



UNIVERSITÀ
DEGLI STUDI
DELL'AQUILA



DIIIE
Dipartimento di Ingegneria
Industriale e dell'Informazione
e di Economia



DISIM
Dipartimento di Ingegneria
e Scienze dell'Informazione
e Matematica



SIE 2026

LVII ANNUAL MEETING

Italian Society of Electronics

L'Aquila, June 24 to 26, 2026

Scientific Sessions

Oral & poster programme



CON IL PATROCINIO GRATUITO DI



L'AQUILA
2026
Capitale Italiana
della Cultura

Conference Program at a glance

WEDNESDAY, JUNE 24, 2026	
10:00 - 13:00	Registration
13:00 - 14:00	Lunch
14:00 - 14:45	Welcome Address
14:45 - 16:00	Invited Talks – C. Reita Fondazione Chips-It. - E. Sangiorgi European Chips Act and the Chips JU Mirror Group Italy - C. De Luca CADETTI Italy Competence Center
16:00 - 16:30	Coffee Break
16:30 - 18:00	Round Table SIE & ICT societies: coordinator P. Pavan
18:00 - 19:30	Free Time
19:30	Welcome Cocktail – Palazzo Benedetti
THURSDAY, JUNE 25, 2026	
09:00 - 10:20	Oral Session I
10:20 - 11:00	Coffee Break
11:00 - 12:45	Oral Session II
12:45 - 14:15	Lunch
14:15 - 16:05	Oral Session III
16:05 - 16:40	Coffee Break
16:40 - 17:45	Oral Session IV
17:45 - 18:45	Free Time
18:45	Departure for Gala Dinner – Monastero di Santo Spirito, Ocre
FRIDAY, JUNE 26, 2026	
09:30 - 10:00	Invited Talk – Marco Re - Electronics in India: the view of the Scientific Attache' in Bangalore
10:00 - 11:00	Invited Talk – M. Ostling - The new era of power efficient devices by utilizing wide bandgap technology - opportunities and challenges
11:00 - 11:30	Coffee break
11:30 - 12:15	SIE meets the Companies
12:15 - 12:30	Recognition and Awards
12:30 - 13:00	PhD Award Presentation
13:00 - 14:30	Lunch
14:30 - 16:30	Assemblea - Consiglio Scientifico SIE
17:00 - 18:30	L'Aquila City Tour
19:30	Social Dinner (arrosticini)

Technical Conference Program (ORAL & POSTER SESSIONS)

ORAL SESSIONS (Thursday, June 25)

ORAL SESSION I AREA 3 Microwave Electronics – AREA 5 Optoelectronics and Photonics			
Chairs: Simona Donati, Antonio d'Alessandro			
Time	Paper	Presentation	Topic
09:00	Paper #58	A Redundant V-Band GaAs MMIC Front-End for Reliable Inter-Satellite Communications Peiman Parand (Università Roma Tor Vergata), Hermann Barbato (University Roma Tor Vergata), Patrick Ettore Longhi (Università Roma Tor Vergata), Alessandro Barigelli (THALES Alenia Space Italy), Francesco Vitulli (THALES Alenia Space Italy) and Ernesto Limiti (Università Roma Tor Vergata)	Microwave Electronics
09:15	Paper #85	Impact of Biasing Conditions on Ka-Band GaAs Stacked Amplifier Cells Negar Choupan (Università degli Studi di Milano Bicocca), Valeria Vadalà (Università degli Studi di Milano Bicocca), Marco Pirola (Politecnico di Torino), Marco Grassi (Università degli Studi di Pavia), Giorgio Vannini (Università degli Studi di Ferrara) and Chiara Ramella (Politecnico di Torino)	Microwave Electronics
09:30	Paper #67	Cryogenic Avalanche Noise Sources Guendalina Simoncini (Technical University of Delft), Ehsan Shokrolahzade (Technical University of Delft), Giacomo Schiavolini (University of Perugia), Giulia Orecchini (University of Perugia), Marco Spirito (Technical University of Delft) and Federico Alimenti (University of Perugia)	Microwave Electronics
09:35	Paper #106	Efficiency Enhancement in an S-Band Axial Vircator Patrizia Livreri (University of Palermo) and Domenico Conti (University of Palermo)	Microwave Electronics
09:40	Paper #14	Programmable photonic integrated circuit with a photonic crystal comprising a phase-change material Martino De Carlo (Politecnico di Bari), Francesco De Leonardis (Politecnico di Bari) and Vittorio M. N. Passaro (Politecnico di Bari)	Optoelectronics and Photonics
09:55	Paper #87	Advanced SERS platforms based on Nanopillar Cluster Arrays Mohammed Janneh (University of Sannio, Benevento), Concetta Esposito (University of Sannio, Benevento), Maria Alessandra Cutolo (Centro Regionale Information Communication Technology (CeRICT Scrl), Benevento), Sara Spaziani (University of Sannio, Benevento), Giovanni Breglio (University of Naples Federico II, Napoli), Marco Pisco (University of Sannio, Benevento) and Andrea Cusano (University of Sannio, Benevento)	Optoelectronics and Photonics
10:10	Paper #65	Robust Interface States in a Topologically Engineered 1D Photonic Crystal for Microwave Photonics Giuseppe Brunetti (Politecnico di Bari), Nabarun Saha (Politecnico Di Bari), Carlotta Panciera (Politecnico di Bari), Antonello Florio (Politecnico di Bari), Giuseppe Coviello (Politecnico di Bari) and Caterina Ciminelli (Politecnico di Bari)	Optoelectronics and Photonics
10:15	Paper #69	Fiber Grating-Based Optical Fiber Sensors for Environmental Monitoring in Neutron-Dominated Radiation Environments Gaia Maria Berruti (Università degli Studi del Sannio), Lorenzo Scherino (European Organization for Nuclear Research), Patrizio Vaiano (Università degli Studi del Sannio, Benevento), Simona Zuppolini (Institute for Polymers, Composites and Biomaterials), Aldobenedetto Zotti (Institute for Polymers, Composites and Biomaterials), Giuseppe Quero (University of Molise), Mauro Zarelli (Institute for Polymers, Composites and Biomaterials), Anna Borriello (Institute for Polymers, Composites and Biomaterials), Giovanni Vito Persiano (Università degli Studi del Sannio, Benevento), Paolo Petagna (European Organization for Nuclear Research), Marco Consales (Università degli Studi del Sannio, Benevento) and Andrea Cusano (Università degli Studi del Sannio, Benevento)	Optoelectronics and Photonics
10:20-11:00		COFFEE BREAK	

ORAL SESSION II AREA 7 Electronic System and Applications			
Chair: Massimo Ruocchio			
Time	Paper	Presentation	Topic
11:00	Paper #12	A Wireless Biosensor Node for Multi-Seasonal in-vivo Plant Monitoring Michele Caselli (University of Parma), Andrea Boni (University of Parma) and Edoardo Graiani (University of Parma)	Electronic Systems and Applications
11:15	Paper #23	A Low Noise Electronic Front-end for OFETs based sensor monitoring Riccardo Collu (University of Cagliari), Antonello Mascia (University of Cagliari), Luigi Raffo (University of Cagliari), Stefano Lai (University of Cagliari), Piero Cosseddu (University of Cagliari) and Massimo Barbaro (University of Cagliari)	Electronic Systems and Applications
11:30	Paper #46	Content-Driven Approximate Convolution Architecture for Energy-Efficient Edge Vision Fanny Spagnolo (University of Calabria), Stefania Perri (University of Calabria), Fabio Frustaci (University of Calabria) and Pasquale Corsonello (University of Calabria)	Electronic Systems and Applications

