1. Record Nr. UNINA9910557244603321

Titolo	Mixotrophy in Protists: from Model Systems to Mathematical Models
Pubbl/distr/stampa	Frontiers Media SA, 2019
Descrizione fisica	1 online resource (126 p.)
Collana	Frontiers Research Topics
Altri autori (Persone)	JohnsonMatthew D., Ph. D.
Soggetti	Oceanography (seas) Science: general issues
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	This eBook is a collection of articles from a Frontiers Research Topic. Frontiers Research Topics are very popular trademarks of the Frontiers Journals Series: they are collections of at least ten articles, all centered on a particular subject. With their unique mix of varied contributions from Original Research to Review Articles, Frontiers Research Topics unify the most influential researchers, the latest key findings and historical advances in a hot research area! Find out more on how to host your own Frontiers Research Topic or contribute to one as an author by contacting the Frontiers Editorial Office: frontiersin. org/about/contact

2. Record Nr. UNINA9910438039903321

Titolo	Power, Control and Optimization / / edited by Ivan Zelinka, Pandian Vasant, Nader Barsoum
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2013
ISBN	9783319002064 3319002066
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (183 p.)
Collana	Lecture Notes in Electrical Engineering, , 1876-1119 ; ; 239
Altri autori (Persone)	ZelinkaIvan <1965-> VasantPandian BarsoumNader N
Disciplina	621.3
Soggetti	Electric power production Mechatronics Control engineering Telecommunication Energy policy Energy and state Electrical Power Engineering Control and Systems Theory Communications Engineering, Networks Energy Policy, Economics and Management
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Foreword; Contents; 1 Pseudo-Gradient Based Particle Swarm Optimization Method for Nonconvex Economic Dispatch; Abstract; 1... Introduction; 2...Problem Formulation; 2.1 ED Problem with Valve Point Effects; 2.2 ED Problem with Multiple Fuels; 2.3 ED Problem with Both Valve Point Effects and Multiple Fuels; 2.4 ED Problem with Prohibited Operating Zones; 3...Pseudo-Gradient Based Particle Swarm Optimization; 3.1 Self-organizing Hierarchical Particle Swarm Optimizer; 3.2 Pseudo-Gradient Concept; 3.3 Proposed Pseudo-Gradient Based Particle Swarm Optimization

4...Implementation of PGPSO to Nonconvex ED Problems4.1 Calculation of Power Output for Slack Unit; 4.2 Handling of Ramp Rate Constraints and POZ Violation; 4.3 Implementation of PGPSO; 4.3.1 Initialization; 4.3.2 Calculation of Particle's Velocity and Position; 4.3.3 Stopping Criteria; 5...Numerical Results; 5.1 Selection of Parameters; 5.2 Systems with Valve Point Effects; 5.3 System with Multiple Fuels; 5.4 System with Prohibited Operating Zones; 5.5 Systems with Both Valve Point Effects and Multiple Fuels; 5.5.1 10-unit System; 5.5.2 Large-Scale Systems; 6...Conclusion; A.x(118). Appendix
References2 Energy Consumption Impacted by Climate Change Application: Case Study Astara; Abstract; 1...Introduction; 2...Methods; 2.1 What are Annual and Monthly Heating and Cooling Degree Days?; 2.2 Global Projections; 2.3 Temperature; 2.4 Future Climate Projection for Asia Sub Regions; 2.5 Past Climate Changes in Middle East; 2.6 Climate Projections in Middle East; 2.7 Past Climate Changes in Iran; 2.8 Past Climate Changes in Astara; 2.9 Investigation on Climate Change Projections in Astara and Ardebil; 2.10 Climate Condition in Astara Especial Forest Ecosystem (District 1); 3...Results
3.1 Precipitation Changes3.2 Temperature Changes; 3.3 Other Climatic Factors Changes; 4...Discussion; 5...Conclusion: Astara Climate Change and Energy Balance; References; 3 Computer Tools for Modelling and Evaluating the Potential of Energy Storage Systems with Reference to the Greek Islands Case; Abstract; 1...Introduction; 2...Energy Storage Technologies-Modeling and Evaluation; 2.1 Battery Energy Storage System; 2.2 Thermal Energy Storage; 2.3 Pumped Hydro Energy Storage; 2.4 Compressed Air Energy Storage; 2.5 Flywheel Energy Storage; 2.6 Superconducting Magnetic Energy Storage
2.7 Super Capacitor Energy Storage2.8 Hydrogen Energy Storage-Fuel Cells; 3...Microgrids and Distributed Energy Storage; 4...Energy Storage for Greek Island Electrification; 5...Analysis Tools for Energy storage Impact in Micro-grid Applications; 6...Discussion and Concluding Remarks; References; 4 Particle Swarm Intelligence Based Optimization Controller Applied to Two Area Interconnected Power Systems; Abstract; 1...Introduction; 2...Dynamic Model of the System; 2.1 Problem Description; 3...Optimization Techniques; 3.1 Genetic Algorithm; 3.2 Particle Swarm Optimization; 4...Simulation Results
4.1 Performance Analysis

Sommario/riassunto

The book consists of chapters based on selected papers of international conference „Power, Control and Optimization 2012”, held in Las Vegas, USA. Readers can find interesting chapters discussing various topics from the field of power control, its distribution and related fields. Book discusses topics like energy consumption impacted by climate, mathematical modeling of the influence of thermal power plant on the aquatic environment, investigation of cost reduction in residential electricity bill using electric vehicle at peak times or allocation and size evaluation of distributed generation using ANN model and others. Chapter authors are to the best of our knowledge the originators or closely related to the originators of presented ideas and its applications. Hence, this book certainly is one of the few books discussing the benefit from intersection of those modern and fruitful scientific fields of research with very tight and deep impact on real life and industry. This book is devoted to the studies of common and related subjects in intensive research fields of power technologies. For these reasons, we believe that this book will be useful for scientists and engineers working in the above-mentioned fields of research and applications. .