1. Record Nr. UNINA9910557722803321 Autore Gabbar Hossam A Titolo Smart Energy, Plasma and Nuclear Systems Pubbl/distr/stampa Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2021 1 electronic resource (106 p.) Descrizione fisica Soggetti Research & information: general Technology: general issues Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico The extended papers in this Special Issue cover the topics of smart Sommario/riassunto energy, nuclear systems, and micro energy grids. In "Electrical Loads

and Power Systems for the DEMO Nuclear Fusion Project" and "Energy Analysis for the Connection of the Nuclear Reactor DEMO to the European Electrical Grid", the authors introduce a European DEMO project. In "Comparison and Design of Resonant Network Considering the Characteristics of a Plasma Generator" the authors present a theoretical analysis and experimental study on the resonant network of the power conditioning system (PCS). In "Techno-Economic Evaluation of Interconnected Nuclear-Renewable Micro Hybrid Energy Systems with Combined Heat and Power", the authors conducted a sensitivity analysis to identify the impact of the different variables on the investigated systems. In "Fault Current Tracing and Identification via Machine Learning Considering Distributed Energy Resources in Distribution Networks", the authors propose a current tracing method to model the single distribution feeder as several independent parallel connected virtual lines, with the result of tracing the detailed contribution of different current sources to the power line current. From the five extended papers, we observe that the SEGE is actively engaged in smart grid and green energy techniques. We hope that the readers enjoy this Special Issue.