1. Record Nr. UNINA9910864185203321

Autore	Pierfederici Serge
Titolo	ELECTRIMACS 2022 : Selected Papers – Volume 2 / / edited by Serge Pierfederici, Jean-Philippe Martin
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2024
ISBN	9783031556968 3031556968
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (322 pages)
Collana	Lecture Notes in Electrical Engineering, , 1876-1119 ; ; 1164
Altri autori (Persone)	MartinJean-Philippe
Disciplina	621.31
Soggetti	Electric power production Mathematical physics Electric power distribution Mathematics - Data processing Engineering mathematics Electrical Power Engineering Theoretical, Mathematical and Computational Physics Energy Grids and Networks Computational Science and Engineering Engineering Mathematics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1. Efficiency maps of synchronous machines based on electrical circuits modelling -- Chapter 2. Losses prediction in the frequency domain for voltage source einverters -- Chapter 3. Online detection of PV degradation effects through ANN Classifier -- Chapter 4. Modeling the non-linearities of charge-transfers and solid electrolyte nterphase resistances for a sodium-ion battery with hard carbon electrode -- Chapter 5. Experimental Development of Embedded Online Impedance Spectroscopy of Lithium-Ion Batteries – Proof of concept and Validation -- Chapter 6. An Improved Maximum Power Point Tracking for Photovoltaic Distributed Energy System associated with a Shunt Active Power Filter -- Chapter 7. Modeling battery aging through high-current incremental capacity features in

fast charge cycling -- Chapter 8. Fully decentralized control strategy for synchronous open-winding motors -- Chapter 9. Quasi 3D Reluctance Network Modeling of an Axial Flux Switched Reluctance Machine -- Chapter 10. A Voltage-Controlled Split-pi Converter Interfacing a High-Voltage ESS with a DC Microgrid: Modeling and Experimental Validation -- Chapter 11. Co-simulation domain decomposition algorithm for hybrid EMT-Dynamic Phasor modelling -- Chapter 12. Uncertainties Impact and Mitigation with an Adaptive Model-Based Voltage Controller -- Chapter 13. Consensus-based distributed primary control for accurate power sharing in islanded mesh microgrids -- Chapter 14. Model-free Detection of Distributed Solar Generation in Distribution Grids Based on Minimal Exogenous Information -- Chapter 15. Model-free Detection of Distributed Solar Generation in Distribution Grids Based on Minimal Exogenous Information -- Chapter 16. Load Consumption Characterization and Tariff design based on Data Mining Techniques -- Chapter 17. Energy management system by deep reinforcement learning approach in a building microgrid -- Chapter 18. Passivity based control of two distributed generations in DC microgrid -- Chapter 19. AnImproved Control of High Efficiency Series Converter for Fuel cell/Supercapacitor Hybrid System -- Chapter 20. Photovoltaics at the electric mobility’s service: French case study -- Chapter 21. Enhanced performances of the DFIG power control using the exponential reaching law based sliding mode control.

Sommario/riassunto

This book collects a selection of papers presented at ELECTRIMACS, 2022 the14th international conference of the IMACS TC1 Committee, held in Nancy, France, on 17st-21rd May 2022. The conference papers deal with modelling, simulation, analysis, control, power management, design optimization, identification and diagnostics in electrical power engineering. The main application fields include electric machines and electromagnetic devices, power electronics, transportation systems, smart grids, electric and hybrid vehicles, renewable energy systems, energy storage, batteries, supercapacitors and fuel cells, and wireless power transfer. The contributions included in Volume 2 are particularly focused on methodological aspects, modelling, and applied mathematics in the field of electrical engineering.