ORAL SESSION II		AREA 7 Electronic System and Applications	
Chair: Massimo Ruo Roch			
11:45	Paper #92	Performance Characterization of an Edge Agentic Language Model on FPGA Pietro Firpo (University of Genoa), Francesco Bellotti (University of Genoa), Matteo Fresta (University of Genoa), Luca Lazzaroni (University of Genoa), Hadi Ballout (University of Genoa), Alessandro Pighetti (University of Genoa), Ali Zare (University of Genoa) and Riccardo Berta (University of Genoa)	Electronic Systems and Applications
12:00	Paper #95	Energy Consumption Optimization in Microcontrollers for TinyML Applications Christian Veronesi (Politecnico di Milano), Tommaso Bondini (Politecnico di Milano), Pietro Bartoli (Politecnico di Milano), Andrea Giudici (Politecnico di Milano) and Franco Zappa (Politecnico di Milano)	Electronic Systems and Applications
12:15	Paper #36	Versatile custom Open Source hardware platform for V2X Applications Sofia Giannoccaro (Politecnico di Torino) and Massimo Ruo Roch (Politecnico di Torino)	Electronic Systems and Applications
12:20	Paper #38	In-Depth Analysis of Health Indicators for SoH in Dynamic Battery Cycling Dennis Rapaccini (Università Politecnica delle Marche, Ancona), Andrea Gentili (Università Politecnica delle Marche, Ancona), Laura Falaschetti (Università Politecnica delle Marche, Ancona), Lorenzo Manoni (Università Politecnica delle Marche, Ancona), Simone Orcioni (Università Politecnica delle Marche, Ancona) and Massimo Conti (Università Politecnica delle Marche, Ancona)	Electronic Systems and Applications
12:25	Paper #43	AI-based models for forecasting energy consumption demand at national level Giorgio Olivieri (Università Politecnica delle Marche, Ancona) and Massimo Conti (Università Politecnica delle Marche, Ancona)	Electronic Systems and Applications
12:30	Paper #63	Wearable Electronic Platform with Embedded AI for Real-Time Sweat Chloride Assessment Daniela De Venuto (Politecnico di Bari)	Electronic Systems and Applications
12:35	Paper #66	Preliminary Analysis of a TinyML approach to AoA Estimation Errors Mitigation Antonello Florio (Politecnico di Bari), Giuseppe Coviello (Politecnico di Bari), Giuseppe Brunetti (Politecnico di Bari), Caterina Ciminelli (Politecnico di Bari) and Gianfranco Avitabile (Politecnico di Bari)	Electronic Systems and Applications
12:40	Paper #93	An Open-Source FPGA Prototype for Extremely Quantized Edge AI Inference Hadi Ballout (University of Genoa), Riccardo Berta (University of Genoa), Ammar Saad (University of Genoa), Luca Lazzaroni (University of Genoa), Ossama Srour (University of Genoa), Matteo Fresta (University of Genoa), Aydin Abedinia (University of Genoa) and Francesco Bellotti (University of Genoa)	Electronic Systems and Applications
12:45-14:15		LUNCH	

ORAL SESSION III		AREA 1 Integrated Circuits and Systems – AREA 2 Micro and nano-electronic devices – AREA 6 Power Electronics	
Chairs: Andrea Bonfanti, David Esseni, Giorgio Spiazzi			
Time	Paper	Presentation	Topic
14:15	Paper #31	Characterization of a 65nm CMOS Readout ASIC with Dynamic Signal Compression for Balloon-Borne Spectrometry Applications Luca Ghislotti (INFN Pavia & Università degli Studi di Bergamo), Paolo Lazzaroni (Università degli Studi di Bergamo & INFN Pavia), Massimo Manghisoni (Università degli Studi di Bergamo & INFN Pavia), Lodovico Ratti (Università di Pavia & INFN Pavia), Valerio Re (Università degli Studi di Bergamo & INFN Pavia) and Elisa Riceputi (Università degli Studi di Bergamo & INFN Pavia)	Integrated Circuits and Systems
14:30	Paper #75	A Fully-Analog Edge-AI Sensors Processor Michele Ronchi (Politecnico di Milano), Mattia Amadori (Politecnico di Milano), Marco Carminati (Politecnico di Milano), Leonardo Bison (Politecnico di Milano), Giacomo Borghi (Politecnico di Milano) and Carlo Fiorini (Politecnico di Milano)	Integrated Circuits and Systems
14:45	Paper #13	A 3T CMOS Voltage References Designed with Automated Flow Michele Caselli (University of Parma) and Andrea Boni (University of Parma)	Integrated Circuits and Systems
14:50	Paper #110	Electronic MMIC Chain suitable for Active Reconfigurable Intelligent Surfaces in K Band Marco Badii (University of Florence), Giovanni Lasagni (University of Florence), Giovanni Collodi (University of Florence), Giacomo Schiavolini (University of Perugia), Giulio Zuccon (University of Florence), Stefano Maddio (University of Florence), Monica Righini (University of Florence), Giulio Brancali (University of Perugia), Stefano Selleri (University of Florence), Federico Alimenti (University of Perugia) and Alessandro Cidronali (University of Florence)	Integrated Circuits and Systems
14:55	Paper #33	Programming scheme of electrochemical random access memory (ECRAM) arrays for analog in-memory computing Lorenzo Micheletti (Politecnico di Milano), Matteo Porzani (Politecnico di Milano), Fabio Carletti (Politecnico di Milano), Matteo Farronato (Politecnico di Milano) and Daniele Ielmini (Politecnico di Milano)	Micro-and Nano-Electronic Devices
15:10	Paper #78	Thermal Conductivity Assessment of Microelectronic Materials via Voltage-Current Measurements Antonio Pio Catalano (University of Napoli Federico II), Ciro Scognamiglio (University of Napoli Federico II), Peter J. Zampardi (Qorvo, Inc., Newbury Park, CA, USA) and Vincenzo D'Alessandro (University of Napoli Federico II)	Micro-and Nano-Electronic Devices
15:25	Paper #44	Analysis of Superconducting Quantum Circuits with the QuLTRA Python Package Simona Zaccaria (University of Bologna) and Antonio Gnudi (University of Bologna)	Micro-and Nano-Electronic Devices

ORAL SESSION III			
AREA 1 Integrated Circuits and Systems – AREA 2 Micro and nano-electronic devices – AREA 6 Power Electronics			
Chairs: Andrea Bonfanti, David Esseni, Giorgio Spiazzi			
15:30	Paper #60	Integrated magnetics techniques for Dual Active Bridge and LLC resonant converters: modelling techniques and comparative evaluation Cristian Ceccolin (Università degli Studi di Padova), Simone Buso (Università degli Studi di Padova) and Giorgio Spiazzi (Università degli Studi di Padova)	Power Electronics
15:45	Paper #82	Comparative experimental analysis of coaxial and SMD shunts for current measurement in WBG devices Giovanni Busatto (University of Cassino and Southern Lazio), Giovanni Canale Parola (University of Cassino and Southern Lazio), Emanuele Martano (University of Cassino and Southern Lazio), Simone Palazzo (University of Cassino and Southern Lazio), Annunziata Sanseverino (University of Cassino and Southern Lazio) and Francesco Velardi (University of Cassino and Southern Lazio)	Power Electronics
16:00	Paper #111	Advanced UIS Test Bench with High-Speed SiC Crowbar for the Characterization of Power Diodes up to 2 kV Giuseppe Capasso (University of Napoli - Federico II), Antonio Porricelli (University of Napoli - Federico II), Alessandro Borghese (University of Naples - Federico II), Mansha Kansal (University of Naples - Federico II), Michele Riccio (University of Naples - Federico II), Giovanni Breglio (University of Naples - Federico II), Andrea Itrace (University of Naples - Federico II) and Luca Maresca (University of Naples - Federico II)	Power Electronics
16:05-16:40		COFFEE BREAK	

