISCAS, ICECS, PRIME, ICICDT, ECCDT.

2011-Today: Associate Editor of the international journal Journal of Circuits, Systems and Computers.

2015: Member of the Technical Committee and organizing committee of several International conference as, among other, ICRSTA 2015, SPLITECH 2016, ECCTD 2017, SPLITECH 2017.

2004-Today and : Organizer of several International Special Sessions and workshops.

List of Publications

Books

G.Ferri, V.Stornelli: Circuiti e Sistemi per la Microelettronica. 09/2012; l'una., ISBN: 978-88-96139-20-8

Book Chapters

Publications

Vincenzo Stornelli, Leonardo Pantoli, Giorgio Leuzzi: Microwave Active Filter Design. Microwave Systems and Applications, 01/2017; , ISBN: 978-953-51-2867-0, DOI:10.5772/65917

V. Stornelli, A. Di Carlofelice, L. Pantoli, E. Di Giampaolo: Radio frequency energy harvester for remote sensor networks. 01/2014: pages 331-334; , DOI:10.1007/978-3-319-00684-0_63

A. De Marcellis, C. Di Carlo, G. Ferri, V. Stornelli, A. Depari, A. Flammini, D. Marioli: A Novel Calibration-Less CCII-Based Resistance-to-Time Front-End for Gas Sensor Interfacing. Sensors and Microsystems, 11/2010: pages 279-284; , DOI:10.1007/978-90-481-3606-3_54

A. Depari, A. Flammini, D. Marioli, E. Sisinni, A. De Marcellis, G. Ferri, V. Stornelli: A New Fast-Readout Front-End for High Resistive Chemical Sensor Applications. Sensors and Microsystems, 01/2010: pages 273-278; , DOI:10.1007/978-90-481-3606-3_53

A. De Marcellis, C. Di Carlo, G. Ferri, V. Stornelli, A. D'Amico, C. Di Natale, E. Martinelli: A Differential Difference Current-Conveyor (DDCCII) Based Front-End for Integrable and Portable Sensor Applications. *Sensors and Microsystems*, 01/2010: pages 267-271; , DOI:10.1007/978-90-481-3606-3_52

Journal Publications

L. Pantoli, V. Stornelli, G. Leuzzi, Hongjun Li, Zhifu Hu: On-chip active filter in GaAs technology for wireless communication systems. *Analog Integrated Circuits and Signal Processing* 04/2018; , DOI:10.1007/s10470-018-1198-1

V. Stornelli, G. Ferri, L. Pantoli, G. Barile, S. Pennisi: A rail-to-rail constant-g m CCII for Instrumentation Amplifier applications. *AEU - International Journal of Electronics and Communications* 04/2018; , DOI:10.1016/j.aeue.2018.04.029

L. Safari, S. Minaei, G. Ferri, V. Stornelli: Current-Mode Instrumentation Amplifier Based on Supply Current Sensing Technique. *AEU - International Journal of Electronics and Communications* 04/2018; , DOI:10.1016/j.aeue.2018.04.011

Leila Safari, Shahram Minaei, Giuseppe Ferri, Vincenzo Stornelli: Analysis and Design of a New COA-Based Current-Mode Instrumentation Amplifier with Robust Performance against Mismatches. *AEU - International Journal of Electronics and Communications* 03/2018; 89., DOI:10.1016/j.aeue.2018.03.021

Paolo Colucci, Arnaldo D'Amico, Andrea De Marcellis, Christian Falconi, Giuseppe Ferri, Francesco Giovannelli, Francesca Romana Parente, Vincenzo Stornelli: CCII-Based Voltage Amplifier Optimization for Reduced Relative Gain Error. *Circuits Systems and Signal Processing* 03/2018; 37(3):1315-1326., DOI:10.1007/s00034-017-0590-x

Francesca Romana Parente, Simone Di Giovanni, Giuseppe Ferri, Vincenzo Stornelli, Giorgio Pennazza, Marco Santonico: An Analog Bootstrapped Biosignal Read-Out Circuit With Common-Mode Impedance Two-Electrode Compensation. *IEEE Sensors Journal* 01/2018; PP(99):1-1., DOI:10.1109/JSEN.2018.2799849

Alessandro Depari, Emiliano Sisinni, Alessandra Flammini, Giuseppe Ferri, Vincenzo Stornelli, Gianluca Barile, Francesca Romana Parente: Autobalancing Analog Front End for Full-Range Differential Capacitive Sensing. *IEEE Transactions on Instrumentation and Measurement* 01/2018; PP(99):1-9., DOI:10.1109/TIM.2017.2785160

A. Leoni, L. Pantoli, V. Stornelli, G. Leuzzi, Zlatica Marinkovic: Automated Calibration System for RF Configurable Voltage-Controlled Filters. *Circuits and Systems II: Express Briefs, IEEE Transactions on* 01/2018; PP(99):1-1., DOI:10.1109/TCSII.2018.2790078

Alfiero Leoni, Leonardo Pantoli, Vincenzo Stornelli, Giuseppe Ferri, Petar Solic, Mladen Russo: A Combined 90/900 MHz IC Architecture for Smart Tag Application. *Journal of Communications Software and Systems* 01/2018; 14(1)., DOI:10.24138/jcomss.v14i1.451

Leonardo Pantoli, Vincenzo Stornelli, Giorgio Leuzzi, Marco Bartocci, Fabrizio Trotta, Domenico Gaetano, Antonio Manna, Egidio Ciaccia, Franco Di Paolo: A GaAs 0.5-18 GHz Antenna Front-end with Integrated Limiter and Differential to Single Ended Low-Noise Amplifier. *IET Microwaves Antennas & Propagation* 12/2017; 12(6)., DOI:10.1049/iet-map.2017.0094

Leonardo Pantoli, Vincenzo Stornelli, Giorgio Leuzzi: High Dynamic Range, Low Power, Tunable, Active Filter for RF and Microwave Wireless Applications. *IET Microwaves Antennas & Propagation* 11/2017; 12(4)., DOI:10.1049/iet-map.2017.0685

Gianluca Barile, Giuseppe Ferri, Francesca Romana Parente, Vincenzo Stornelli, Alessandro Depari, Alessandra Flammini, Emiliano Sisinni: Linear Integrated Interface for Automatic Differential Capacitive Sensing. 08/2017; 1(4):592., DOI:10.3390/proceedings1040592

Marco Santonico, Giorgio Pennazza, Francesca Romana Parente, Simone Grasso, Alessandro Zompanti,

Vincenzo Stornelli, Giuseppe Ferri, Mariano Bizzarri, Arnaldo D'Amico: A Gas Sensor Device for Oxygen and Carbon Dioxide Detection. 08/2017; 1(4):447., DOI:10.3390/proceedings1040447

G. Ferri, F.R. Parente, V. Stornelli: Current conveyor-based differential capacitance analog interface for displacement sensing application. AEU - International Journal of Electronics and Communications 07/2017; 81., DOI:10.1016/j.aeue.2017.07.014

