



Smart Antenna System for Electronic Toll Collection with Vehicle Localization and Tracking using End Users' Smartphones with BLE

(*Jose-Luis Gómez-Tornero, Alejandro Raban Parra, Víctor Cavero-Herranz, Alejandro Gil Martinez, David Cañete Rebenaque, Javier Rojo-Fernandez*)

Design of a Low-Cost Wireless Communication System for Driving Precision Agriculture Through RTK Integration

(*Francesco P. Chietera, Pierluigi Rossi, Leonardo Assettati, Leonardo Vita, Davide Gattamelata, Daniele Puri, Danilo Monarca, Luca Catarinucci*)

HerMeS: A New Approach to Enjoy Tangible and Intangible Point of Interests of Culture Heritage

(*Alberto Bucciero, Alessandra Chirivì, Chiara Florise Amadei, Mohamed Ali Jaziri, Irene Muci, B Luigi Nuzzo, Andrea Pandurino*)

H2IOSC Project: The Italian Federated Cluster for IoT-based Monitoring and Digital Twinning of Cultural Heritage

(*Alberto Bucciero, Alessandra Chirivì, Riccardo Colella, Mohamed Emara, Matteo Greco, Daniela M Palamà, Andrea Pandurino, Francesco Taurino, Davide Zecca*)

Towards Sensorized Glasses: a Smart Wearable System for Head Movement Monitoring

(*Igor Bisio, Chiara Garibotto, Mehrnaz Hamedani, Fabio Lavagetto, Angelo Schenone, Andrea Sciarrone, Muhammad Shahid*)

An Innovative Monitoring System based on UAV and Unmanned Surface Vessel

(*Valeria Vergine, Fabrizio Benvenuto, Sergio De Giuseppe, Marco Spedicato, Alessandro Largo*)

Development of an IoT-Based Real-Time Psychrometric Data Acquisition and Visualization System

(*Milovan Medojevic, Dušan Simić, Milana Medojevic*)

3D Printed Digital Materials for Antenna Applications

(*Anil Bastola, Aakash Bansal, Chris Tuck, William Whittow*)

A Millimeter-wave H-plane Printed-Horn Antenna with Multi-layered Substrate

(*Hafiz Usman Tahseen, Luciano Mescia, Luca Catarinucci*)

A miniaturized ECG system based on a versatile single chip sensor interface

(*Andrea Ria, Simone Contardi, Massimo Piotto, Paolo Bruschi*)

A Model for Performance Evaluation of Low-Frequency 3D-Printed Electronic filters

(*Paolo Esposito, Gianluca Barile, Vincenzo Stornelli, Giuseppe Ferri*)

A Platform-Tolerant RFID Tag Designed on an AMC Supporting Structure

(*Giovanni Andrea Casula, Giorgio Montisci, Giacomo Muntoni, Paolo Maxia*)

A Prototype of an RFID-Based Command Sleeve With Changeable Microcircuits

(*Tiina Vuohijoki, Sari Merilampi, Tiina Ihalainen, Johanna Virkki*)

Adaptive Beamsteering Architecture based on AoA Estimation with Phase Shift on LO-Path for 5G NR

(*Antonello Florio, Giuseppe Coviello, Claudio Talarico, Gianfranco Avitabile*)

AI-Based Methodologies for Next-Generation Biomedical Imaging: Recent Advances and Future Trends

(*Marco Salucci, Samantha Lusa, Lorenzo Poli, Alessandro Polo, Luca Tosi, Andrea Massa*)

Autonomous probe for underwater karstic topology reconstruction

(*Nicolas Troesch, Arnaud Vena, Séverin Pistre, Philippe Combette*)

Backscatter-based wireless sensing system for multi-channel complex impedance measurements

(*Arnaud Vena, Jean Podlecki, Brice Sorli*)

Characterization of A Monopulse Antenna Made of Substrate-Integrated-Waveguide Structure

(*Achmad Munir, Dwi Andi Nurmantris, Muhammad Farhan Maulana, Ebin Novendra*)

Circuit Model of NFC-Powered Systems for Monitoring Cracks in Built Cultural Heritage

(*Mohamed Emara, Riccardo Colella, Alberto Bucciero, Luca Catarinucci, Giuseppe Grassi*)

Decision Support for Resilient Emergency Response through IoT-driven Environmental Monitoring

(*Alessandro Polo, Paolo Rocca, Marco Salucci, Giorgio Gottardi, Andrea Massa*)

Deriving Sea Surface Currents from Satellite Measurements

(*Ljiljana Šerić, Ivana Barišin, Antonia Ivanda, Maja Braović, Damir Krstinić, Selena Knežić Buhovac, Hrvoje Mihanović*)

Design and development of a fully wireless board enabling multiple electrochemical sensors operation and readout for salivary diagnostics applications

(*Riccardo Goldoni, Filippo Goldoni, Andrea Ria, Gianluca M. Tartaglia, Lucanos Strambini*)

Design of an RFID-Based Wireless Programmable Smart-Shield for Implantable Medical Devices

(*Francesco Lestini, Alessio Marino, Gaetano Marrocco, Cecilia Occhiuzzi*)

Digital Twin of Retail Stores with RFID Tags Localization

(*Junwei Ma, Xiangyu Wang, Caleb Powell, Jian Zhang, Shiwen Mao, Senthilkumar Periaswamy, Justin Patton*)