ORAL SESSION IV			
AREA 6 Sensors, Microsystems and Instrumentation			
Chair: Domenico Caputo			
Time	Paper	Presentation	Topic
16:40	Paper #15	CMOS-Compatible, Electrohydrodynamic Jet-Printed Colloidal Quantum Dot Photodetectors Giovanni Alberto Romeo (Roma Tre University), Federica Mitri (Roma Tre University), Louis Denolf (Universiteit Gent), Iwan Moreels (Universiteit Gent), Andrea De Iacovo (Roma Tre University) and Lorenzo Colace (Roma Tre University)	Sensors, Microsystems and Instrumentation
16:55	Paper #83	Passive Thermography for Counterfeit Electronic Components Detection via Linear Regression Comparison Simone Carta (University of Cagliari), Leonardo Callia (University of Cagliari), Alessandro Pisano (University of Cagliari) and Giovanna Mura (University of Cagliari)	Sensors, Microsystems and Instrumentation
17:10	Paper #108	Electronic interface optimization for QMB sensors platform Alessandro Zompanti (University Campus Bio-Medico di Roma), Davide Ciarrocchi (University Campus Bio-Medico di Roma), Giorgio Pennazza (University Campus Bio-Medico di Roma) and Marco Santonico (University Campus Bio-Medico di Roma)	Sensors, Microsystems and Instrumentation
17:25	Paper #9	Design and Analysis of a Dual-Input Dual-Stage Boost Converter Riccardo Olivieri (University of L'Aquila), Lorenza D'Alanno (University of L'Aquila), Saleh El Hindi (Politecnico di Bari), Giulio Antonini (University of L'Aquila) and Giuseppe Ferri (University of L'Aquila)	Sensors, Microsystems and Instrumentation
17:30	Paper #30	Collective Nonlinear Dynamics and Topology Effects in Superconducting Qubit Networks Valentina Di Meo (CNR SPIN), Alessandro D'Elia (INFN Laboratori Nazionali di Frascati), Claudio Gatti (INFN Laboratori Nazionali di Frascati), Giorgio Brida (Istituto Nazionale di Ricerca Metrologica (INRiM)), Emanuele Enrico (Istituto Nazionale di Ricerca Metrologica (INRiM)), Luca Fasolo (Istituto Nazionale di Ricerca Metrologica (INRiM)), Mikhail Fistul (Ruhr University Bochum), Ilya Eremin (Ruhr University Bochum), Patrick Navez (Université de Montpellier), Alexandre Zagorskin (Loughborough University), Paolo Silvestrini (Università degli Studi della Campania "L. Vanvitelli"), Jacopo Settino (Università della Calabria), Francesco Romeo (Università degli Studi di Salerno), Berardo Ruggiero (CNR ISASI) and Mikhail Lisitskiy (CNR SPIN) Collective Nonlinear Dynamics and Topology Effects in Superconducting Qubit Networks Valentina Di Meo (CNR SPIN), Alessandro D'Elia (INFN Laboratori Nazionali di Frascati), Claudio Gatti (INFN Laboratori Nazionali di Frascati), Giorgio Brida (Istituto Nazionale di Ricerca Metrologica (INRiM))	Sensors, Microsystems and Instrumentation
17:35	Paper #51	From Lab Bench to Orbit: A Lab-on-Chip Experiment on the International Space Station Augusto Nascetti (Sapienza University of Rome), Nicola Lovecchio (Sapienza University of Rome), Parsa Abbasrezaee (Sapienza University of Rome), Thiago Baratto de Albuquerque (Sapienza University of Rome), Lorenzo Nardi (Sapienza University of Rome), Giulia Petrucci (Sapienza University of Rome), Sahithi Sriramoju (Sapienza University of Rome), Siva Sankaram Emani (Sapienza University of Rome), Vahid Omrani (Sapienza University of Rome), Zahra Mazidi (Sapienza University of Rome), Domenico Caputo (Sapienza University of Rome), Giampiero de Cesare (Sapienza University of Rome), Donato Calabria (Alma Mater Studiorum - University of Bologna), Martina Zangheri (Alma Mater Studiorum - University of Bologna), Elisabetta Marrucci (Kayser Italia S.r.l.), Carlo del Vecchio Bianco (Kayser Italia S.r.l.) and Mara Mirasoli (Alma Mater Studiorum - University of Bologna)	Sensors, Microsystems and Instrumentation
17:40	Paper #64	Real-Time Slip Detection in a Commercial Prosthetic Hand Giuseppe Coviello (Politecnico di Bari), Cristina Roselli (Politecnico di Bari), Antonello Florio (Politecnico di Bari), Giuseppe Brunetti (Politecnico di Bari), Damiano Cosma Potenza (Politecnico di Bari) and Caterina Ciminelli (Politecnico di Bari)	Sensors, Microsystems and Instrumentation

SESSIONS POSTER I–IV

SESSION POSTER I – Wednesday 15:00-18:00

No.	Authors	Title
3	Lorenzo D'Antonio (Tor Vergata University of Rome), Sergio Spanò (Tor Vergata University of Rome), Riccardo La Cesa (Tor Vergata University of Rome), Cristian Valenti (Tor Vergata University of Rome), Udhaya Damodarin (Tor Vergata University of Rome) and Luca Di Nunzio (Tor Vergata University of Rome)	AI-based WideBand Direction of Arrival Estimation on FPGA
4	Lorenzo Canese (Tor Vergata University of Rome), Gian Carlo Cardarilli (Tor Vergata University of Rome), Giuseppe D'Angelo (Airbus Italia S.p.A.), Luca Di Nunzio (Tor Vergata University of Rome), Piero Gabellini (Airbus Italia S.p.A.), Riccardo La Cesa (Tor Vergata University of Rome), Marco Re (Tor Vergata University of Rome) and Sergio Spanò (Tor Vergata University of Rome)	Onboard FPGA AI/ML Processing on Landsat-8 Satellite Images: A Case Study of Wildfires Detection
5	Simone Acciarito (Tor Vergata University of Rome), Gian Carlo Cardarilli (Tor Vergata University of Rome), Luca Di Nunzio (Tor Vergata University of Rome), Riccardo La Cesa (Tor Vergata University of Rome), Marco Re (Tor Vergata University of Rome), Sergio Spanò (Tor Vergata University of Rome) and Cristian Valenti (Tor Vergata University of Rome)	Low-Complexity and Resource-Efficient Design of a Streaming Channel Estimation for ZP-OTFS
7	Elisa Montaldi (University of L'Aquila), Riccardo Olivieri (University of L'Aquila), Gianluca Barile (University of L'Aquila), Vincenzo Stornelli (University of L'Aquila) and Giuseppe Ferri (University of L'Aquila)	Impedance Sensor Evaluation by Current-Feedback Autobalancing Bridge
8	Riccardo Olivieri (University of L'Aquila), Paolo Esposito (University of L'Aquila), Gianluca Barile (University of L'Aquila), Vincenzo Stornelli (University of L'Aquila) and Giuseppe Ferri (University of L'Aquila)	A Flexible Capacitive Sensor for Biomedical Applications
10	Gianmarco Lo Mele (Campus Bio-Medico University of Rome), Emanuela Proietti (Institute for Microelectronics and Microsystems, National Research Council (CNR-IMM), Romolo Marcelli (Institute for Microelectronics and Microsystems, National Research Council (CNR-IMM), Rome), Giovanni Capoccia (Institute for Microelectronics and Microsystems, National Research Council (CNR-IMM), Marco Santonico (Campus Bio-Medico University of Rome) and Giorgio Pennazza (Campus Bio-Medico University of Rome)	Near-Field Microwave Scanning Microscopy for Non-Invasive Dielectric Characterization of Materials: Sensitivity to Probe-Sample Distance and Material Properties
11	Martina Fonte (Università Campus Bio-Medico di Roma), Alessandro Zompanti (Università Campus Bio-Medico di Roma), Giorgio Pennazza (Università Campus Bio-Medico di Roma) and Marco Santonico (Università Campus Bio-Medico di Roma)	Design and characterization of an electronic interface for ULV applications with Thermoelectric Generator
16	Alessandro Nastro (Università di Brescia), Marco Zini (Università di Brescia), Pierpaolo Belardinelli (Università Politecnica delle Marche, Ancona), Francesco Clementi (Università Politecnica delle Marche, Ancona), Paola Russo (Università Politecnica delle Marche, Ancona), Luca Bastianelli (Università Politecnica delle Marche, Ancona), Luca Rosafalco (Politecnico di Milano), Teng Ma (Politecnico di Milano), Attilio Frangi (Politecnico di Milano) and Marco Ferrari (Università di Brescia)	Experimental Characterization of Nonlinear Electrostatic-Capacitive MEMS Resonators featuring 1:2 Internal Resonance
17	Claudio Fratini (Università degli Studi Roma Tre), Andrea De Iacovo (Università degli Studi Roma Tre), Simone Contardi (University of Pisa), Paolo Bruschi (University of Pisa) and Lorenzo Colace (Università degli Studi Roma Tre)	FFT-based Domestic Flame-species classification using multiband PIR sensors
18	Raffaele Vallifuoco (Università degli Studi della Campania "Luigi Vanvitelli"), Luigi Zeni (University of Campania "Luigi Vanvitelli") and Aldo Minardo (Università della Campania "Luigi Vanvitelli")	A cost-effective single-laser interrogation scheme for stimulated forward Brillouin scattering measurements
19	Matteo Verzeroli (Università degli Studi di Bergamo), Luigi Gaioni (Università degli Studi di Bergamo) and Valerio Re (Università degli Studi di Bergamo)	Development of a Low-Cost IoT Platform for Evaluating a Fanless PM Sensor
20	Elia Landi (University of Siena), Valerio Vignoli (University of Siena), Ada Fort (University of Siena), Marco Mugnaini (University of Siena) and Tommaso Addabbo (University of Siena)	Lightweight Impedance Measurement for QCM
21	Elia Landi (University of Siena), Valerio Vignoli (University of Siena), Ada Fort (University of Siena), Marco Mugnaini (University of Siena) and Tommaso Addabbo (University of Siena)	Embedded Bioimpedance Sensing for Smart Mobility
22	Alessandro Nastro (Università di Brescia), Yassine Banani (Politecnico di Milano), Marco Ferrari (Università di Brescia), Marco Bau' (Università di Brescia), Valentina Zega (Politecnico di Milano) and Vittorio Ferrari (Università di Brescia)	A Novel Design of a Triaxial Electrostatic-capacitive MEMS Force Sensor with In-plane Differential Readout
24	Sara Campanella (Università Politecnica delle Marche, Ancona) and Lorenzo Palma (Università Politecnica delle Marche, Ancona)	AI-Driven Wearables for Type 1 Diabetes Management