Tullio de Rubeis, Mirco Muttillio, Leonardo Pantoli, Iole Nardi, Ivan Leone, Vincenzo Stornelli, Dario Ambrosini: A First Approach to Universal Daylight and Occupancy Control System for Any Lamps: Simulated Case in an Academic Classroom. Energy and Buildings 07/2017; 152., DOI:10.1016/j.enbuild.2017.07.025

V. Stornelli, L. Pantoli, G. Ferri, L. Liberati, F. Centurelli, P. Monsurrò, A. Trifiletti: The AB-CCII, a novel adaptive biasing LV-LP current conveyor architecture. AEU - International Journal of Electronics and Communications 06/2017; 79., DOI:10.1016/j.aeue.2017.06.022

Leonardo Pantoli, Alfiero Leoni, Vincenzo Stornelli, Giuseppe Ferri: An IC architecture for RF Energy Harvesting systems. Journal of Communications Software and Systems 06/2017; 13(2):96., DOI:10.24138/jcomss.v13i2.377

V. Stornelli, G. Ferri, A. Leoni, L. Pantoli: The Assessment of Wind Conditions by Means of Hot Wire Sensors and a Modified Wheatstone Bridge Architecture. Sensors and Actuators A Physical 05/2017; 262., DOI:10.1016/j.sna.2017.05.005

Giuseppe Ferri, Vincenzo Stornelli, francesca romana parente, Gianluca Barile: Full range analog Wheatstone bridge-based automatic circuit for differential capacitance sensor evaluation. International Journal of Circuit Theory and Applications 10/2016;, DOI:10.1002/cta.2298

P. Di Marco, V. Stornelli, G. Ferri, L. Pantoli, A. Leoni: Dual band harvester architecture for autonomous remote sensors. Sensors and Actuators A Physical 07/2016; 247., DOI:10.1016/j.sna.2016.06.040

Leonardo Pantoli, vincenzo stornelli, giorgio leuzzi: A low-voltage low-power 0.25 μm integrated single transistor active inductor-based filter. Analog Integrated Circuits and Signal Processing 04/2016; 87(3), DOI:10.1007/s10470-016-0727-z

Leonardo Pantoli, Vincenzo Stornelli, Giorgio Leuzzi: Active Resonator for Low-Phase-Noise Tunable Oscillators. Microwave and Optical Technology Letters 03/2016; 58(5), DOI:10.1002/mop.29725

L. Pantoli, V. Stornelli, G. Leuzzi: Low-noise tunable filter design by means of active components. Electronics Letters 11/2015;, DOI:10.1049/el.2015.2225

G. Ferri, F.R. Parente, V. Stornelli, A. D'Amico, G. Pennazza, M. Santonico: A standard CMOS technology fully-analog differential capacitance sensor front-end. DOI:10.1109/IWASI.2015.7184939

L. Pantoli, V. Stornelli, G. Leuzzi: Class AB tunable active inductor. Electronics Letters 01/2015; 51(1):65-67., DOI:10.1049/el.2014.3877

Leonardo Pantoli, Vincenzo Stornelli, Giorgio Leuzzi: Tunable active filters for RF and microwave applications. Journal of Circuits, Systems and Computers 05/2014; 23(06), DOI:10.1142/S0218126614500881

Leonardo Pantoli, Vincenzo Stornelli: A gaussian monocycle pulse generator/modulator for uwb radios applications. Journal of Circuits, Systems and Computers 05/2014; 23(05), DOI:10.1142/S0218126614500601

P. Branchi, L. Pantoli, V. Stornelli, G. Leuzzi: RF and microwave high-Q floating active inductor design and implementation. International Journal of Circuit Theory and Applications 04/2014; 43(8), DOI:10.1002/cta.1991

V. Stornelli, G. Ferri: A single current conveyor-based low voltage low power bootstrap circuit for ElectroCardioGraphy and ElectroEncephaloGraphy acquisition systems. Analog Integrated Circuits and Signal Processing 04/2014; 79(1), DOI:10.1007/s10470-013-0252-2

V. Stornelli, P. Mantenuto, G. Ferri, P. Di Marco: A Compact Architecture for Heartbeat Monitoring. *Lecture Notes in Electrical Engineering* 01/2014; 268:301-305., DOI:10.1007/978-3-319-00684-0-57

G. Leuzzi, V. Stornelli, L. Pantoli, S. Del Re: Single transistor high linearity and wide dynamic range active inductor. *International Journal of Circuit Theory and Applications* 07/2013; 43(3)., DOI:10.1002/cta.1938

Vincenzo Stornelli, Giuseppe Ferri: A 0.18 μ m CMOS DDCCII for portable LV-LP filters. *Radioengineering* 06/2013; 22(2):434-439.

V. Stornelli, L. Pantoli, G. Leuzzi, G. Ferri: Fully differential DDA-based fifth and seventh order Bessel low pass filters and buffers for DCR radio systems. *Analog Integrated Circuits and Signal Processing* 05/2013; 75(2)., DOI:10.1007/s10470-013-0051-9

V. Stornelli, L. Pantoli, G. Leuzzi: High Quality Factor L-Band Active Inductor-Based Band-Pass Filters. *Journal of Circuits, Systems and Computers* 03/2013; 22(03)., DOI:10.1142/S021812661350014X

Giorgio Leuzzi, Vincenzo Stornelli: SB μ PE drift-diffusion algorithm for FET devices global modeling. *Microwaves Journal* 01/2013; 44(1)., DOI:10.1016/j.mejo.2011.07.013

Paolo Colucci, Giorgio Leuzzi, Leonardo Pantoli, Vincenzo Stornelli: Third order integrable UHF bandpass filter using active inductors. *Microwave and Optical Technology Letters* 06/2012; 54(6)., DOI:10.1002/mop.26857

Giuseppe Ferri, Vincenzo Stornelli, Alessia di Simone: A CCII-Based High Impedance Input Stage for Biomedical Applications.. *Journal of Circuits, Systems and Computers* 12/2011; 20(08):1441-1447., DOI:10.1142/S021812661100802X

Giorgio Leuzzi, Vincenzo Stornelli, Stefano Del Re: A Tuneable Active Inductor With High Dynamic Range for Band-Pass Filter Applications. *Circuits and Systems II: Express Briefs, IEEE Transactions on* 10/2011; 58-II(10):647-651., DOI:10.1109/TCSII.2011.2164145

Andrea De Marcellis, Claudia Di Carlo, Giuseppe Ferri, Vincenzo Stornelli: A CCII μ -based wide frequency range square waveform generator. *International Journal of Circuit Theory and Applications* 01/2011; 41(1)., DOI:10.1002/cta.781

A. Depari, A. Flammini, D. Marioli, E. Sisinni, A. De Marcellis, G. Ferri, V. Stornelli: A New and Fast-Readout Interface for Resistive Chemical Sensors. *IEEE Transactions on Instrumentation and Measurement* 06/2010; 59(5-59):1276 - 1283.

