

## URSI Radio Science Letters Index for volume 2 (2020)

Takashi Hikage, Suzune Ito, and Atsuki Ohtsuka

["Novel Interference Voltage Measurement for Beam-Type Wireless Power Transfer Using an Electro-Optical Converter for EMI Assessment of Active Implantable Medical Devices"](#)

DOI: 10.46620/20-0039

Fabio Paonessa, Lorenzo Ciorba, Giuseppe Virone, Pietro Bolli, Alessio Magro, Andrew McPhail, Dave Minchin, and Raunaq Bhushan

["SKA-Low Prototypes Deployed in Australia: Synoptic of the UAV-Based Experimental Results"](#)

DOI: 10.46620/20-0021

Seigo Ohno, Yu Tokizane, Jun-ichi Shikata, and Hiroaki Minamide

["Phase and Direction Control of a Terahertz Wave Propagating in a Waveguide Coupled With a Bull's-Eye Structure"](#)

DOI: 10.46620/20-0030

Alexandre Alvares Pimenta

["Propagation of Nighttime Medium-Scale Traveling Ionospheric Disturbances \(MSTIDs\) During High and Low Solar-Activity Conditions"](#)

DOI: 10.46620/20-0015

Apostolos Z. Papafragkakis and Athanasios D. Panagopoulos

["Site- and Time-Diversity Experimental Statistics at Ka and Q Bands in Attica, Greece, Using Alphasat"](#)

DOI: 10.46620/20-0066

Xueqing Liu, Trond Ytterdal, and Michael Shur

["TeraFET Optimization for 0.1 THz to 10 THz Operation"](#)

DOI: 10.46620/20-0010

Alexander I-Chi Lai, Chung-Yuan Chen, and Ruey-Beei Wu

["A Mutual Information-Based Infrastructureless Radio Frequency Positioning System via Deep Learning"](#)

DOI: 10.46620/20-0024

Ben Minnaert, Giuseppina Monti, Alessandra Costanzo, and Mauro Mongiardo

["Power Maximization for a Multiport Network Described by the Admittance Matrix"](#)

DOI: 10.46620/20-0029

Giuseppina Monti, Mauro Mongiardo, Ben Minnaert, Alessandra Costanzo, and Luciano Tarricone

["Resonant Inductive WPT Link in MISO Configuration"](#)

DOI: 10.46620/20-0037





Paul La Plante, Peter K. G. Williams, and Joshua S. Dillon

["Developing a Real-Time Processing System for HERA"](#)

DOI: 10.46620/20-0041

Scott G. H. Kriel and Dirk I. L. de Villiers

["Mutual Coupling Effects Between Test and Reference Antennas in Near-Field Measurements"](#)

DOI: 10.46620/20-0025

Alessandro Fedeli, Claudio Estatico, Andrea Randazzo, and Matteo Pastorino

["Multifrequency Microwave Tomography in Lebesgue Spaces With Nonconstant Exponents"](#)

DOI: 10.46620/20-0032

Crystal T. Wu, Nuno M. Nobre, Emmanuel Fort, Graham D. Riley, and Fumie Costen

["Characteristics of Reversed Propagations Generated Using Time Reversal Mirrors and Instantaneous Time Mirrors in Electromagnetics"](#)

DOI: 10.46620/20-0042

Amedeo Capozzoli, Claudio Curcio, and Angelo Liseno

["Optimized NUFFTs for Interpolations in Back-Projection Algorithms"](#)

DOI: 10.46620/20-0031

Andrea Petricca, Christian Canestri, Cosmo Mitrano, Riccardo Ardoino, Walter Fuscaldo, and Alessandro Galli

["Statistical Analysis and Model Validation of a UWB Innovative Phased Array for M-AESA Applications"](#)

DOI: 10.46620/20-0033

Yue Wang and Qi Liu

["Parameter Configuration and Data Accuracy Analysis for Real-Time RFI Detection"](#)

DOI: 10.46620/20-0043

Ghulam Murtaza, Mazen Shanawani, Diego Masotti, and Alessandra Costanzo

["Design of a SWIPT System With Special Consideration of the Near-Field WPT in the 27 MHz Band"](#)

DOI: 10.46620/20-0044

Lakhima Chutia, Narendra Ojha, Imran A. Girach, Binita Pathak, Lokesh K. Sahu, and Pradip K. Bhuyan

["Seasonal Evolution of Sulfur Dioxide Over the Indian Subcontinent"](#)