SESSION POSTER I – Wednesday 15:00-18:00

26	Valentina Carrarini (CHOSE and Electronic Engineering Department, University of Rome Tor Vergata, Rome), Eswaran Jayaraman (SDU Centre for Advanced Photovoltaics and Thin-film Energy Devices (CAPE), Mads Clausen Institute, Denmark), Morten Madsen (SDU Centre for Advanced Photovoltaics and Thin-film Energy Devices (CAPE), Mads Clausen Institute, Denmark) and Andrea Reale (CHOSE and Electronic Engineering Department, University of Tor Vergata Rome)	Fully slot die coated tandem OPV/OPV solar cells
27	Paolo Lazzaroni (Università degli Studi di Bergamo & INFN Pavia), Mike Hammer (Argonne National Laboratory), Massimo Manghisoni (Università di Bergamo & INFN Pavia), Antonino Miceli (Argonne National Laboratory), Lodovico Ratti (Università di Pavia & INFN Pavia) and Valerio Re (University of Bergamo & INFN Pavia)	A low-noise front-end architecture for diffraction-limited synchrotron applications
28	Paolo Lazzaroni (Università degli Studi di Bergamo & INFN Pavia)	Activities on low-power mm-wave radars for healthcare and rehabilitation
29	Tommaso Floris (University of Pavia and INFN), Lodovico Ratti (University of Pavia and INFN), Carla Vacchi (University of Pavia and INFN), Marcello Campajola (University of Naples Federico II and INFN, Naples), Gianmaria Collazuol (University of Padua and INFN, Padua), Manuel Dionísio Da Rocha Rolo (INFN, Turin Section), Giuliana Fiorillo (University of Naples Federico II and INFN, Naples), Francesco Licciulli (INFN, Bari Section), Mario Nicola Mazziotta (INFN, Bari Section), Lucio Pancheri (University of Trento and TIFPA-INFN, Trento), Luigi Pio Rignanesi (INFN, Bologna Section, Bologna), Davide Falchieri (INFN, Bologna Section, Bologna), Romualdo Santoro (University of Insubria, Como, and INFN, Milan) and Fatemeh Shojaei (University of Pavia and INFN)	Ultra-Fast Digital Silicon Photomultiplier with Timestamping Capability in a 110 nm CMOS Process
32	Guido Di Patrizio Stanchieri (University of L'Aquila), Andrea De Marcellis (University of L'Aquila), Elia Palange (University of L'Aquila), Marco Faccio (University of L'Aquila), Orazio Aiello (University of Genova) and Ulkuhan Gulur (Worcester Polytechnic Institute)	CMOS Integrated Optoelectronic Sensing Systems
34	Laura Manin (University Magna Graecia of Catanzaro), Elena Stuppia (University Magna Graecia of Catanzaro), Marta Greco (University Magna Graecia of Catanzaro), Filippo Laganà (University Magna Graecia of Catanzaro), Antonio Brunetti (University Magna Graecia of Catanzaro), Antonino S Fiorillo (University Magna Graecia of Catanzaro) and Salvatore Andrea Pullano (University Magna Graecia of Catanzaro)	Electrochemical Interface Design for Glucose Detection Using Zeolite 3A-Modified Silver Electrodes
35	Laura Manin (University Magna Graecia of Catanzaro), Elena Stuppia (University Magna Graecia of Catanzaro), Filippo Laganà (University Magna Graecia of Catanzaro), Marta Greco (University Magna Graecia of Catanzaro), Antonino S Fiorillo (University Magna Graecia of Catanzaro) and Salvatore Andrea Pullano (University Magna Graecia of Catanzaro)	Selective Detection of Palmitic Acid for Oil Adulteration Analysis Using a PID–Zeolite 5A System

SESSION POSTER II (Thursday 09:00-12:45)