Alessandro Depari, Alessandra Flammini, Daniele Marioli, Emiliano Sisinni, Andrea De Marcellis, Giuseppe Ferri, Vincenzo Stornelli: A New and Fast-Readout Interface for Resistive Chemical Sensors. *IEEE Transactions on Instrumentation and Measurement* 05/2010; 59(5):1276-1283., DOI:10.1109/TIM.2009.2038292

A. D'Amico, A. De Marcellis, C. Di Carlo, C. Di Natale, G. Ferri, E. Martinelli, R. Paolesse, V. Stornelli: Low-voltage low-power integrated analog lock-in amplifier for gas sensor applications. *Sensors and Actuators B Chemical* 02/2010; 144(2-144):400-406., DOI:10.1016/j.snb.2009.01.045

Paolo Colucci, Giorgio Leuzzi, Vincenzo Stornelli: HF Class-E based multiplier circuits. DOI:10.1109/INMMIC.2010.5480108

Giuseppe Ferri, Andrea De Marcellis, Claudia Di Carlo, Vincenzo Stornelli, Alessandra Flammini, Alessandro Depari, Daniele Marioli, Emiliano Sisinni: A CCII-Based Low-Voltage Low-Power Read-Out Circuit for DC-Excited Resistive Gas Sensors. *IEEE Sensors Journal* 01/2010; 9(12-9):2035 - 2041., DOI:10.1109/JSEN.2009.2033197

Giuseppe Ferri, Claudia Di Carlo, Vincenzo Stornelli, Andrea De Marcellis, Alessandra Flammini, Alessandro Depari, Nader Jand: A single-chip integrated interfacing circuit for wide-range resistive gas sensor arrays. *Sensors and Actuators B Chemical* 12/2009; 143(1-143):218-225., DOI:10.1016/j.snb.2009.09.002

A. De Marcellis, G. Ferri, N. C. Guerrini, G. Scotti, V. Stornelli, A. Trifiletti: The VCG-CCII: A novel building block and its application to capacitance multiplication. *Analog Integrated Circuits and Signal Processing* 08/2009; 58(1):55-59., DOI:10.1007/s10470-008-9213-6

V. Stornelli, G. Leuzzi: Global modeling of multifinger MOSFETs with SB-SP combined analysis. DOI:10.1109/RME.2009.5201343

Vincenzo Stornelli, Giuseppe Ferri, King Pace: CMOS pulse generator for BPSK, OOK, PAM, and PPM modulations. *Journal of Circuits, Systems and Computers* 05/2009; 18(3):487-495., DOI:10.1142/S0218126609005320

Vincenzo Stornelli: Low voltage Low Power Fully Differential Buffer.. *Journal of Circuits, Systems and Computers* 05/2009; 18(3):497-502., DOI:10.1142/S0218126609005319

Andrea De Marcellis, Giuseppe Ferri, Nicola Carlo Guerrini, Giuseppe Scotti, Vincenzo Stornelli, Alessandro Trifiletti: A novel low-voltage low-power fully differential voltage and current gained CCII for floating impedance simulations. *Microelectronics Journal* 01/2009; 40(1-40):20-25., DOI:10.1016/j.mejo.2008.08.014

Giorgio Leuzzi, Vincenzo Stornelli: Physical/electromagnetic analysis of multifinger MOSFETs with SB-SP combined methods. *International Journal of RF and Microwave Computer-Aided Engineering* 01/2009; 20(2):141 - 147., DOI:10.1002/mmce.20408

Giorgio Leuzzi, Vincenzo Stornelli: A Frequency- and Space-Domain Series-Expansion Approach for Efficient Numerical Modeling of Semiconductor Devices. *IEEE Transactions on Electron Devices* 01/2009; 55(12-55):3525 - 3531., DOI:10.1109/TED.2008.2006740

Giorgio Leuzzi, Vincenzo Stornelli: Efficient Frequency Domain plus Spatial Expansion Method For Semiconductor Devices Modeling. DOI:10.1109/EMICC.2008.4772302

Andrea De Marcellis, Alessandro Depari, Giuseppe Ferri, Alessandra Flammini, Daniele Marioli, Vincenzo Stornelli, Andrea Taroni: A CMOS Integrable Oscillator-Based Front End for High-Dynamic-Range Resistive Sensors. *IEEE Transactions on Instrumentation and Measurement* 09/2008; 57(8-57):1596 - 1604., DOI:10.1109/TIM.2008.922075

Andrea De Marcellis, Alessandro Depari, Giuseppe Ferri, Alessandra Flammini, Daniele Marioli, Vincenzo Stornelli, Andrea Taroni: Uncalibrated integrable wide-range single-supply portable interface for resistance and parasitic capacitance determination. *Sensors and Actuators B Chemical* 06/2008; 132(2-132):477-484., DOI:10.1016/j.snb.2007.10.068

Christian Falconi, Giuseppe Ferri, Vincenzo Stornelli, Andrea De Marcellis, Daniele Mazziere, Arnaldo D'Amico: Current-Mode High-Accuracy High-Precision CMOS Amplifiers. *Circuits and Systems II: Express Briefs, IEEE Transactions on* 06/2008; 55(5-55):394 - 398., DOI:10.1109/TCSII.2007.914407

Giuseppe Ferri, Vincenzo Stornelli, Andrea De Marcellis, Alessandra Flammini, Alessandro Depari: Novel CMOS fully integrable interface for wide-range resistive sensor arrays with parasitic capacitance estimation. *Sensors and Actuators B Chemical* 03/2008; 130(1-130):207-215., DOI:10.1016/j.snb.2007.08.001

Giorgio Leuzzi, Vincenzo Stornelli: Quasi-2D Frequency-Domain Physical Modeling of MOSFETs by the Spectral Balance Technique.

Andrea De Marcellis, Alessandro Depari, Giuseppe Ferri, Alessandra Flammini, Daniele Marioli, Vincenzo Stornelli, Andrea Taroni: A CMOS Integrable Oscillator-Based Front End for High-Dynamic-Range Resistive Sensors..

Giuseppe Ferri, Vincenzo Stornelli, Angelo Celeste: Integrated Rail-to-Rail Low-Voltage Low-Power Enhanced DC-Gain Fully Differential Operational Transconductance Amplifier. *Etri Journal* 12/2007; 29(6):785-793., DOI:10.4218/etrij.07.0107.0172

Giorgio Leuzzi, Vincenzo Stornelli: Global Modeling Analysis of HEMTs by the Spectral Balance Technique.

