

INTERNATIONAL JOURNAL OF
MICROWAVE AND WIRELESS TECHNOLOGIES

CONTENTS

EDITORIAL

EuCAP 2020 special issue

S. Monni and M. Sierra Castaner 675

EuCAP 2020

Development of a millimeter-wave transparent antenna inside a headlamp for automotive radar application

Sofian Hamid, Dirk Heberling, Manuela Junghähnel, Thomas Preussner, Patrick Gretzki, Ludwig Pongratz, Christian Hördemann and Arnold Gillner 677

Experimental comparison of absorber and conductive floor automotive near field antenna measurement systems

F. Saccardi, F. Mioc, A. Scannavini, P. O. Iversen, J. Estrada, M. Edgerton, J. A. Graham and L. J. Foged 689

Directive mmWave radio channel modeling in a ship hull

Brecht De Beelde, Andrés Almarcha Lopéz, David Plets, Marwan Yusuf, Emmeric Tanghe and Wout Joseph 701

Cost-effective millimeter-wave measurement setup for narrowband path loss and angle-of-arrival measurements: uncertainty analysis and specular building reflection measurements

R. Schulpen, L. A. Bronckers, A. B. Smolders and U. Johannsen 713

Telemetry antennas withstanding very high accelerations and centrifugal forces

Loïc Bernard, Hrvoje Covic, Andreas Zeiner and Armin Schneider 723

Determining the nominal body contour image using wideband millimeter-wave radar for characterizing person-worn threats

Mohammad M. Tajdini and Carey M. Rappaport 732

RADAR

Fast sparse image reconstruction method in through-the-wall radars using limited memory Broyden-Fletcher-Goldfarb-Shanno algorithm

Candida Mwisomba, Abdi T. Abdalla, Idrissa Amour, Florian Mkemwa and Baraka Maiseli 739

EM FIELD THEORY

Rain fade margin of terrestrial line-of-sight (LOS) links for 5G networks in Peninsular Malaysia

Shi Jie Seah, Siat Ling Jong, Hong Yin Lam and Jafri Din 750

Numerical simulation of characteristics of propagation of symmetric waves in microwave circular shielded waveguide with a radially inhomogeneous dielectric filling

I.J. Islamov, E.Z. Hunbataliyev and A.E. Zulfugarli 761

ANTENNA DESIGN, MODELLING AND MEASUREMENTS

Time-modulated linear array synthesis with optimal time schemes for the simultaneous suppression of sidelobe and sidebands

Avishek Chakraborty, Gopi Ram and Durbadal Mandal 768

Investigations on a circular UWB antenna with Archimedean spiral slot for WLAN/Wi-MAX and satellite X-band filtering feature

Arnab De, Bappaditya Roy, Ankan Bhattacharya and A. K. Bhattacharjee 781

Superstrate-based patch antenna array with reduced in-band radar cross section

S. K. Vyshnavi Das, Avinash Singh, Arti A. Gurap and Hema Singh 790

In-band RCS reduction antennas using an EBG surface

Manivara Kumar Parsha, Arnab Nandi and Banani Basu 803