No.	Authors	Title
25	Letizia Cantalini (University of L'Aquila), Valentina Paolucci (University of L'Aquila), Carlo Cantalini (University of L'Aquila), Giuseppe Ferri (University of L'Aquila) and Vincenzo Stornelli (University of L'Aquila)	Physical Response Analysis of a MEMS Sensor for H ₂ S Detection in UAV Systems
37	Matteo Ribeca (University of Perugia), Leonardo Pierantozzi (University of Perugia), Giacomo Schiavolini (University of Perugia), Giulia Orecchini (University of Perugia), Valentina Palazzi (University of Perugia), Federico Alimenti (University of Perugia) and Luca Roselli (University of Perugia)	Experimental Study of Radiative Elements Distances Impact on Rectenna Matrix Performances
39	Lorenzo Manoni (Università Politecnica delle Marche), Laura Falaschetti (Università Politecnica delle Marche), Eleonora Di Angelo (Università Politecnica delle Marche), Alessandro Senesi (Università Politecnica delle Marche), Simone Orcioni (Università Politecnica delle Marche) and Massimo Conti (Università Politecnica delle Marche)	YOLOv8-Based Segmentation for Automated Vineyard Pruning
40	Tommaso Ugolini (University of Bologna) and Elena Gnani (University of Bologna)	Scattering matrix method for the Poisson-Schrödinger solution in graphene-based devices
41	Francesco Capone (Department of Industrial Engineering, University of Salerno), Pio Esposito (Department of Industrial Engineering, University of Salerno), Andrea Fasolino (Department of Industrial Engineering, University of Salerno), Giuseppe Longo (Department of Industrial Engineering, University of Salerno), Nicola Rinaldi (Department of Industrial Engineering, University of Salerno), Rosalba Liguori (Department of Industrial Engineering, University of Salerno), Luigi Di Benedetto (Department of Industrial Engineering, University of Salerno), Gian Domenico Licciardo (Department of Industrial Engineering, University of Salerno) and Alfredo Rubino (Department of Industrial Engineering, University of Salerno)	Latest Research Results at Microelectronic Circuits, Systems and Devices (MiCS&D) Laboratory of the University of Salerno
42	Federica Piccirillo (Optoelectronics Group, Department of Engineering, University of Sannio), Michael Zimmer (Institut für Halbleitertechnik und Funktionelle Grenzflächen, University of Stuttgart), Katharina Dahler (Institut für Halbleitertechnik und Funktionelle Grenzflächen, University of Stuttgart), Alberto Micco (Optoelectronics Group, Department of Engineering, University of Sannio), Michael Jetter (Institut für Halbleitertechnik und Funktionelle Grenzflächen, University of Stuttgart), Peter Michler (Institut für Halbleitertechnik und Funktionelle Grenzflächen, University of Stuttgart), Simone Luca Portalupi (Institut für Halbleitertechnik und Funktionelle Grenzflächen, University of Stuttgart), Andrea Cusano (Optoelectronics Group, Department of Engineering, University of Sannio) and Armando Ricciardi (Optoelectronics Group, Department of Engineering, University of Sannio)	Optoelectronics on fiber technology: a roadmap

SESSION POSTER II (Thursday 09:00-12:45)		
47	Teresa Natale (Politecnico di Bari) and Francesco Dell'Olio (Politecnico di Bari)	Feasibility of a Silicon-Photonic Navigation-Grade Chip-Scale IMU: Design and Early Experimental Evidence
48	Francesco Manni (Università degli studi di Roma Tor Vergata), Gianni Bosi (University of Milano-Bicocca, Milano), Antonio Raffo (University of Ferrara), Giorgio Vannini (University of Ferrara), Paolo Colantonio (Università degli studi di Roma Tor Vergata) and Rocco Giofrè (Università degli studi di Roma Tor Vergata)	An High Power Amplifier with 800W Output Power and 70% Efficiency for 40-50MHz Space Radar Systems
49	Claudio Frongia (University of Cagliari), Riccardo Collu (University of Cagliari), Massimo Barbaro (University of Cagliari) and Luigi Raffo (University of Cagliari)	Event-Driven Spike Encoding Performance on Epileptic EEG and iEEG
50	Alessandro Ficarra (University of Messina) and Emanuele Cardillo (University of Messina)	A Low-Profile Differential Feed Circular Polarized Patch in a Rigid-Flex Substrate for mmWave Applications
52	Sara Pettinato (Università degli studi "Niccolò Cusano", Rome), Maria Cristina Rossi (Università degli Studi Roma Tre), Marco Girolami (Istituto di Struttura della Materia, Consiglio Nazionale delle Ricerche, Montelibretti (Rome))	) and Stefano Salvatori (Università degli Studi Niccolò Cusano, Rome) Exploring Diamond-Based Dosimeters for FLASH Radiotherapy: From Conventional MSM to 3D Architectures
53	Daniele Martinelli (Università di Bologna), Francesco Zavalloni (Università di Bologna), Andrea Lico (Fondazione Chips-IT), Alessio Antolini (Università di Bologna), Lorenzo Greco (Università di Bologna), Luca De Marchi (Università di Bologna), Eleonora Franchi Scarselli (Università di Bologna), Marco Pasotti (STMicroelectronics) and Federica Zonzini (Università di Bologna)	Improving Neural Network Accuracy on Phase Change Memory Devices With Hardware-Aware Training
54	Sergio Colangeli (University of Roma Tor Vergata, Rome), Peiman Parand (University of Roma Tor Vergata, Rome), Walter Ciccognani (University of Roma Tor Vergata, Rome), Patrick Ettore Longhi (University of Roma Tor Vergata, Rome), Giancarlo Orenco (University of Roma Tor Vergata, Rome) and Ernesto Limiti (University of Roma Tor Vergata, Rome)	Revisiting Four-Element Matching for Dual-Band Multi-Stage LNA Design
55	Alessio Antolini (University of Bologna), Andrea Lico (Fondazione Chips-IT), Francesco Zavalloni (Università di Bologna), Lorenzo Greco (Università di Bologna), Riccardo Zurla (STMicroelectronics), Emanuela Calvetti (STMicroelectronics), Marco Pasotti (STMicroelectronics), Alessandro Cabrini (Università di Pavia) and Eleonora Franchi Scarselli (Università di Bologna)	Cross-layer Techniques for Accurate PCM-based Analog in-Memory Computing
56	Giorgio Tatangelo (University of L'Aquila), Mehran Khanehbeygi (University of L'Aquila), Leonardo Pantoli (University of L'Aquila) and Giorgio Leuzzi (University of L'Aquila)	Design Considerations in Wideband Low-Noise Amplifiers operating from DC to GHz
57	Filippo Perea (Università degli Studi di Padova), Davide Biadene (Università degli Studi di Padova) and Paolo Mattavelli (Università degli Studi di Padova)	Improved Charge Mode (iCMC) for Series Resonant Converters
59	Stefania Perri (University of Calabria), Pasquale Corsonello (University of Calabria), Fanny Spagnolo (University of Calabria), Cristina Silvano (Politecnico di Milano) and Fabio Frustaci (University of Calabria)	A Design Space Exploration Framework for Digital IMC Architectures
61	Arbi Gunbardi (Alma Mater Studiorum – Università di Bologna)	Maximizing Performance at Low Area Cost in RISC-V Processors Leveraging Fine-Grained Multithreading
62	Jacopo Marchesin (University of Trento), Danilo Pau (STMicroelectronics) and Roberto Passerone (University of Trento)	Tiny Acceleration of Liquid Foundation Models
68	Gabriele Andreetta (University of Padova), Stefano Bonaldo (University of Padova) and Alessandro Paccagnella (University of Padova)	Effect of Anti-Punchthrough Implant on Radiation Response of Planar nMOS Transistors
70	Elisa Riceputi (University of Bergamo), Luca Ghislotti (INFN Pavia & Università degli Studi di Bergamo), Sofia Poloni (Istituto di Ricerche Farmacologiche Mario Negri IRCCS, Bergamo), Andrea Galliani (University of Bergamo), Chiara Emma Campiglio (University of Bergamo), Anna Caroli (Istituto di Ricerche Farmacologiche Mario Negri IRCCS, Bergamo), Michela Bozzetto (Istituto di Ricerche Farmacologiche Mario Negri IRCCS, Bergamo) and Luca Soliveri (University of Bergamo)	AVF-MONITOR: design and development of a device for vascular access surveillance
71	Fabio Cappelli (University of Rome "La Sapienza"), Giulia Petrucci (Department of Information Engineering, Electronics and Telecommunications, University of Rome "La Sapienza"), Martina Baldini (Department of Information Engineering, Electronics and Telecommunications, University of Rome "La Sapienza"), Francesca Costantini (Research Centre for Plant Protection and Certification (CREA-DC) Council for Agricultural Research and Economics Rome), Augusto Nascetti (School of Aerospace Engineering, University of Rome "La Sapienza"), Giampiero de Cesare (Department of Information Engineering, Electronics and Telecommunications, University of Rome "La Sapienza"), Domenico Caputo (Department of Information Engineering, Electronics and Telecommunications, University of Rome "La Sapienza") and Nicola Lovecchio (Department of Information Engineering, Electronics and Telecommunications, University of Rome "La Sapienza")	Mechanical Stability of Amorphous Silicon Thin-Film Devices on Polyimide for Flexible Sensor Platforms