Enhancing Ku Band Antenna Performance Through Supershaped Design Elements

(*Domenico Caggiano, Angela Ferraris, Claudio Maria Lamacchia, Gaetano Chimenti, Luciano Mescia*)

Estimating Bathing Water Quality from Meteorological Measurements

(*Jelena Culic Gambiroza, Ivana Nizetic Kosovic, Marin Ordulj, Slaven Jozić, Nikolina Baumgartner, Ana Vrdoljak Tomaš*)

Experimental Evaluation of RFID-based Thermal Monitoring Sheet (R-TMS) for Superficial Hyperthermia Treatment

(*Francesco Lestini, Alessandro Di Carlo Felice, Piero Tognolatti, Gaetano Marrocco, Cecilia Occhiuzzi*)

Integrating Environmental Monitoring and Structural Health: A IoT-based and Mobile-Oriented Decision Support System for Early Alerting

(*Alessandro Polo, Paolo Rocca, Marco Salucci, Maria Rosaria Gallipoli, Angela Perrone, Vincenzo Serlenga, Andrea Massa*)

Localization of Personnel in Industrial Environments Using Passive RFID Tags

(*Massimo Scarsella, Mattia Ragnoli, Marianna Rotilio, Federica Cucchiella, Giuseppe Ferri, Vincenzo Stornelli*)

Low-cost antenna integrated within flexible solar panels for IoT sensor nodes

(*Marco Simone, Olga Basile, Alessandro Polo, Antonio Iacchetti, Roberto La Rosa, Santi Concetto Pavone, Gino Sorbello, Mohammad Abdul Hannan, Marco Salucci*)

New project for a surface penetrating radar

(*Alberto Bucciero, Riccardo Colella, Lara De Giorgi, Dora Francesca Barbolla, Giuseppe Cannazza, Chiara Torre, Giovanni Leucci*)

Obstacle-avoidance through RFID Near-Field detectors for Robot-based Localization and Sensing Systems

(*Glauco Cecchi, Andrea Motroni, Andrea Ria, Paolo Nepa*)

Optically Transparent Ultra-High Frequency (UHF) RFID Tag Antennas

(*Aakash Bansal, William Whittow*)

RFID-Based Temperature Integrity Seal For "Cold Chain" Monitoring

(*Giovanni Andrea Casula, Giuseppe Sforazzini, Piero Cosseddu, Giorgio Montisci, Giacomo Muntoni*)

SENSIBUS: a Novel One Wire Protocol for Smart Sensors

(*Michele Vitelli, Leonardo Balocchi, Mario Molinara, Stefania Bonafoni, Luca Roselli, Simone Contardi, Iacopo Nannipieri*)

Towards Everyday Physiological Monitoring: A Sock Prototype for Electrodermal Activity Measurements

(*S M Musfequr Rahman, Henna Mattila, Lotta Eerola, Annika Maenpaa, Terhi Helminen, Pasi Raumonen, Anneli Kylliainen, Johanna Virkki*)

Utilization of PIN Diode for Polarization Reconfigurability of 3D Printed RFID Antenna

(*Elmi Cahyaningsih, Trasma Yunita, Sulistyaning Sulistyaningsih, Achmad Munir*)

Wearable Waveguide Antennas

(*Davor Bonefačić, Davorin Mikulic, Juraj Bartolić, Zvonimir Sipus*)

Wideband OFDM Backscatter with Limited-Bandwidth Antennas for WiFi-6 and Future High-Data-Rate Backscatter Systems

(*James Rosenthal, Matthew Reynolds*)

A smart IoT system for real-time monitoring of indoor and outdoor air quality using low-cost sensors

(*Ainhoa Osa-Sánchez, Begoña García Zapirain*)

Development of an IoT-Based Real-Time Psychrometric Data Acquisition and Visualization System

(*Milovan Medojević, Dušan Simić, Milana Medojević*)

IoT – The Value Stream 4.0 model for SCM

(*Hubertus Cornelius Franke*)

Static and Dynamic Fingerprint of RFID devices

(*Francesca Nanni, Gaetano Marrocco*)

Taxonomy and Statistics of Cyber and Physical Vulnerabilities in Medical Devices

(*Francesca Nanni, Francesco Lestini, Gaetano Marrocco*)

Design and Experimental Measurement of RF Power Splitter Based on Cohn Topology

(*Sarah Rahayu, Zulfi Zulfi, Rheyuniarto Sahlendar Asthan, Achmad Munir*)



Development of Semi-Conformal Antennas for Telemetry and GPS Applications on Experimental Rocket
(Rezki Benedikto Renwarin, Agus D. Prasetyo, Anita Pascawati, Achmad Munir)

LiDAR on a Budget: Driving Global Safety Innovations Across Developing Countries
(Mohsin Khalil, Kazam Abbas, Ala'a Khalaf Al-Horman)

Electromagnetic field-induced electrotaxis as a mechanism for reducing the neuroanatomical gap in cochlear implants
(Boris Delipetar, Tina Borić, Jelena Žarković, Viktorija Radotić, Ana Bedalov, Damir Kovačić)

SonicVision: Navigating Object Counting Frontiers with Ultrasonic Economy
(Mohsin Khalil, Kazam Abbas, Muhammad Saad Ikram, Adnan Shah)