IEEE Transactions on Microwave Theory and Techniques 07/2007; 55(6-55):1405 - 1412.,

DOI:10.1109/TMTT.2007.895233

Christian Falconi, Eugenio Martinelli, Di Corrado, Natale, Arnaldo D 'amico, Franco Maloberti, Piero Malcovati, Andrea Baschirotto, Vincenzo Stornelli, Giuseppe Ferri: Electronic interfaces. Sensors and Actuators B Chemical 01/2007; 121(1):295-329., DOI:10.1016/j.snb.2006.09.022

Giuseppe Ferri, Vincenzo Stornelli, Walter Cappucci, Carlo Cantalini: Integrated CMOS interfaces for wide-range resistive gas sensors. Sensors and Actuators B Chemical 10/2006; 118(1):269-275.,

DOI:10.1016/j.snb.2006.04.032

Giuseppe Ferri, Vincenzo Stornelli, Mauro Fragnoli: An integrated improved CCII topology for resistive sensor application. Analog Integrated Circuits and Signal Processing 09/2006; 48(3):247-250.,

DOI:10.1007/s10470-006-7415-3

Giuseppe Ferri, Vincenzo Stornelli: A high precision temperature control system for CMOS integrated wide range resistive gas sensors. Analog Integrated Circuits and Signal Processing 01/2006; 47(3):293-301.,

DOI:10.1007/s10470-006-6991-6

Giorgio Leuzzi, Vincenzo Stornelli: Towards Very High Frequency Simulators for Active Device Modelling.

DOI:10.1109/RME.2006.1689930

Giuseppe Ferri, V. Stornelli, Livio Giuli: A low voltage low power DCCII and MRC-based 2nd order multiple-output filter. DOI:10.1109/RME.2006.1689885

Giuseppe Ferri, Nicola Guerrini, Vincenzo Stornelli: A temperature control system for integrated resistive gas sensor arrays. Proceedings of SPIE - The International Society for Optical Engineering 06/2005; 5837.,

DOI:10.1117/12.608075

Vincenzo Stornelli, Mario Caramanico, Massimo Di Fabrizio, Angelo Brigante: A K-band Biconical Antennas System for Wireless Wideband Communication Equipments.

Patents

G. Leuzzi, V. Stornelli, P. Colucci, L. Pantoli: Low-noise electronic circuit simulating the behavior of an inductance. Ref. No: US 20140292448 A1, Year: 10/2014

Conference Proceedings

Leonardo Pantoli, Vincenzo Stornelli, Leuzzi Giorgio: Active Filter Synthesis and Optimization Method. 7th International Workshop on Microwave Filters, ESTEC - ESA, Noordwijk, The Netherlands; 04/2018

Francesca Romana Parente, Simone Di Giovanni, Giuseppe Ferri, Vincenzo Stornelli, Giorgio Pennazza,

Marco Santonico: An Electrode Impedance Balanced Interface for Biomedical Application. AISEM Annual Conference on Sensors and Microsystems; 02/2018, DOI:10.1007/978-3-319-66802-4_36

A. Zompanti, P. Finamore, C. Pedone, M. Santonico, S. Grasso, F. R. Parente, G. Ferri, V. Stornelli, D. Lelli, L. Costanzo, R. Antonelli Incalzi, G. Pennazza: Breath-Printing of Heart Failure in Elderly. AISEM Annual Conference on Sensors and Microsystems; 02/2018, DOI:10.1007/978-3-319-66802-4_23

G. Ferri, F. R. Parente, V. Stornelli, G. Barile, G. Pennazza, M. Santonico: Voltage-Mode Analog Interfaces for Differential Capacitance Position Transducers. Convegno Nazionale Sensori; 02/2018, DOI:10.1007/978-3-319-55077-0_49

G. Ferri, F. R. Parente, V. Stornelli, G. Barile, G. Pennazza, M. Santonico: CCII-Based Linear Ratiometric Capacitive Sensing by Analog Read-Out Circuits. Convegno Nazionale Sensori; 02/2018, DOI:10.1007/978-3-319-55077-0_50

Mirco Mutillo, Luca Di Battista, Tullio De Rubeis, Iole Nardi, Dario Ambrosini, Domenica Paoletti,

Vincenzo Stornelli, Rocco Alaggio: Automatic indoor monitoring system for structural health. 18th CIRIAF National Congress, Sustainable Development, Human Health and Environmental Protection, Perugia; 01/2018

Gianluca Barile, Giuseppe Ferri, Alfiero Leoni, Mirco Muttillio, Vincenzo Stornelli, Marco Caldari, Marco Palombini, Franco Ripa: Integrable Sensor System for Live Monitoring of Loudspeaker Performances. AISEM Annual Conference on Sensors and Microsystems; 01/2018, DOI:10.1007/978-3-319-66802-4_1

Alfiero Leoni, Leonardo Pantoli, Zlatica Marinkovic, Vincenzo Stornelli, Giorgio Leuzzi: An Approach for AI-Based Filters Design by Means of Neural Networks. 2017 International Conference on Telecommunication in Modern Satellite, Cable and Broadcasting Services, Ni?, Serbia; 10/2017, DOI:10.1109/TELSKS.2017.8246294

A. Leoni, L. Pantoli, G. Leuzzi, V. Stornelli, B. Sto?i?: Bandpass Filter Design with Active Inductor by Means of Wave Digital Approach. 2017 International Conference on Telecommunication in Modern Satellite, Cable and Broadcasting Services (TELSIKS 2017), Ni?, Serbia; 10/2017, DOI:10.1109/TELSKS.2017.8246293

Leonardo Pantoli, Vincenzo Stornelli, Giorgio Leuzzi: Design Considerations and Effects of Class-AB Polarization in ActiveFilters Realised by Means of Active Inductors. European Microwave Conference (EuMC) 10th; 10/2017, DOI:10.23919/EuMC.2017.8230793

Francesco Centurelli, Pietro Monsurrò, Alessandro Trifiletti, Gianluca Barile, Giuseppe Ferri, Leonardo Pantoli, Vincenzo Stornelli: Class-AB current conveyors based on the FVF. 2017 European Conference on Circuit Theory and Design (ECCTD 2017), Catania (Italy); 09/2017, DOI:10.1109/ECCTD.2017.8093354

Giuseppe Ferri, Luca Liberati, Gianluca Barile, Vincenzo Stornelli, Leonardo Pantoli, Alessandro Trifiletti, Francesco Centurelli, Pierò Monsurrò: Power-efficient dynamic-biased CCII. 2017 European Conference on Circuit Theory and Design (ECCTD 2017), Catania (Italy); 09/2017, DOI:10.1109/ECCTD.2017.8093349

L. Pantoli, M. Muttillio, V. Stornelli, G. Ferri, T. Gabriele: A Low Cost Flexible Power Line Communication System. Convegno Nazionale Sensori; 09/2017, DOI:10.1007/978-3-319-55077-0_52

L. Pantoli, A. Leoni, F. R. Parente, V. Stornelli, G. Ferri: Integrable Autonomous Devices for WSNs. Convegno Nazionale Sensori; 09/2017, DOI:10.1007/978-3-319-55077-0_51