SESSION POSTER III (Thursday 14:15-17:45)

No.	Authors	Title
72	Fabio Cappelli (La Sapienza University of Rome), Angelica Checchi (Department of Information Engineering, Electronics and Telecommunications, Sapienza University of Rome), Giulia Petrucci (Department of Information Engineering, Electronics and Telecommunications, University of Rome "La Sapienza"), Francesca Costantini (Research Centre for Plant Protection and Certification (CREA-DC) Council for Agricultural Research and Economics Rome), Augusto Nascetti (School of Aerospace Engineering, University of Rome "La Sapienza"), Giampiero de Cesare (Department of Information Engineering, Electronics and Telecommunications, University of Rome La Sapienza), Greta Peruzzi (Department of Earth Science, Sapienza University of Rome), Alessandro Ciccola (Department of Environmental Biology, Sapienza University of Rome), Gabriele Favero (Department of Environmental Biology, Sapienza University of Rome), Daniela De Venuto (Politecnico di Bari), Nicola Lovecchio (Department of Information Engineering, Electronics and Telecommunications, University of Rome La Sapienza) and Domenico Caputo (Department of Information Engineering, Electronics and Telecommunications, University of Rome La Sapienza)	Optimizing the deposition conditions on flexible substrate of electrochemical sensors for chloride ion detection
73	Henri Haka (Politecnico di Milano), Carsten Pitsch (Fraunhofer IOSB), Davide Moschella (Politecnico di Milano), Dominik Walter (Fraunhofer IOSB), Alberto Tosi (Politecnico di Milano) and Federica Villa (Politecnico di Milano)	A 32 × 32 SPAD-Based Platform for Real-Time Asynchronous Quantum Ghost Imaging
74	Carmine Villani Delle Vergini (University of Rome "La Sapienza"), Silvia Casalini (University of Rome "La Sapienza"), Pisana Placidi (University of Perugia) and Domenico Caputo (University of Rome "La Sapienza")	Phase Error Compensation in MQ-Range resistive measurements using an AD5941-based custom PCB
76	Davide Orlandelli (Politecnico di Milano), Simona Sorrentino (Politecnico di Milano), Fabio Telesca (Politecnico di Milano), Kamil Gradkowski (Tyndall National Institute) and Alberto Tosi (Politecnico di Milano)	Hybrid and heterogeneous integration of InGaAs/InP SPADs with Photonic Integrated Circuits
77	Andrea Forgiione (Politecnico di Milano, DEIB; Istituto Nazionale di Fisica Nucleare (INFN), Martina Piroddi (Politecnico di Milano), Christian Riboldi (Politecnico di Milano, DEIB; Istituto Nazionale di Fisica Nucleare (INFN)), Fabio Garzetti (Politecnico di Milano, DEIB), Korbinian Urban (Politecnico di Milano, DEIB; Istituto Nazionale di Fisica Nucleare (INFN)), Letizia Santini (Politecnico di Milano, DEIB; Istituto Nazionale di Fisica Nucleare (INFN)), Giacomo Borghi (Politecnico di Milano, DEIB; Istituto Nazionale di Fisica Nucleare (INFN)), Marco Carminati (Politecnico di Milano, DEIB; Istituto Nazionale di Fisica Nucleare (INFN)) and Carlo Fiorini (Politecnico di Milano, DEIB; Istituto Nazionale di Fisica Nucleare (INFN)).	Development of a High-Speed, 64-Channel Modular Platform for Scintillator-Based Range Verification in Hadrontherapy
79	Nicolò Zagni (University of Modena and Reggio Emilia), Giovanni Vezzellesi (University of Modena and Reggio Emilia) and Alessandro Chini (University of Modena and Reggio Emilia)	Dynamic RON and QOSS in p-GaN Power HEMTs Explained With the Hole Redistribution Model
80	Anna Pascali (Università degli Studi di Trieste), Sergio Carrato (Università degli Studi di Trieste), Gabriele Brajnik (Elettra Sincrotrone Trieste) and Giuseppe Cautero (Elettra Sincrotrone Trieste)	Development of an FPGA-based Acquisition and Processing System for Real-Time Beam Loss Monitoring in Elettra 2.0
81	Nunzia Illiano (Università degli Studi di Napoli Federico II), Maria Gagnaniello (Università degli Studi di Napoli Federico II), Tommaso Lisini Baldi (Università degli Studi di Siena), Elia Landi (Università degli Studi di Siena), Ada Fort (Università degli Studi di Siena), Giovanni Breglio (Università degli Studi di Napoli Federico II) and Michele Riccio (Università degli Studi di Napoli Federico II)	Development of an Embedded System for Stiffness Classification in a Wearable Robotic Sixth Finger Using Edge-AI on ARM Cortex-M4
86	Yan Duan (Politecnico di Milano), Filippo Mele (Politecnico di Milano), Benjamin Draper (Megadalton Solutions), Martin Jarrold (Megadalton Solutions, Indiana University) and Giuseppe Bertuccio (Politecnico di Milano)	Improved Front-End Electronics for a Charge Detection Mass Spectrometer
88	Michela Baiocchi (Sapienza Università di Roma), Angelo Gulinatti (Politecnico di Milano), Nicolas Hanine (Sapienza Università di Roma), Alessio Buzzin (Sapienza Università di Roma), Angelica Focardi (Sapienza Università di Roma), Franco Zappa (Politecnico di Milano) and Rita Asquini (Sapienza Università di Roma)	Monte Carlo Simulations of SPAD Arrays for Spaceborne LiDAR Applications
113	Mohammad Mahdi Dehghan Pir (Roma Tre University), Monica La Mura (Roma Tre University), Domenico Giusti (STMicroelectronics), Davide Ugo Ghisu (STMicroelectronics), Marco Ferrera (STMicroelectronics) and Alessandro Stuart Savoia (Roma Tre University)	An Eye-Tracking System for Wearable Devices Based on MEMS Ultrasonic Transducers
114	Mahdi Yektaei (University of Pavia), Riccardo Collu (University of Cagliari) and Massimo Barbaro (University of Cagliari)	A High Voltage 7-bit programmable optimized-current converter for prosthetic stimulation

SESSION POSTER III (Thursday 14:15-17:45)

