

ALLSENSORS 2022

The Seventh International Conference on Advances in Sensors, Actuators,
Metering and Sensing

June 26th – 30th, 2022

Porto, Portugal

ALLSENSORS 2022 Editors

Matteo Tonezzer, CNR-IMEM, Trento, Italy

Almudena Rivadeneyra, Universidad de Granada, Spain

Printed from e-media with permission by:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2022) by International Academy, Research, and Industry Association (IARIA) Please refer to the Copyright Information page.

Printed with permission by Curran Associates, Inc. (2023)

International Academy, Research, and Industry Association (IARIA) 412 Derby Way Wilmington, DE 19810

Phone: (408) 893-6407 Fax: (408) 527-6351

petre@iaria.org

Additional copies of this publication are available from:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571 USA Phone: 845-758-0400

Fax: 845-758-2633

Email: curran@proceedings.com Web: www.proceedings.com

Table of Contents

Using Machine Learning to Perform Force Calibration of Soft Triaxial Magnetic Sensors and Identify the Temperature of grasped objects Yao-Wei Tian and Jung-Tang Huang	1
Indoor Guidance Services through Visible Light Communication Manuela Vieira, Manuel Augusto Vieira, Paula Louro, Alessandro Fantoni, and Pedro Vieira	7
Parameter Optimization for BLE Mesh Sensor Networks Using an MQTT Gateway Philipp Bolte and Ulf Witkowski	13
Visible Light Communication in Vehicular Communication Applications Manuel Vieira, Manuela Vieira, Paula Louro, and Pedro Vieira	19
VLC Footprint Maps for Positioning and Guidance Paula Louro, Manuela Vieira, and Manuel Augusto Vieira	25
Development of a Lung Cancer Diagnosis Support System Nelson Faria, Vitor Carvalho, and Sofia Campelos	30