Vol. 31 No. 9(1) 2019

Preface

## Sensors and Materials

### **CONTENTS**

# SPECIAL ISSUE ON SELECTED PAPERS FROM AUTO2018 AND IS3C2018 (1) GUEST EDITOR: HSIUNG-CHENG LIN (NATIONAL CHIN-YI UNIVERSITY OF TECHNOLOGY)

| AUTO2018  |
|---|
| Research Paper of Special Issue (Sensor Applications)  Development of a Desktop Universal Testing Machine with a Full-field Optical Extensometer (S & M 1964)  Wei-chen Lee and Frank Laufer  |
| Research Paper of Special Issue (Sensor Applications)  Acoustic Emission Monitoring System for Hard Polishing of Sapphire Wafer (S & M 1965)  Chun-Wei Liu, Hong-Chang Chen, and Shih-Chieh Lin   |
| Research Paper of Special Issue (Sensor Applications) Improvement of Energy Efficiency in Wireless Sensor Networks Using Low-energy Adaptive Clusterin Hierarchy (LEACH)-based Energy Betweenness Model (S & M 1966) Yu-Fan Feng, Shu-Guang Pan, Zhi-Yong Huang, and Hsiung-Cheng Lin |
| IS3C2018  |
| Research Paper of Special Issue (Sensor Applications)  Development of Remote Sensing Data Collection and Management Platform via Internet (S & M 1967)  Chun-Kuan Wu and Hsiung-Cheng Lin   |
| Research Paper of Special Issue (Sensor Applications) 3D Reconstruction of Underground Tunnel Using Depth-camera-based Inspection Robot (S & M 1968) Ningbo Jing, Xianmin Ma, Wei Guo, and Mei Wang   |
| Research Paper of Special Issue (Sensor Applications) Using a Type-2 Neural Fuzzy Controller for Navigation Control of Evolutionary Robots (S & M 1969) Cheng-Jian Lin, Jyun-Yu Jhang, and Kuu-Young Young  |
| Research Paper of Special Issue (Sensor Applications)  Development of High-accuracy Multi-degrees-of-freedom Indoor Ultrasonic Positioning Approach for Automated Guided Vehicles (S & M 1970)  Yan Zhang, Hsiung-Cheng Lin, Jiang Zhao, Zewen Ma, Shuangliang Zhang, and Hao Liu     |
| Letter of Special Issue (Sensor Applications)  High-performance Two-stage Face Recognition Algorithm for Reduced Illumination Effect (S & M 1971  Cheng-Yu Yeh, Chien-Fu Chen, and Chun-Cheng Lin   |
| D4  |

### SPECIAL ISSUE ON SELECTED PAPERS FROM AUTO2018 AND IS3C2018 (1)

#### **PREFACE**



The papers of this special issue were recommended from The Fourth International Symposium on Computer, Consumer and Control (6–8 December 2018, technically co-sponsored by the IEEE Computer Society, IS3C2018) and The 15th International Conference on Automation Technology (6–8 December 2018, sponsored by the Chinese Institute of Automation Engineers, AUTO2018). After extensive reviews, these papers

highlight their good quality and suitability for publication in *Sensors and Materials*. There are three major topics focused on: (1) measurement using sensors, (2) development of wireless sensor networks, and (3) sensor applications in different areas. Many valuable solutions covering both theory and applications in sensors and materials disciplines have been presented.

As a guest editor, I would like to congratulate all the authors for their outstanding research outcomes and thank them for their excellent contributions. I am also grateful to Ms. Misako Sakano for her efforts on the publication of this special issue.

Hsiung-Cheng Lin
Professor, Department of Electronic Engineering
National Chin-Yi University of Technology
Taiwan