115	Babak Hashemi (Mediterranea University of Reggio Calabria), Teresa Crisci (Università degli Studi di Napoli Federico II), Mohamed Mammeri (Università degli Studi di Napoli Federico II), Maurizio Casalino (Istituto di Scienze Applicate e Sistemi Intelligenti (ISASI), National Research Council) and Francesco G. Della Corte (Università degli Studi di Napoli Federico II)	Fabrication of an Asymmetric MMI-Based Mach–Zehnder Thermo-Optic Switch for Silicon Photonic Applications
116	Babak Hashemi (Mediterranea University of Reggio Calabria), Teresa Crisci (Università degli Studi di Napoli Federico II), Kianoush Ranjbarshargh (University of Naples Parthenope), Mohamed Mammeri (Università degli Studi di Napoli Federico II), Stefania Campopiano (University of Naples Parthenope), Maurizio Casalino (Istituto di Scienze Applicate e Sistemi Intelligenti (ISASI), National Research Council) and Francesco G. Della Corte (Università degli Studi di Napoli Federico II)	CAD Design of a Simulation-Optimized Adiabatic Photonic Switch for Foundry Fabrication
67 short oral	Guendalina Simoncini (Technical University of Delft), Ehsan Shokrolahzade (Technical University of Delft), Giacomo Schiavolini (University of Perugia), Giulia Orecchini (University of Perugia), Marco Spirito (Technical University of Delft) and Federico Alimenti (University of Perugia, Department of Engineering)	Cryogenic Avalanche Noise Sources
106 short oral	Patrizia Livreri (University of Palermo) and Domenico Conti (University of Palermo)	Efficiency Enhancement in an S-Band Axial Vircator
65 short oral	Giuseppe Brunetti (Politecnico di Bari), Nabarun Saha (Politecnico Di Bari), Carlotta Panciera (Politecnico di Bari), Antonello Florio (Politecnico di Bari), Giuseppe Coviello (Politecnico di Bari) and Caterina Ciminelli (Politecnico di Bari)	Robust Interface States in a Topologically Engineered 1D Photonic Crystal for Microwave Photonics
69 short oral	Gaia Maria Berruti (Università degli Studi del Sannio, Benevento), Lorenzo Scherino (European Organization for Nuclear Research), Patrizio Vaiano (Università degli Studi del Sannio, Benevento), Simona Zuppolini (Institute for Polymers, Composites and Biomaterials), Aldobenedetto Zotti (Institute for Polymers, Composites and Biomaterials), Giuseppe Quero (University of Molise), Mauro Zarrelli (Institute for Polymers, Composites and Biomaterials), Anna Borriello (Institute for Polymers, Composites and Biomaterials), Giovanni Vito Persiano (Università degli Studi del Sannio, Benevento), Paolo Petagna (European Organization for Nuclear Research), Marco Consales (Università degli Studi del Sannio, Benevento) and Andrea Cusano (Università degli Studi del Sannio, Benevento)	Fiber Grating-Based Optical Fiber Sensors for Environmental Monitoring in Neutron-Dominated Radiation Environments
36 short oral	Sofia Giannoccaro (Politecnico di Torino) and Massimo Ruocco (Politecnico di Torino)	Versatile custom Open Source hardware platform for V2X Applications
38 short oral	Dennis Rapaccini (Università Politecnica delle Marche, Ancona), Andrea Gentili (Università Politecnica delle Marche, Ancona), Laura Falaschetti (Università Politecnica delle Marche, Ancona), Lorenzo Manoni (Università Politecnica delle Marche, Ancona), Simone Orcioni (Università Politecnica delle Marche, Ancona) and Massimo Conti (Università Politecnica delle Marche, Ancona)	In-Depth Analysis of Health Indicators for SoH in Dynamic Battery Cycling
43 short oral	Giorgio Olivieri (Università Politecnica delle Marche, Ancona) and Massimo Conti (Università Politecnica delle Marche, Ancona)	AI-based models for forecasting energy consumption demand at national level
63 short oral	Daniela De Venuto (Politecnico di Bari)	Wearable Electronic Platform with Embedded AI for Real-Time Sweat Chloride Assessment
66 short oral	Antonello Florio (Politecnico di Bari), Giuseppe Coviello (Politecnico di Bari), Giuseppe Brunetti (Politecnico di Bari), Caterina Ciminelli (Politecnico di Bari) and Gianfranco Avitabile (Politecnico di Bari)	Preliminary Analysis of a TinyML approach to AoA Estimation Errors Mitigation in Phase Interferometry
93 short oral	Hadi Ballout (University of Genoa), Riccardo Berta (University of Genoa), Ammar Saad (University of Genoa), Luca Lazzaroni (University of Genoa), Ossama Srour (University of Genoa), Matteo Fresta (University of Genoa), Aydin Abedinia (University of Genoa) and Francesco Bellotti (University of Genoa)	An Open-Source FPGA Prototype for Extremely Quantized Edge AI Inference

SESSION POSTER IV (Friday 09:30-12:30)

No.	Authors	Title
89	Alessandro Torrisi (Free University of Bolzano-Bozen), Michele Gullino (Free University of Bolzano-Bozen), Luisa Petti (Free University of Bolzano-Bozen) and Paolo Lugli (Free University of Bolzano-Bozen)	Wearable Electronics for Apples: An IoT Approach to Precision Fruit Growth Monitoring
90	Bernardo Galvano (University of Palermo)	Towards Quantum-Enhanced Microwave Illumination with TWPAs
91	Yinhe Zhu (Politecnico di Milano), Filippo Mele (Politecnico di Milano) and Giuseppe Bertuccio (Politecnico di Milano)	A Precision Bandgap Reference with Improved Noise Performance for Spectroscopy ASICs
94	Tommaso Bondini (Politecnico di Milano), Pietro Bartoli (Politecnico di Milano), Christian Veronesi (Politecnico di Milano), Andrea Giudici (Politecnico di Milano) and Niccolò Antonello (EssilorLuxottica)	Energy-Efficient Pipeline for Keyword Spotting Embedded into Micro-controllers
96	Angela Cusano (Centro Regionale Information Communication Technology (CeRICT Srl), Sara Spaziani (Optoelectronic Division-Engineering Department, University of Sannio, Benevento), Anna Aliberti (Engineering Department, University of Sannio, Benevento), Vincenzo Lettera (Biopox), Giovanni Sannia (Biopox), Marco Monaco (Russo di Casandrino), Marco Pisco (University of Sannio, Benevento) and Andrea Cusano (University of Sannio, Benevento)	Light-Activated Collagen: From Tannery Waste to Advanced Leather Finishing

