# **Smart SysTech 2018**

# European Conference on Smart Objects, Systems and Technologies

June 12 to June 13, 2018

Fraunhofer Institute for Photonic Microsystems (Fraunhofer IPMS), Dresden, Germany

## **Program**

#### SHM of Concrete Bridge Structures using Wireless Sensor Networks

S.H. Ali, National University of Sciences & Technology, Islamabad, Pakistan

#### Wireless Sensors for Industry 4.0 – Wireless Communication and Wireless Powering

H.C. Müller, Fraunhofer IMS, Duisburg, Germany

#### Smart Grid Data Classification with Deep Networks

Ö. Özdemir, Pázmány Péter Catholic University, Budapest, Hungary

#### LoRaWAN for IoT Applications in Air Cargo

O. Poenicke, Fraunhofer IFF, Magdeburg, Germany

### HF RFID Card Optimization Regarding the IC's Non-Linearity

S. Rizkalla, TU Wien, Austria

# Read Rate Optimization of an RFID Tunnel Gate by Using the Concept of an Electromagnetic Reverberation Chamber With Different Q Factors

S. Schwarz, Fraunhofer IFF, Magdeburg, Germany

#### Realization and Measurements of a Novel Dual Frequency Circulator for POW-RFID

P. Kuhn, Fraunhofer IMS, Duisburg, Germany

#### A Channel Sounding System for Highly Interfered License-Exempt Frequency Bands

J. Robert, FAU Erlangen-Nürnberg, Erlangen, Germany

#### Analog Frontend for Ultra Low Power 60-GHz RFID Tag for Back-Scattering Communication

A. Harutyunyan, Fraunhofer IPMS, Dresden, Germany

# A comparison of several ASK modulator techniques for SHF Reader implementation

E.E. Bektas, Fraunhofer IMS, Duisburg, Germany

#### Machine Learning Based Indoor Localisation Using Environmental Data in PhyNetLab Warehouse

M. Masoudinejad, TU Dortmund, Dortmund, Germany

## Smart Self-Sufficient Wireless Current Sensor

A. Hennig, Fraunhofer IMS Duisburg, Germany

#### A GUI-based Platform for Quickly Prototyping Server-side IoT Applications

T. Nepomuceno, Fraunhofer SCS, Germany

#### Blockchain Cloud Manufacturing: Shop Floor and Machine Level

A. Vatankhah Barenji, Guangdong University of Technology, Guangzhou, China

# **Poster**

# SHF RFID Reader Architecture & SHF RFID Reader Antenna Design Abstract

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