

Frequency Comb Generation in a Continuous-Wave Pumped Second-Order Nonlinear Waveguide Resonator

Adaptive multiresolution method for MAP reconstruction in electron tomography

Multifrequency Pulsar Image Classification Using Dual-Band 1D Convolutional Neural Networks

Headband Antenna for Wireless Power Transfer to Millimeter-Sized Neural Implants with Minimal Misalignment Effects

Methods for simultaneous robot-world-hand-eye calibration
A comparative study

Sensor Fusion for Unobtrusive Respiratory Rate Estimation in Dogs

Impact of Different Concrete Types on Radio Propagation
Fundamentals and Practical RF Measurements

Routing light with nematicons
Light localization and steering in liquid crystals

Rapid and sensitive detection of norovirus antibodies in human serum with a bilayer interferometry biosensor

Coupled dictionaries for exemplar-based speech enhancement and automatic speech recognition

Blind Separation of Audio Mixtures Through Nonnegative Tensor Factorization of Modulation Spectrograms

Advancements in Solution Processable Devices using Metal Oxides For Printed Internet-of-Things Objects

Secure environmental monitoring for industrial internet of things
From framework to live implementation

Restoration of low-dose digital breast tomosynthesis

Theory of near-IR metatronic nanocircuits using transparent conducting oxides (TCO)

Observation of defect formation in metamaterials

Directional selectivity through the subwavelength slit in metallic gratings

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Measurement of the refractive index dispersion of As_2Se_3 bulk glass and thin films prior to and after laser irradiation and annealing using prism coupling in the near- and mid-infrared spectral range

Fabrication and reliability evaluation of passive UHF RFID T-shirts

Passive Moisture Sensor Based on Conductive and Water-Soluble Yarns

RFID-based sensors for zero-power autonomous wireless sensor networks

Chipless graphene tag and dual-CP reader for Internet of Things

The variation of air and surface temperatures in London within a 1km grid using vehicle-transect and ASTER data

Binary Non-Negative Matrix Deconvolution for Audio Dictionary Learning

Towards Asteroid Tomography
Modellings and Measurements Using an Analogue Model

Evaluating transparent liquid screen overlay as a haptic conductor
Method of enhancing touchscreen based user interaction by a transparent deformable liquid screen overlay

In-flightwind field identification and prediction of parafoil systems

Dilute nitride SOAs for high-speed data processing in variable temperature conditions

Humidity passive sensors based on UHF RFID using cork dielectric slabs

RFID-Based Wireless Passive Sensors Utilizing Cork Materials

Polarization control of the bound state of a vector soliton

Tuning plasmon induced reflectance with hybrid metasurfaces

Passive RFID-based Textile Touchpad

ClothFace
A Batteryless RFID-Based Textile Platform for Handwriting Recognition

Developing curiosity and multimedia skills with programming experiments

Third order nonlinear optical response of TTF-based molecular corners

Multimode waveguides in nematic liquid crystals

Spatial solitons carrying phase singularities in nematic liquid crystals

Today is the future of yesterday; What is the future of today?

The educators' telescope to the future of technology

A novel technique for analysis of postural information with wearable devices

Incorporating Aircraft Kinematics and Radar Cross Section into the Performance Prediction of Air Surveillance

Double-side pumped membrane external-cavity surface-emitting laser (MECSEL) with increased efficiency emitting > 3 W in the 780 nm region

Bioimpedance Sensor Array for Long-Term Monitoring of Wound Healing from Beneath the Primary Dressings and Controlled Formation of H₂O₂ Using Low-Intensity Direct Current

Alpha radiation-induced luminescence by am-241 in aqueous nitric acid solution

Electromagnetism and cross-disciplinary problems

Strain Reliability of Embroidered Passive UHF RFID Tags on 3D-printed Substrates

Automatic detection of water inside concrete slabs using ground penetrating radar

Protective Coating Methods for Glove-Integrated RFID Tags - A Preliminary Study

Low-cost inkjet-printed fully passive RFID tags for calibration-free capacitive/haptic sensor applications

Screen-printed curvature sensors for soft robots

Adaptive and nonlinear control of discharge pressure for variable displacement axial piston pumps

Frequency domain penetration loss in the terahertz band

Gas-phase endstation of electron, ion and coincidence spectroscopies for diluted samples at the FinEstBeAMS beamline of the MAX IV 1.5 GeV storage ring

Optimization of RFID-Based Tunnel Access Monitoring System Antenna Reading Areas

Amplifier similariton laser with extra-broad bandwidth output pulse

Improved Session Continuity in 5G NR with Joint Use of Multi-Connectivity and Guard Bandwidth

Circularly Polarized Textile Tag Antenna for Wearable Passive UHF RFID Systems

Circularly Polarized Corner-Truncated and Slotted Microstrip Patch Antenna on Textile Substrate for Wearable Passive UHF RFID Tags

Single KTiOPO₄ nanocrystals for nonlinear probing of local optical fields and interaction with a metallic nanostructure

Error analysis of NOMA-based user cooperation with SWIPT

Open data based value networks
Finnish examples of public events and agriculture

Comparison of Human Head Phantoms with Different Complexities for Implantable Antenna Development

Role-based visualization of industrial IoT-based systems

Fluid Transmission Line Modeling Using a Variational Method

Inertial Sensor-Based State Estimation of Flexible Links Subject to Bending and Torsion

Improving reliability for classification of metallic objects using a WTMD portal

Development of Low Cost, Wireless, Inkjet Printed Microfluidic RF Systems and Devices for Sensing or Tunable Electronics

Circularly polarized shorted ring slot rectenna with a mesh design for optimized inkjet printing on paper substrate