SESSION POSTER IV (Friday 09:30-12:30)		
97	Davide Ciarrocchi (University Campus Bio-Medico di Roma), Alessandro Zompanti (University Campus Bio-Medico di Roma), Marco Santonico (University Campus Bio-Medico di Roma) and Giorgio Pennazza (University Campus Bio-Medico di Roma)	Mitigating Dead-Zone and Phase Ambiguity in Polar Demodulation Circuits for Impedance Spectroscopy
98	Lorenzo Giannini (Sapienza University of Rome), Alessio Buzzin (Sapienza University of Rome), Antonio Francesco Stano (Sapienza University of Rome), Nicola Pio Belfiore (Roma Tre University) and Rita Asquini (Sapienza University of Rome)	Performance evaluation of a MEMS-based Pseudo-Parallel Micromanipulator
99	Luigi D'Andrea (Università degli Studi di Napoli 'Federico II'), Vincenzo Romano Marrazzo (Università degli Studi di Napoli 'Federico II'), James Thomas Hainsworth (Laboratoire Hubert Curien, Université Jean Monnet), Giovanni Breglio (Università degli Studi di Napoli 'Federico II'), Sylvain Girard (Laboratoire Hubert Curien, Université Jean Monnet), Emmanuel Marin (Laboratoire Hubert Curien, Université Jean Monnet), Adriana Morana (Laboratoire Hubert Curien, Université Jean Monnet) and Francesco Fienga (Università degli Studi di Napoli 'Federico II')	Evaluation of Ionizing Radiation Effects on Tilted FBG Sensors
100	Giulia Petrucci (Department of Information Engineering, Electronics, and Telecommunications, Sapienza University of Rome), Denise Martone (Department of Information Engineering, Electronics, and Telecommunications, Sapienza University of Rome), Fabio Cappelli (La Sapienza University of Rome), Augusto Nascetti (School of Aerospace Engineering, University of Rome "La Sapienza"), Giampiero de Cesare (Department of Information Engineering, Electronics and Telecommunications, University of Rome "La Sapienza"), Demetrio Logoteta (Department of Information Engineering, Electronics and Telecommunications, University of Rome "La Sapienza"), Domenico Caputo (Department of Information Engineering, Electronics and Telecommunications, University of Rome "La Sapienza") and Nicola Lovecchio (Department of Information Engineering, Electronics and Telecommunications, University of Rome "La Sapienza")	Electrical Characterization of Contact Materials on n- and p-Doped Amorphous Silicon-Based Layers for Integrated Thin-Film Electronics
101	Mariaconsiglia Cuomo (University of Naples "Parthenope"), Elena De Vita (University of Naples "Parthenope"), Agostino Iadicicco (University of Naples "Parthenope") and Stefania Campopiano (University of Naples "Parthenope")	Multi-Site Pulse Wave Analysis with Fiber Bragg Grating Sensors
102	Angelica Focardi (Sapienza University of Rome), Rita Asquini (Sapienza Università di Roma), Filippo Calì Quaglia (Istituto Nazionale di Geofisica e Vulcanologia (INGV), Nicolas Hanine (Sapienza Università di Roma), Monica Tosco (Università di Venezia Ca' Foscari), Alessio Buzzin (Sapienza Università di Roma), Michela Baiocchi (Sapienza Università di Roma) and Giovanni Muscari (Istituto Nazionale di Geofisica e Vulcanologia (INGV))	Design and Validation of a Calibration System for Arctic Spectroradiometers
103	Noor Ul Amin (University of Genoa) and Orazio Aiello (University of Genoa)	A 54 ppm/°C Voltage Reference in flexible TFT technology
104	Francesco Russo (Università Degli Studi Di Napoli Federico II), Vincenzo Romano Marrazzo (Università Degli Studi Di Napoli Federico II), Guido Magazzù (CERN), Massimiliano De Deo (Laboratori Nazionali del Gran Sasso (LNGS), Nicola D'Ambrosio (Laboratori Nazionali del Gran Sasso (LNGS)), Riccardo de Asmundis (INFN Napoli), Giovanni Breglio (Università Degli Studi Di Napoli Federico II) and Francesco Fienga (Università Degli Studi Di Napoli Federico II)	FPGA test system for the SND@LHC upgrade
105	Nicolas Hanine (Sapienza University of Rome), Alessio Buzzin (Sapienza University of Rome), Lorenzo Giannini (Sapienza University of Rome), Ahmadreza Alaeddini (Sapienza University of Rome), Michela Baiocchi (Sapienza University of Rome), Angelica Focardi (Sapienza University of Rome) and Rita Asquini (Sapienza University of Rome)	Highly Efficient Voltage-Controlled MOEMS Microring Resonator
107	Ahmadreza Alaeddini (Sapienza Università di Roma), Simone Ferraresi (University of Ferrara), Gaetano Bellanca (University of Ferrara) and Stefan Wabnitz (Sapienza Università di Roma)	Analysis of Fabrication Tolerance in Modal Phase Matching for SHG in LNOI Waveguides
109	Marco Scalici (Università degli Studi di Palermo) and Patrizia Livreri (Università degli Studi di Palermo)	Plasmonic Nanoantennas for Biomedical Applications: Design and Electromagnetic Analysis for Biomarker Sensing
112	Giuseppe Capasso (University of Napoli - Federico II), Alice Inverno (University of Napoli - Federico II), Alessandro Borghese (University of Naples - Federico II), Mansha Kansal (University of Naples - Federico II), Michele Riccio (University of Naples - Federico II), Giovanni Breglio (University of Naples - Federico II), Andrea Irace (University of Naples - Federico II) and Luca Maresca (University of Naples - Federico II)	A 12 kV ESD Tester for Power Semiconductor Avalanche Failure Investigation
13 short oral	Michele Caselli (University of Parma) and Andrea Boni (University of Parma)	A 3T CMOS Voltage References Designed with Automated Flow
110 short oral	Marco Badii (University of Florence), Giovanni Lasagni (University of Florence), Giovanni Collodi (University of Florence), Giacomo Schiavolini (University of Perugia), Giulio Zuccon (University of Florence), Stefano Maddio (University of Florence), Monica Righini (University of Florence), Giulio Brancali (University of Perugia), Stefano Selleri (University of Florence), Federico Alimenti (University of Perugia) and Alessandro Cidronali (University of Florence)	Electronic MMIC Chain suitable for Active Reconfigurable Intelligent Surfaces in K Band
44 short oral	Simona Zaccaria (University of Bologna) and Antonio Gnudi (University of Bologna)	Analysis of Superconducting Quantum Circuits with the QuLTRA Python Package

SESSION POSTER IV (Friday 09:30-12:30)		
111 short oral	Giuseppe Capasso (University of Napoli - Federico II), Antonio Porricelli (University of Napoli - Federico II), Alessandro Borghese (University of Naples - Federico II), Mansha Kansal (University of Naples - Federico II), Michele Riccio (University of Naples - Federico II), Giovanni Breglio (University of Naples - Federico II), Andrea Itrace (University of Naples - Federico II) and Luca Maresca (University of Naples - Federico II)	Advanced UIS Test Bench with High-Speed SiC Crowbar for the Characterization of Power Diodes up to 2 kV
9 short oral	Riccardo Olivieri (University of L'Aquila), Lorenza D'Alanno (University of L'Aquila), Saleh El Hindi (Politecnico di Bari), Giulio Antonini (University of L'Aquila) and Giuseppe Ferri (University of L'Aquila)	Design and Analysis of a Dual-Input Dual-Stage Boost Converter for Ultra Low-Voltage Energy Harvesting Applications
30 short oral	Valentina Di Meo (CNR SPIN), Alessandro D'Elia (INFN Laboratori Nazionali di Frascati), Claudio Gatti (INFN Laboratori Nazionali di Frascati), Giorgio Brida (Istituto Nazionale di Ricerca Metrologica (INRiM)), Emanuele Enrico (Istituto Nazionale di Ricerca Metrologica (INRiM)), Luca Fasolo (Istituto Nazionale di Ricerca Metrologica (INRiM)), Mikhail Fistul (Ruhr University Bochum), Ilya Eremin (Ruhr University Bochum), Patrick Navez (Université de Montpellier), Alexandre Zagoskin (Loughborough University), Paolo Silvestrini (Università degli Studi della Campania "L. Vanvitelli"), Jacopo Settino (Università della Calabria), Francesco Romeo (Università degli Studi di Salerno), Berardo Ruggiero (CNR ISASI) and Mikhail Lisitskiy (CNR SPIN)	Collective Nonlinear Dynamics and Topology Effects in Superconducting Qubit Networks
51 short oral	Augusto Nascetti (Sapienza University of Rome), Nicola Lovecchio (Sapienza University of Rome), Parsa Abbasrezaee (Sapienza University of Rome), Thiago Baratto de Albuquerque (Sapienza University of Rome), Lorenzo Nardi (Sapienza University of Rome), Giulia Petrucci (Sapienza University of Rome), Sahithi Sriramoju (Sapienza University of Rome), Siva Sankaram Emani (Sapienza University of Rome), Vahid Omrani (Sapienza University of Rome), Zahra Mazidi (Sapienza University of Rome), Domenico Caputo (Sapienza University of Rome), Giampiero de Cesare (Sapienza University of Rome), Donato Calabria (Alma Mater Studiorum - University of Bologna), Martina Zangheri (Alma Mater Studiorum - University of Bologna), Elisabetta Marrucci (Kayser Italia S.r.l.), Carlo del Vecchio Blanco (Kayser Italia S.r.l.) and Mara Mirasoli (Alma Mater Studiorum - University of Bologna)	From Lab Bench to Orbit: A Lab-on-Chip Experiment on the International Space Station
64 short oral	Giuseppe Coviello (Politecnico di Bari), Cristina Roselli (Politecnico di Bari), Antonello Florio (Politecnico di Bari), Giuseppe Brunetti (Politecnico di Bari), Damiano Cosma Potenza (Politecnico di Bari) and Caterina Ciminelli (Politecnico di Bari)	Real-Time Slip Detection in a Commercial Prosthetic Hand Using Low-Cost Multimodal Sensing