G. Ferri, F. R. Parente, V. Stornelli: Current-mode differential capacitance to voltage converter for position sensing. 2017 European Conference on Circuit Theory and Design (ECCTD); 09/2017, DOI:10.1109/ECCTD.2017.8093318

Leonardo Pantoli, Mirco Muttillio, Tullio De Rubeis, Iole Nardi, Vincenzo Stornelli, Giuseppe Ferri: Digital Multi-Probe Temperature Monitoring System for Long-Term on Field Measurements. EUROSENSORS 2017; 08/2017, DOI:10.3390/proceedings1040596

Gianluca Barile, Giuseppe Ferri, Alfiero Leoni, Mirco Muttillio, Leonardo Pantoli, Vincenzo Stornelli, Daniele Vettori: Automatic Wireless Monitoring System for Real-Time Rock Fall Events ?. EUROSENSORS 2017; 08/2017, DOI:10.3390/proceedings1040569

Alfiero Leoni, Gianluca Barile, Mirco Muttillio, Leonardo Pantoli, Vincenzo Stornelli, Giuseppe Ferri, R. Paolucci, L. Di Vita: A Spherical Directional Anemometer Sensor System ?. EUROSENSORS 2017; 08/2017, DOI:10.3390/proceedings1040388

A. Leoni, L. Pantoli, V. Stornelli, G. Ferri, M. Russo, P. Solic: 90/900 MHz IC Architecture for Autonomous Systems. SpliTech2017, Split (Croatia); 07/2017

Vincenzo Stornelli, Leonardo Pantoli, Alfiero Leoni, Giorgio Leuzzi: RF and Microwave Filter Design By Means of Single Transistor Active Inductor: a Review. IcETAN 2017; 07/2017

Leonardo Pantoli, Mirco Muttillio, Giuseppe Ferri, Vincenzo Stornelli, Rocco Alaggio, Daniele Vettori, Luca Chinzari, Ferdinando Chinzari: REMOTE SENSING SYSTEM FOR CONDITION MONITORING OF MODERN WOODEN STRUCTURES. 49TH ANNUAL MEETING OF THE ASSOCIAZIONE SOCIETÀ ITALIANA DI ELETTRONICA, Palermo; 06/2017

Gianluca Barile, Giuseppe Ferri, Francesca Romana Parente, Vincenzo Stornelli, Alessandro Depari,

Alessandra Flammini, Emiliano Sisinni: A standard CMOS bridge-based analog interface for differential capacitive sensors. 2017 13th Conference on Ph.D. Research in Microelectronics and Electronics (PRIME); 06/2017, DOI:10.1109/PRIME.2017.7974162

L. Pantoli, V. Stornelli, G. Leuzzi: High efficiency active filter. 2017 Integrated Nonlinear Microwave and Millimetre-wave Circuits Workshop (INMMiC); 04/2017, DOI:10.1109/INMMIC.2017.7927303

L. Pantoli, V. Stornelli, G. Leuzzi, Li Hongjun, Hu Zhifu: GaAs MMIC tunable active filter. 2017 Integrated Nonlinear Microwave and Millimetre-wave Circuits Workshop (INMMiC); 04/2017, DOI:10.1109/INMMIC.2017.7927304

V. Stornelli, G. Ferri, M. Muttillio, L. Pantoli, A. Leoni, G. Barile, D. D'Onofrio, F. R. Parente, T. Gabriele: Wireless Smart Parking Sensor System for Vehicles Detection. AISEM 2017; 02/2017, DOI:10.1007/978-3-319-66802-4_25

G. Ferri, F. R. Parente, V. Stornelli, G. Barile, L. Pantoli: Automatic Bridge-based Interface for Differential Capacitive Full Sensing. 30th Eurosensors Conference, EUROSENSORS 2016, Budapest; 09/2016, DOI:10.1016/j.proeng.2016.11.466

C. Orsetti, M. Muttillio, F. R. Parente, L. Pantoli, V. Stornelli, G. Ferri: Reliable and Inexpensive Solar Irradiance Measurement System Design. 30th Eurosensors Conference, EUROSENSORS 2016, Budapest; 09/2016, DOI:10.1016/j.proeng.2017.02.001

P. Fusacchia, M. Muttillio, A. Leoni, L. Pantoli, F. R. Parente, V. Stornelli, G. Ferri: A Low Cost Fully Integrable in a Standard CMOS Technology Portable System for the Assessment of Wind Conditions. 30th Eurosensors Conference, EUROSENSORS 2016, Budapest; 09/2016, DOI:10.1016/j.proeng.2016.11.331

L. Pantoli, A. Leoni, V. Stornelli, G. Ferri: Energy harvester for remote sensors systems. 2016 International Multidisciplinary Conference on Computer and Energy Science (SpliTech); 07/2016, DOI:10.1109/SpliTech.2016.7555933

P. Di Marco, A. Leoni, L. Pantoli, V. Stornelli, G. Ferri: Remote Sensor Networks with Efficient Energy Harvesting Architecture. PRIME 2016, Lisbona; 06/2016, DOI:10.1109/PRIME.2016.7519524

Vincenzo Stornelli, Leonardo Pantoli, Giorgio Leuzzi: An Assessment On Low Voltage Low Power Integrable Single Transistor Active Inductor Design for RF Filter Applications (Invited Paper). IEEE International Conference on Integrated Circuit Design and Technology (ICICDT); 06/2016, DOI:10.1109/ICICDT.2016.7542047

Domenico Gaetano, Antonio Manna, Fabrizio Trotta, Marco Bartocci, Egidio Ciaccia, Vincenzo Stornelli, Giorgio Leuzzi, Leonardo Pantoli: An Active and Passive Antenna Pattern Comparison. IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting, Fajardo, Puerto Rico; 06/2016, DOI:10.1109/APS.2016.7696782

V. Stornelli, G. Ferri, L. Pantoli, F. R. Parente, A. Leoni, M. Muttillio, S. Ricci, T. Gabriele: Smart Parking Monitoring System. Riunione Annuale dell'Associazione Gruppo Italiano di Elettronica - GE2016; 06/2016

Leonardo Pantoli, V. Stornelli, G. Leuzzi, F. Mancini, A. Pelliccione: High Dynamic Range Integrable Active Filters. Riunione Annuale dell'Associazione Gruppo Italiano di Elettronica - GE2016; 06/2016

G. Ferri, F. R. Parente, V. Stornelli: Analog current-mode interfaces for differential capacitance sensing. 2016 IEEE Sensors Applications Symposium (SAS); 04/2016, DOI:10.1109/SAS.2016.7479825

Patrizio Di Marco, Leonardo Pantoli, Alfiero Leoni, Mirco Muttillio, Francesca Romana Parente, Vincenzo Stornelli, Giuseppe Ferri: Autonomous Devices For Long Life Co2 Sensors System. Terzo Convegno Nazionale Sensori, CNR - Roma, Roma; 02/2016