DOI: 10.46620/20-0046

Jonas Tebart, Matthias Steeg, Florian Exner, Andreas Czylwik, and Andreas Stohr

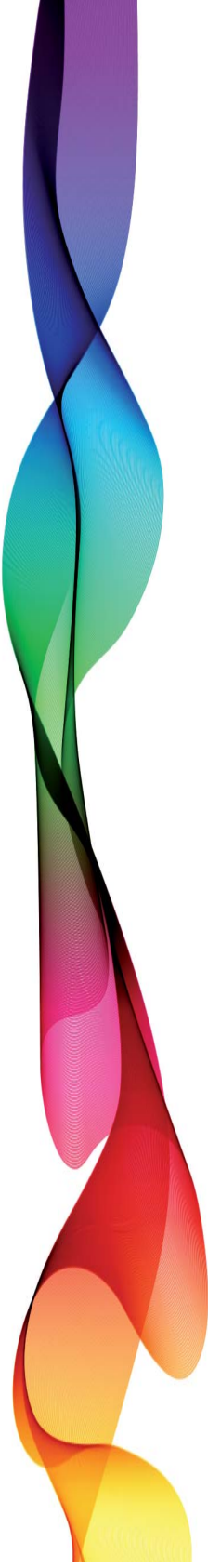
["Frequency-Scalable Coherent Radio-Over-Fiber Architecture for 100 Gbit/s Wireless Transmission"](#)

DOI: 10.46620/20-0059

R. Nebuloni, M. D'Amico, G. Cazzaniga, and C. De Michele

["On the Use of Minimum and Maximum Attenuation for Retrieving Rainfall Intensity Through Commercial Microwave Links"](#)

DOI: 10.46620/20-0062



Jingtian Xi, Corbett Rowell, Jose M. Fortes, Fereshteh Rouholahnejad, Benoit Derat, and Niels Kuster

["Optimization of SAM Head Phantom for Compact Antenna Test Ranges"](#)

DOI: 10.46620/20-0064

T. A. Siddiqui, P. Khanal, J. Holopainen, and V. Viikari

["Further Investigation of a Frequency-Reconfigurable Transponder on the Basis of a Mutually Coupled Antenna Cluster and Phased Modulators"](#)

DOI: 10.46620/20-0065

Mary R. Keller, Andrew C. Strikwerda, Joshua T. Cahill, Lauren M. Jozwiak, Brian C. Montgomery, Nelofar Mosavi, Michael E. Nord, Wes Patterson, Hermann Sequeira, Angela M. Stickle, and Dalibor J. Todorovski

["Stokes Reflectometer for Soil Moisture, Subterranean Voids, and Subsurface Ice"](#)

DOI: 10.46620/20-0045

Clezio M. Denardini, Giorgio A. S. Pican,co, Paulo F. Barbosa Neto, Paulo A. B. Nogueira, Carolina S. Carmo, Laysa C. A. Resende, Juliano Moro, Sony S. Chen, Esmeralda Romero-Hernandez, Regia P. Silva, and Cristiano M. Wrasse

["Ionospheric-Scale Index Map Based on TEC Data for South America"](#)

DOI: 10.46620/20-0005

Xueqing Liu, John Suarez, and Michael Shur

["TCAD Modeling for Si-Ge HBT THz Detectors"](#)

DOI: 10.46620/20-0009

Peter M. van den Berg and Jacob T. Fokkema

["New Insight in the Propagation of Wave Fronts in the Vicinity of a Refractive Object"](#)

DOI: 10.46620/20-0011

Adrian T. Sutinjo, Benjamin McKinley, Leonid Belostotski, Daniel C. X. Ung, and Jishnu Nambissan T.

["Design Equations for Closely Spaced Two-Element Interferometer for Radio Cosmology"](#)

DOI: 10.46620/20-0017

Peter Russer and Johannes A. Russer

["Josephson-Effect-Based Electronics"](#)

DOI: 10.46620/20-0060

Florin Hutu, Vincent Lechappé, Guillaume Villemaud, and Michael Di Loreto


["Study of Distributed Beamforming for Wireless Power Transfer in the Presence of RF Impairments"](#)

DOI: 10.46620/20-0040

Shuang Liu, Akihiro Kuwahata, and Masaki Sekino

["Design of a Multi-Locus Transcranial Magnetic Stimulation Coil With a Single Driver"](#)

DOI: 10.46620/20-0057



Imara Mohamed Nazar and Mustafa Aksoy

[“Radio Frequency Interference Detection in Microwave Radiometry Using Support Vector Machines”](#)

DOI: 10.46620/20-0034

Patrick Savelli, Vincent Savaux, Pauline Desnos, Ali Zeineddine, Matthieu Kanj, and Christophe Delacourt

[“Flexible Multi-Standard Digital Front End for LPWA Technologies”](#)

