

## Table of Contents

A Management Strategy for Centralized Wireless Sensor Networks Applied to Small and Medium Sized Manufacturing Enterprises <i>Pedro R. Chaves, Omar C. Branquinho, and Fabiano Fruett</i>	1
Robust Network Models for using Mobility Parameters for Health Assessment <i>Abhilash Patolla, Ik-Hyun Youn, and Hesham Ali</i>	8
Simulating Collaborative Sensor Calibration: Convergence and Cost <i>Leo Le Taro and Herve Rivano</i>	14
An Electromyography Signal Conditioning Circuit Simulation Experience <i>Jorge R. B. Garay, Arshpreet Singh, Moacyr Martucci, Hugo D. H. Herrera, Gustavo M. Calixto, Stelvio I. Barbosa, and Sergio T. Kofuji</i>	19
FTRP: A Fault Tolerant Reliable Protocol for Wireless Sensor Networks <i>Islam Moursy, Mohamed ElDerini, and Magdy Ahmed</i>	24
An Effective Voronoi-based Coverage Enhancing Algorithm in Directional Sensor Networks <i>Cheng-Yen Chung, Hao-Wei Chen, and Chiu-Kuo Liang</i>	31
Multi-hop Protocol to Extend Signal Coverage <i>Eloisa A. N. Matthiesen, Omar C. Branquinho, Guilherme L. Silva, and Paulo Cardieri</i>	37
MAC Protocol Design Requirements for Mobility-Aware Wireless Sensor Networks <i>Adrian Kacso and Wajahat Abbas Kazmi</i>	40
A Flexible Wireless Sensor Platform with an Auto Sensor Identification Scheme <i>Yi-Jie Hsieh, Chih-Chyau Yang, Yi-Jun Liu, Wei-Lin Lai, Chien-Ming Wu, and Chun-Ming Huang</i>	46
SAFESENS – Smart Sensors for Fire Safety First Responders Occupancy, Activity and Vital Signs Monitoring <i>Brendan O'Flynn, Michael Walsh, Eduardo M. Pereira, Piyush Agrawal, Tino Fuchs, Jos Oudenhoven, Axel Nackaerts, Tanja Braun, Klaus-Dieter Lang, and Christian Dils</i>	51
Electrochemical Sensors for the Measurement of Relative Humidity and Their Signal Processing <i>Ivan Krejci and Michal Hedl</i>	58
A New Localization Scheme Using Gyro Sensor for Underwater Mobile Communication Systems <i>Sung-Joon Park</i>	62
Discrimination of Immersion in Writing from Association of Browsed Information <i>Takahisa Oe, Shinya Yonekura, and Hiromitsu Shimakawa</i>	64

Issues in Designing 6TiSCH Wireless Networks <i>Sunghee Myung, Chaewoo Lee, and Dongsoo Har</i>	71
Optimal Energy Management in NanoGrids <i>Sangkeum Lee and Dongsoo Har</i>	74
Automatic Identification Monitoring System for Fishing Gear Based on Narrowband Internet-of-Things Communication Systems <i>Sangmin Lee and Dongsoo Har</i>	77
Multiple Stage Charging of Rechargeable Wireless Sensor Networks with a Directional Antenna <i>Celso Luiz Barroso de Moraes and Dongsoo Har</i>	81
Exhaustive Study on Medical Sensors <i>Nadine Boudargham, Jacques Bou Abdo, Jacques Demerjian, and Christophe Guyeux</i>	86
On The Problem of Energy Efficient Mechanisms Based on Data Reduction in Wireless Body Sensor Networks <i>Carol Habib, Abdallah Makhoul, Raphael Couturier, and Rony Darazi</i>	94