Structural characterization, spectroscopic, thermal, AC conductivity and dielectric properties and antimicrobial studies of $(C_8H_{12}N)_2[SnCl_6]$

An activity recognition framework deploying the random forest classifier and a single optical heart rate monitoring and triaxial accelerometer wrist-band

Metrics for polyphonic sound event detection

Detection and Classification of Acoustic Scenes and Events
Outcome of the DCASE 2016 Challenge

Position Estimation for Drones based on Visual SLAM and IMU in GPS-denied Environment

Texture region detection by trained neural network

Separation of Moving Sound Sources Using Multichannel NMF and Acoustic Tracking

High power fiber lasers

Secure and connected wearable intelligence for content delivery at a mass event
A case study

Positioning information privacy in intelligent transportation systems
An overview and future perspective

Environmental monitoring with distributed mesh networks
An overview and practical implementation perspective for urban scenario

Highly directive radiation and negative refraction using photonic crystals

High performance corrosion resistant coatings by novel coaxial cold- and hot-wire laser cladding methods

Third harmonic generation enhancement in nematic liquid crystals via nonlocal solitons propagation

Measurements of Reflection and Penetration Losses in Low Terahertz Band Vehicular Communications

Light beam hysteresis in liquid crystals

Spatial solitons in a self-focusing medium with tunable nonlinearity

Dark solitons in nematic liquid crystals

Nematicon routing in liquid crystal light valve

Soliton self-deflection via power-dependent walk-off

Automatic numerical differentiation by maximum likelihood estimation of a linear Gaussian state space model

Methods for long-term GNSS clock offset prediction

Acquiring respiration rate from photoplethysmographic signal by recursive bayesian tracking of intrinsic modes in time-frequency spectra

Charge Storage Level Sensor RFID Tag
Impedance Matching and Experimental Characterisation

Composite nonlinear feedback control of a JIB trolley of a tower crane behaviors

Measurement of sensitivity distribution map of a ferroelectret polymer film

Designing, Manufacturing and Testing of a Piezoelectric Polymer Film In-Sole Sensor for Plantar Pressure Distribution Measurements

Monitoring pH, temperature and humidity in long-term stem cell culture in CO₂ incubator

User Positioning in mmW 5G Networks Using Beam-RSRP Measurements and Kalman Filtering

Introduction to the Special Section on Sound Scene and Event Analysis

M2M Communication Assessment in Energy-Harvesting and Wake-Up Radio Assisted Scenarios Using Practical Components

On prediction of DCT-based denoising efficiency under spatially correlated noise conditions

A Framework for Using Radar Measurements of Unknown Targets in Hierarchical Classification

High-Q resonance train in a plasmonic metasurface

Optical Frequency Comb Photoacoustic Spectroscopy

Passive resonance sensor based method for monitoring particle suspensions

Non-destructive and wireless monitoring of biodegradable polymers

Optimal emission enhancement in orthogonal double-pulse laser-induced breakdown spectroscopy

Piezoresistive natural rubber-multiwall carbon nanotube nanocomposite for sensor applications

Path Loss Characterization for Intra-Vehicle Wearable Deployments at 60 GHz

Spectral object recognition in hyperspectral holography with complex-domain denoising

Ambient rf energy harvesting sensor device with capacitor-leakage-aware duty cycle control

Round Robin computer simulation of ejection probability in sputtering

Inertial Odometry on Handheld Smartphones

Detection of KC1 and KOH using collinear photofragmentation and atomic absorption spectroscopy

Inkjet-printed dual microfluidic-based sensor integrated system

Low-cost microfluidics-enabled tunable loop antenna using inkjet-printing technologies

Fusionsense

Emotion classification using feature fusion of multimodal data and deep learning in a brain-inspired spiking neural network

Real-time and Robust Collaborative Robot Motion Control with Microsoft Kinect ® v2

5G new radio evolution towards sub-THz communications

Design and development of a novel passive wireless ultrasensitive RF temperature transducer for remote sensing

Statistical evaluation of barkhausen noise testing (BNT) for ground samples

160W single-frequency laser based on active tapered double-clad fiber amplifier

Development of a constant dilution sampling system for particulate and gaseous pollutant measurements

New Evidence for the Mechanism of Action of a Type-2 Diabetes Drug Using a Magnetic Bead-Based Automated Biosensing Platform

Exploiting the Momentary Dependence of Radar Observations for Non-Cooperative Target Recognition

Fluorimetric oxygen sensor with an efficient optical read-out for in vitro cell models

Ranges and stopping power of KeV electrons in the solid hydrogens

Molecular dynamics simulation of the damage production in Al (110) surface with slow argon ions

Self-assembled monolayers (SAMs) of porphyrin deposited inside solid-core photonic crystal fibre (SCPCF)

Joint-Space Kinematic Model for Gravity-Referenced Joint Angle Estimation of Heavy-Duty Manipulators

Cysteine-tagged chimeric avidin forms high binding capacity layers directly on gold

Detection of 3,4-methylenedioxymethamphetamine (MDMA, ecstasy) by displacement of antibodies

Microwave assisted laser-induced breakdown spectroscopy at ambient conditions

Sequential Collinear Photofragmentation and Atomic Absorption Spectroscopy for Online Laser Monitoring of Triatomic Metal Species

Evaluation of dry electrodes in canine heart rate monitoring

Inkjet printed, self powered, wireless sensors for environmental, gas, and authentication-based sensing

Location-based beamforming architecture for efficient farming applications with drones

Sensitivity modeling of an RFID-based strain-sensing antenna with dielectric constant change

Energy Detection-Based Spectrum Sensing over Fisher-Snedecor F Fading Channels

Noncontact Respiration Monitoring during Sleep with Microwave Doppler Radar