DOI: 10.46620/20-0007

Christophe Delacourt, Patrick Savelli, and Vincent Savaux

[“A Cloud RAN Architecture for LoRa”](#)

DOI: 10.46620/20-0008

Hanno Spreeuw, Sarod Yatawatta, Ben van Werkhoven, and Faruk Diblen

[“SAGECal Performance With Large Sky Models”](#)

DOI: 10.46620/20-0026

Elguja Archemashvili, Vakhtang Jandieri, Hiroshi Maeda, Kiyotoshi Yasumoto, Jaromir Pistora, and Daniel Erni

[“Numerical Analysis of Dielectric Post-Wall Waveguides and Band-Pass Filters”](#)

DOI: 10.46620/20-0027

M. Beccaria, A. Niccolai, A. Massaccesi, R. E. Zich, and P. Pirinoli

[“SNO-Based Design of Wide-Angle Beam-Scanning Reflectarrays”](#)

DOI: 10.46620/20-0047

Junchen Xue, Lin Quan, and Wenyao Zhu

[“The Spatial and Temporal Analysis of Hourly TECs Derived From Selected Representative Ionospheric Climatology Models”](#)

DOI: 10.46620/20-0006

Nat Gopalswamy, Sachiko Akiyama, Pertti Makela, and Seiji Yashiro

[“Diffuse Interplanetary Radio Emission: Shock Emission or a Type III Storm?”](#)

DOI: 10.46620/20-0049

Elizabeth George, Debarati Ganguly, Debdeep Sarkar, Chinmoy Saha, Jawad Siddiqui, and Yahia Antar

[“Time Domain Analysis of UWB Printed Monopole-Based Two-Port Systems for Characterization of On- to Off-Body Channels”](#)

DOI: 10.46620/20-0061

Amedeo Capozzoli, Claudio Curcio, and Angelo Liseno

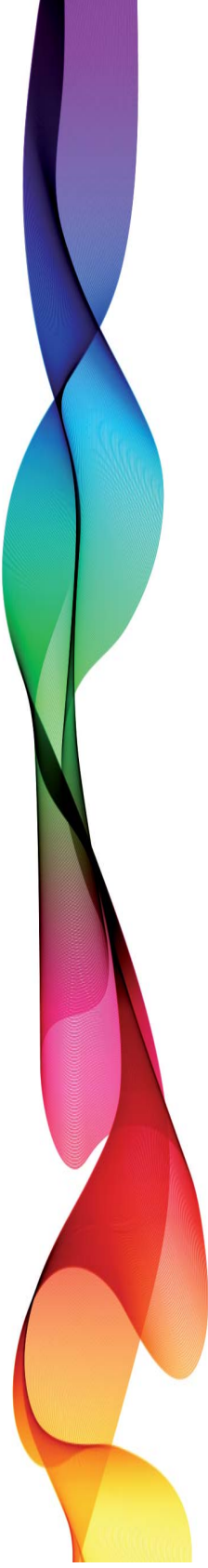
[“Optimized 2-D NUFTs for Spiral Scanning in MRI”](#)

DOI: 10.46620/20-0020

Baker B. Al-Bahri and Piergiorgio L. E. Uslenghi

[“Exact Scattering by Metal Structures With Strips and Right-Angle Wedges”](#)

DOI: 10.46620/20-0022



Alkmini Michaloglou and Nikolaos L. Tsitsas

["Particle Swarm Optimization of Layered Media Cloaking Performance"](#)

DOI: 10.46620/20-0016

Filippo Costa and Giuliano Manara

["Waveguide Leaky-Wave Antennas: Modal Configuration and Dispersion Properties"](#)

DOI: 10.46620/20-0013

E. Narita, Y. Shimizu, M. Matsunaga, N. Shinohara, and J. Miyakoshi

["Effects of Ultrahigh-Frequency Electromagnetic Field at 28 GHz on Micronucleus Formation in Human Cell Lines"](#)

DOI: 10.46620/20-0018

Luca Olmi and Pietro Bolli

["EM Simulations of Super-Resolution With the Active Surface of a Radio Telescope"](#)

DOI: 10.46620/20-0019

Regis Rousseau, Guillaume Villemaud, and Florin Hutu

["State-Space Model Representation to Characterize an Energy-Harvesting Circuit"](#)

DOI: 10.46620/20-0038

Daiya Nagata, Ryota Birukawa, Yu-ichi Hayashi, Takaaki Mizuki, and Hideaki Sone

["Design of Suitable Controlled Image for Evaluation of EM Information Leakage"](#)

DOI: 10.46620/20-0054