Mirco Muttillio, Leonardo Pantoli, Vincenzo Stornelli, Giuseppe Ferri, Tullio Gabriele: Power Line Communication System For Home Automation Through Mobile Device. Terzo Convegno Nazionale Sensori,

CNR - Roma, Roma; 02/2016

Leonardo Pantoli, Vincenzo Stornelli, Giorgio Leuzzi: RF Active Circuit Simulating a Floating Inductance. International Workshop on Integrated Nonlinear Microwave and Millimetre-wave Circuits (INMMiC), 2015; 09/2015, DOI:10.1109/INMMIC.2015.7330364

Leonardo Pantoli, Vincenzo Stornelli, Giorgio Leuzzi: Class AB Gyrator-Based Active Inductor.. International Workshop on Integrated Nonlinear Microwave and Millimetre-wave Circuits (INMMiC), 2015; 09/2015, DOI:10.1109/INMMIC.2015.7330365

Leonardo Pantoli, Vincenzo Stornelli, Giorgio Leuzzi: A Wideband Class-AB Tunable Active Filter. IEEE European Microwave Integrated Circuits Conference (EuMiC 2015); 09/2015, DOI:10.1109/EuMIC.2015.7345159

Leonardo Pantoli, Vincenzo Stornelli, Giorgio Leuzzi: A Wideband Class-AB Tunable Active Filter. IEEE European Microwave Conference (EuMC2015); 09/2015, DOI:10.1109/EuMC.2015.7346002

Vincenzo Stornelli, Giuseppe Ferri, Patrizio Di Marco, Leonardo Pantoli: High Conversion Efficiency Harvesters for Low Power Remote Sensors. Eurosensors 2015; 09/2015

Patrizio Di Marco, Giuseppe Ferri, Alfiero Leoni, Leonardo Pantoli, Vincenzo Stornelli: Dual Band Architecture For High Conversion Efficiency Energy Harvesting System. Workshop Gruppo Italiano di Elettronica, Siena; 06/2015

Giorgio Leuzzi, Leonardo Pantoli, Vincenzo Stornelli, Franco Di Paolo, Marco Bartocci, Fabrizio Trotta, Antonio Tafuto: An Ultra-Wideband Monolithic Active Balun. Workshop Gruppo Italiano di Elettronica, Siena; 06/2015

T. Gabriele, L. Pantoli, V. Stornelli, D. Chiulli, M. Mutillo: Smart power management system for home appliances and wellness based on wireless sensors network and mobile technology. AISEM Annual Conference, 2015 XVIII; 03/2015, DOI:10.1109/AISEM.2015.7066808

G. Ferri, F. R. Parente, C. Rossi, V. Stornelli, G. Pennazza, M. Santonico, A D'Amico: A simplified architecture for differential capacitance sensors. AISEM Annual Conference, 2015 XVIII; 03/2015, DOI:10.1109/AISEM.2015.7066791

L. Pantoli, V. Stornelli, G. Leuzzi, S. Cibella, F. Mattioli, D. Chiulli: A physic based model of antenna-coupled mom diodes for lwir harvesters smart systems. AISEM Annual Conference, 2015 XVIII; 03/2015, DOI:10.1109/AISEM.2015.7066807

Vincenzo Stornelli, P. Di Marco, G. Ferri: Integrable electronic system for pulseoximetry/heartbeat detection. AISEM Annual Conference, 2015 XVIII; 02/2015, DOI:10.1109/AISEM.2015.7066804

Leonardo Pantoli, Vincenzo Stornelli, Giorgio Leuzzi: Low-phase-noise VCO with active resonator. IEEE European Microwave Integrated Circuits Conference (EuMIC2014); 10/2014, DOI:10.1109/EuMIC.2014.6997803

Leonardo Pantoli, Vincenzo Stornelli, Giorgio Leuzzi: Use of Active Inductors in the Oscillator Design. Workshop Gruppo Italiano di Elettronica, Cagliari; 06/2014

Leonardo Pantoli, Vincenzo Stornelli, Giorgio Leuzzi: Oscillator phase-noise reduction using active inductor. International Workshop on Integrated Nonlinear Microwave and Millimetre-Wave Circuits, INMMiC 2014; 04/2014, DOI:10.1109/INMMIC.2014.6815094

Leonardo Pantoli, Stornelli Vincenzo, Leuzzi Giorgio, Alessandro Di Carlofelice: A single transistor post selector active tunable filter for radio receivers applications. International Workshop on Integrated Nonlinear Microwave and Millimetre-Wave Circuits, INMMiC 2014; 04/2014, DOI:10.1109/INMMIC.2014.6815106

Luca Nicola Di Muccio, Leonardo Pantoli, Vincenzo Stornelli, Giorgio Leuzzi: Low Voltage Low Power High Dynamic Range Active Filters For Bluetooth And Radar Applications. Workshop Gruppo Italiano di

Elettronica, Udine; 06/2013

Patrizio Di Marco, Alessandro Di Carlofelice, Leonardo Pantoli, Vincenzo Stornelli, Giuseppe Ferri: Architectures And Circuits For Remote Sensor Energy Harvesters. Workshop Gruppo Italiano di Elettronica, Udine; 06/2013

Vincenzo Stornelli, Alessandro Di Carlofelice, Leonardo Pantoli, Emidio Di Giampaolo: Energy Harvesters for Remote Sensor Networks. AISEM 2013; 06/2013

L. Pantoli, V. Stornelli, G. Leuzzi: Low voltage high-order agile active filter for microwave applications. Microwave Conference (EuMC), 2013 European; 01/2013

L. Pantoli, V. Stornelli, G. Leuzzi: A single-transistor tunable filter for Bluetooth applications. Microwave Integrated Circuits Conference (EuMIC), 2012 7th European; 10/2012, DOI:10.23919/EuMC.2012.6459288

L. Pantoli, V. Stornelli, G. Leuzzi: A 0.13um double balanced mixer for 3.2-4.8GHz IR-UWB applications. Integrated Nonlinear Microwave and Millimetre-Wave Circuits (INMMIC), 2012 Workshop on; 09/2012, DOI:10.1109/INMMIC.2012.6331946

Giorgio Leuzzi, Vincenzo Stornelli, Leonardo Pantoli, Ivano De Francesco, Federica Iorio: Low Noise, High Dynamic Range, Tunable Active Inductor. Workshop Gruppo Italiano di Elettronica, Marina di Carrara; 06/2012

L. Pantoli, V. Stornelli, G. Leuzzi: A single-transistor tunable filter for Bluetooth applications. Microwave Conference (EuMC), 2012 42nd European; 01/2012

V. Stornelli, R. Minutolo, G. Leuzzi, F. Barcio, M. Montanari: Notice of Violation of IEEE Publication Principles A low complexity tuneable pulse generator architecture for sub-GHz UWB applications. Ultra-Wideband (ICUWB), 2011 IEEE International Conference on; 09/2011, DOI:10.1109/ICUWB.2011.6058915

