1. Record Nr. UNINA9910367565403321 Autore **Dounis Anastasios** Titolo Intelligent Control in Energy Systems / Anastasios Dounis Pubbl/distr/stampa MDPI - Multidisciplinary Digital Publishing Institute, 2019 Basel, Switzerland:,: MDPI,, 2019 **ISBN** 9783039214167 3039214160 Descrizione fisica 1 electronic resource (508 p.) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto The editors of this Special Issue titled "Intelligent Control in Energy Systems" have attempted to create a book containing original technical articles addressing various elements of intelligent control in energy systems. In response to our call for papers, we received 60 submissions. Of those submissions, 27 were published and 33 were rejected. In this book, we offer the 27 accepted technical articles as well as one editorial. Authors from 15 countries (China, Netherlands, Spain, Tunisia, United Sates of America, Korea, Brazil, Egypt, Denmark, Indonesia, Oman, Canada, Algeria, Mexico, and the Czech Republic) elaborate on several aspects of intelligent control in energy systems. The book covers a broad range of topics including fuzzy PID in automotive fuel cell and MPPT tracking, neural networks for fuel cell control and dynamic optimization of energy management, adaptive control on power systems, hierarchical Petri Nets in microgrid management, model predictive control for electric vehicle battery and frequency regulation in HVAC systems, deep learning for power consumption forecasting, decision trees for wind systems, risk analysis

storage.

for demand side management, finite state automata for HVAC control, robust -synthesis for microgrids, and neuro-fuzzy systems in energy