

Table of Contents

Programmable Logic Controllers - Insecure by Design? A Survey <i>Benedikt Geisler and Markus Kucera</i>	1
PIV of Flow Convection Induced by Solar Sphere to Generate Power <i>Hassan Abdulmouti</i>	5
An Architecture for Reliable Learning Agents in Power Grids <i>Eric Veith</i>	13
Development of Occupants' Behavior Model in Urban Scale Using Dynamic Time Warping and Particle Swarm Optimization Algorithms Based on National Lifetime Survey <i>Hengxuan Wang and Sumiyoshi Daisuke</i>	17
Machine Learning and Optimisation to Improve Energy Utilisation Efficiency <i>Srinath Ramagiri, Evelyn El Masri, Arman Zonuzi, Ahmed Teyeb, Shehan Lowe, and Tat-Hean Gan</i>	23
An Islanded Community Solar Microgrid with Capability of Future Fractal Growth <i>Mark Apperley and Tama Toki</i>	29
The Implementation of the Automatic Dispatching System (ADS) to Support the Smart Grid Pilot Project for Distribution Grid Improvement in Sumba Island <i>Dimas Fiddiansyah and Hanny Benchmark</i>	36
Implementation of a Fully-automated Optimized Fog-computing-based IoT-controlled PV Network <i>Adel AlWaqfi, Mohammad Abdel-Rahman, Yunis Al-Greenawi, Zain AlHwaidy, and Ahmad Abu-El-Haija</i>	42
Spatial Analysis to Identify the Need for Additional EV Charging <i>Vivian Sultan, Benjamin Pezzillo, Roxana Cuevas, Solange Ruiz, Jinhua Tang, and Amanda Acosta</i>	49
Business Model Considerations for a Solution to Optimize and Diagnose Solar Panel Installations <i>Lasse Berntzen, Saeed Teimourzadeh, Paula Anghelita, Qian Meng, and Viorel Ursu</i>	57
Performance Analysis of Single and Multi-step Short-term Load Forecasts Using Multilayer Perceptron <i>Athanasios Ioannis Arvanitidis, Dimitrios Kontogiannis, Georgios Vontzos, Vasileios Laitzos, Dimitrios Bargiotas, and Miltiadis Alamaniotis</i>	63