Giorgio Leuzzi, Vincenzo Stornelli, Stefano Del Re, Leonardo Pantoli: High quality factor integrable bandpass filter by using tunable active inductor. Integrated Nonlinear Microwave and Millimetre-Wave Circuits (INMMIC), 2011 Workshop on; 04/2011, DOI:10.1109/INMMIC.2011.5773314

V. Stornelli, G. Leuzzi, L. Pantoli, S. Del Re: High dynamic range bandpass filters design based on active inductor. Microwave Integrated Circuits Conference (EuMIC), 2011 European; 01/2011

G. Leuzzi, V. Stornelli: Fast physic based analysis of multifinger MOSFETs with SB-SP combined method for global modeling. Microwave Conference, 2009. EuMC 2009. European; 11/2009

C. Di Carlo, A. De Marcellis, V. Stornelli, G. Ferri, D. Tiberio: A Novel LV LP CMOS internal topology of CCII+and its application in current-mode integrated circuits. Research in Microelectronics and Electronics, 2009. PRIME 2009. Ph.D.; 08/2009, DOI:10.1109/RME.2009.5201310

A. De Marcellis, C. Di Carlo, G. Ferri, V. Stornelli: A novel general purpose current mode oscillating circuit for the read-out of capacitive sensors. Advances in sensors and Interfaces, 2009. IWASI 2009. 3rd International Workshop on; 07/2009, DOI:10.1109/IWASI.2009.5184789

C. Di Carlo, A. De Marcellis, V. Stornelli, G. Ferri, A. Flammini, A. Depari: Integrated CMOS resistance-to-period converter with parasitic capacitance evaluation. Circuits and Systems, 2009. ISCAS 2009. IEEE International Symposium on; 06/2009, DOI:10.1109/ISCAS.2009.5117966

A. Depari, A. Flammini, D. Marioli, E. Sisinni, A. De Marcellis, G. Ferri, V. Stornelli: A new interface for resistive chemical sensors with low measuring time. Instrumentation and Measurement Technology Conference, 2009. I2MTC '09. IEEE; 06/2009, DOI:10.1109/IMTC.2009.5168474

G. Ferri, V. Stornelli, C. Di Carlo, A. De Marcellis, A. D'Amico, C. Di Natale, E. Martinelli: A CMOS integrable DDCCII-based readout system for portable potentiometric sensors array. AIP Conference Proceedings; 05/2009, DOI:10.1063/1.3156534

G. Ferri, V. Stornelli, A. De Marcellis, C. Di Carlo, A. Flammini, A. Depari, D. Marioli: Uncalibrated Current-

Mode Oscillator For Resistive Gas Sensor Integrable Applications. AIP Conference Proceedings; 05/2009, DOI:10.1063/1.3156529

A Depari, A Flammini, D. Marioli, E. Sisinni, A De Marcellis, G. Ferri, V. Stornelli: A New, Fast Readout, Interface For High-value Resistive Chemical Sensors. OLFACTION AND ELECTRONIC NOSE, PROCEEDINGS; 05/2009, DOI:10.1063/1.3156533

Stefano Del Re, Andrea De Marcellis, Claudia Di Carlo, Giuseppe Ferri, Vincenzo Stornelli: AN INTEGRATED CAPACITIVE SENSOR FRONT-END BASED ON LOW VOLTAGE CCII ASTABLE MULTIVIBRATOR. Sensors and Microsystems - 13th Italian Conference; 01/2009, DOI:10.1142/9789812835987_0085

Andrea De Marcellis, Claudia Di Carlo, Giuseppe Ferri, Vincenzo Stornelli, Alessandro Depari, Alessandra Flammini, Daniele Marioli: NEW LOW-VOLTAGE LOW-POWER CURRENT-MODE RESISTIVE SENSOR INTERFACE WITH R/T CONVERSION AND DC EXCITATION VOLTAGE. Sensors and Microsystems - 13th Italian Conference; 01/2009, DOI:10.1142/9789812835987_0084

Andrea De Marcellis, Giuseppe Ferri, Vincenzo Stornelli: AN OSCILLATOR TOPOLOGY AS WIDE RANGE RESISTIVE-CAPACITIVE SENSOR INTERFACE. Sensors and Microsystems - 13th Italian Conference; 01/2009, DOI:10.1142/9789812835987_0087

Pamela Branchi, Vincenzo Stornelli: A CURRENT MODE HEART RATE METER FOR VERY LOW VOLTAGE PORTABLE APPARATUS. Sensors and Microsystems - 13th Italian Conference; 01/2009, DOI:10.1142/9789812835987_0044

Andrea De Marcellis, Giuseppe Ferri, Vincenzo Stornelli, Alessandro Depari, Alessandra Flammini, Daniele Marioli: A NOVEL OP-AMP BASED FRONT-END FOR HIGH VALUED RESISTIVE SENSORS. Sensors and Microsystems - 13th Italian Conference; 01/2009, DOI:10.1142/9789812835987_0088

Giuseppe Ferri, Vincenzo Stornelli, Andrea De Marcellis, Claudia Di Carlo, Christian Falconi, Arnaldo D'amico: A CCII-BASED DYNAMIC ELEMENT MATCHED HIGH PRECISION INSTRUMENTATION AMPLIFIER FOR IC SENSOR APPLICATIONS. Sensors and Microsystems - 13th Italian Conference; 01/2009, DOI:10.1142/9789812835987_0086

C. Di Carlo, Andrea De Marcellis, Vincenzo Stornelli, Giuseppe Ferri, Alessandra Flammini, Alessandro Depari: Integrated CMOS Resistance-to-period Converter with Parasitic Capacitance Evaluation.. International Symposium on Circuits and Systems (ISCAS 2009), 24-17 May 2009, Taipei, Taiwan; 01/2009

S. Del Re, G. Leuzzi, V. Stornelli: A new approach to the design of high dynamic range tunable active inductors. Integrated Nonlinear Microwave and Millimetre-Wave Circuits, 2008. INMMIC 2008. Workshop on; 12/2008, DOI:10.1109/INMMIC.2008.4745705

G. Ferri, V. Stornelli, A. De Marcellis, A. Flammini, A. Depari, D. Marioli: A novel low-voltage low-power Second Generation Current Conveyor-based front-end for high-valued DC-excited resistive sensors. Sensors, 2008 IEEE; 11/2008, DOI:10.1109/ICSENS.2008.4716511

Andrea De Marcellis, Giuseppe Ferri, Vincenzo Stornelli, Alessandro Depari, Alessandra Flammini: UNCALIBRATED HIGH-DYNAMIC RANGE RESISTIVE SENSOR FRONT-END WITH PARALLEL CAPACITANCE ESTIMATION. Sensors and Microsystems - 12th Italian Conference; 07/2008, DOI:10.1142/9789812833594_0076

Giuseppe Ferri, Andrea De Marcellis, Vincenzo Stornelli, Arnaldo D'amico, Corrado Di Natale, Christian Falconi, Eugenio Martinelli: A 77 HZ LOCK-IN AMPLIFIER FOR SENSOR APPLICATIONS. Sensors and Microsystems - 12th Italian Conference; 07/2008, DOI:10.1142/9789812833594_0077

Vincenzo Stornelli, Giuseppe Ferri, Andrea De Marcellis: CCII-BASED OSCILLATOR FOR SENSOR INTERFACE. Sensors and Microsystems - 12th Italian Conference; 07/2008,

DOI:10.1142/9789812833594_0078

Giuseppe Ferri, Vincenzo Stornelli, Andrea De Marcellis, Fabrizio Mancini: LOW VOLTAGE LOW POWER IMPROVED CCII BASED INTERFACE FOR MEASURE AND HEATING CONTROL OF RESISTIVE SENSORS. Sensors and Microsystems - 11th Italian Conference; 01/2008,

DOI:10.1142/9789812793393_0076

Giuseppe Ferri, Vincenzo Stornelli, Andrea De Marcellis, Christian Falconi, Arnaldo D'Amico: A DYNAMIC-ELEMENT MATCHED CCII FOR SMART SENSORS. Sensors and Microsystems - 11th Italian Conference; 01/2008, DOI:10.1142/9789812793393_0067

Giuseppe Ferri, Vincenzo Stornelli, Andrea De Marcellis, Angelo Celeste: A rail-to-rail DC-enhanced adaptive biased fully differential OTA. Circuit Theory and Design, 2007. ECCTD 2007. 18th European Conference on; 09/2007, DOI:10.1109/ECCTD.2007.4529649

Andrea De Marcellis, Giuseppe Ferri, Vincenzo Stornelli: NIC-based capacitance multipliers for low-frequency integrated active filter applications. Research in Microelectronics and Electronics Conference, 2007. PRIME 2007. Ph.D.; 08/2007, DOI:10.1109/RME.2007.4401853

Stefano Del Re, Andrea De Marcellis, Giuseppe Ferri, Vincenzo Stornelli: Low voltage integrated astable multivibrator based on a single CCII. Research in Microelectronics and Electronics Conference, 2007. PRIME 2007. Ph.D.; 08/2007, DOI:10.1109/RME.2007.4401841

Vincenzo Stornelli, Giuseppe Ferri, Andrea De Marcellis: A fully-differential symmetrical OTA-based rail-to-rail switched buffer. Research in Microelectronics and Electronics Conference, 2007. PRIME 2007. Ph.D.; 08/2007, DOI:10.1109/RME.2007.4401817

A. De Marcellis, G. Ferri, M. Patrizi, V. Stornelli, A. D'Amico, C. Di Natale, E. Martinelli, A. Alimelli, R. Paollesse: An integrated analog lock-in amplifier for low-voltage low-frequency sensor interface. Advances in Sensors and Interface, 2007. IWASI 2007. 2nd International Workshop on; 07/2007, DOI:10.1109/IWASI.2007.4420033

A. Depari, A. Flammini, D. Marioli, A. Taroni, A. De Marcellis, G. Ferri, V. Stornelli: An Uncalibrated Wide-Range Single-Supply Integrable Front-End for Resistance and Capacitance Estimation. Solid-State Sensors, Actuators and Microsystems Conference, 2007. TRANSDUCERS 2007. International; 07/2007, DOI:10.1109/SENSOR.2007.4300562

V. Stornelli, G. Ferri, A. De Marcellis, C. Falconi, D. Mazzieri, A. D'Amico: High-accuracy, high-precision DEM-CCII amplifiers. Circuits and Systems, 2007. ISCAS 2007. IEEE International Symposium on; 06/2007, DOI:10.1109/ISCAS.2007.378717

A. Depari, A. Flammini, D. Marioli, A. Taroni, A. De Marcellis, G. Ferri, V. Stornelli: A New CMOS Integrable Oscillating Circuit for High-Value Wide-Range Resistive Sensors. Instrumentation and Measurement Technology Conference Proceedings, 2007. IMTC 2007. IEEE; 06/2007, DOI:10.1109/IMTC.2007.379117

Giorgio Leuzzi, Vincenzo Stornelli: Frequency-Domain Physics-Based Analysis of semiconductor devices by a Spectral-Balance approach. European Microwave Integrated Circuits Conference, 2006. The 1st; 10/2006, DOI:10.1109/EMICC.2006.282669

A. Baschiroto, S. Capone, A. De Marcellis, C. Di Natale, V. Ferragina, G. Ferri, L. Francioso, M. Grassi, N. C. Guerrini, P. Malcovati, E. Martinelli, P. Siciliano, V. Stornelli: A portable integrated wide-range gas sensing system with smart A/D front end. Proc. IMCS 2006, Brescia - Italy; 07/2006

G. Ferri, V. Stornelli, A. De Marcellis, A. Flammini, A. Depari: Novel CMOS integrable wide-range resistive sensor interface. Proc. IMCS 2006, Brescia - Italy; 07/2006

V. Stornelli, G. Ferri, G. Leuzzi, A. De Marcellis: A tunable 0.5-1.3 GHz CMOS 2nd order bandpass filter

with 50/spl Omega/ input-output impedance matching. Circuits and Systems, 2006. ISCAS 2006. Proceedings. 2006 IEEE International Symposium on; 06/2006, DOI:10.1109/ISCAS.2006.1692722

Giorgio Leuzzi, Vincenzo Stornelli: A Frequency-Domain Spectral-Balance Quasi-Two-Dimensional Approach for the Simulation of Nonlinear Devices and Circuits. Integrated Nonlinear Microwave and Millimeter-Wave Circuits, 2006 International Workshop on; 03/2006, DOI:10.1109/INMMIC.2006.283524

Vincenzo Stornelli, Giuseppe Ferri, Giorgio Leuzzi, Andrea De Marcellis: A tunable 0.5-1.3 GHz CMOS 2nd order bandpass filter with 50 Omega input-output impedance matching. International Symposium on Circuits and Systems (ISCAS 2006), 21-24 May 2006, Island of Kos, Greece; 01/2006

Christian Falconi, E. Zampetti, S. Pantalei, Eugenio Martinelli, Corrado Di Natale, Arnaldo D'Amico, Vincenzo Stornelli, Giuseppe Ferri: Temperature and flow velocity control for quartz crystal microbalances. International Symposium on Circuits and Systems (ISCAS 2006), 21-24 May 2006, Island of Kos, Greece; 01/2006, DOI:10.1109/ISCAS.2006.1693604

Giuseppe Ferri, Nicola Guerrini, Vincenzo Stornelli, Carlo Catalani: A novel CMOS temperature control system for resistive gas sensor arrays. Circuit Theory and Design, 2005. Proceedings of the 2005 European Conference on; 01/2005, DOI:10.1109/ECCTD.2005.1523052