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volume 45



New Energy and Future Energy Systems



Proceedings of the 8th International
Conference (NEFES 2023), Matsue, Japan,
21-24 November 2023



EDITED BY
Grigorios L. Kyriakopoulos


IOS Press

New Energy and Future Energy Systems

A reliable and sustainable energy supply is a prerequisite for any stable and prosperous society, and the volatility of international supply chains, coupled with the increasing threat of a global climate crisis, mean that developing and maintaining efficient and dependable energy systems for the future is more important than ever.

This book presents selected papers from NEFES 2023, the 8th International Conference on New Energy and Future Energy Systems, held from 21 to 24 November 2023 in Matsue, Japan. The conference encompasses a number of different areas, including power system operation, biomass energy, fuel energy, solar energy, thermal energy, energy materials, energy technology, and other related fields. From a total of 84 submissions received, 12 peer-reviewed papers were selected for publication in this book. Ranging widely, from renewable energy policy planning for a low-carbon economy and the impact of lightning-induced wildfires on power systems to the energy supply capacity of micro energy grids and safety design technologies for a sodium-cooled fast reactor, the papers included here offer a fascinating insight into the challenges and solutions encountered in modern energy systems.

Covering a wide range of topics related to energy and energy systems, the book will be of interest to all researchers, engineers, and educators working in the field.

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NEW ENERGY AND FUTURE ENERGY SYSTEMS

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Edited by

Grigorios L. Kyriakopoulos

*School of Electrical and Computer Engineering,
National Technical University of Athens (NTUA), Greece*



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Preface

This book contains selected papers from the 8th International Conference on New Energy and Future Energy Systems (NEFES 2023), which was held from November 21 to 24, 2023 in Matsue, Japan. About 60 participants from 20 countries (including China, Japan, USA, UK, Canada, Australia, India, Pakistan, Egypt, Saudi Arabia, Mozambique, Algeria, Sweden, Philippines, Ghana) attended the conference. The conference program included 3 keynote presentations, 26 oral presentations, and 10 poster presentations.

Twelve peer-reviewed papers were selected from 84 submissions for this book. The topics covered are power system operation, biomass energy, fuel energy, solar energy, thermal energy, energy materials, energy technology, and other related fields. It will be of interest to researchers, engineers, and educators working in the field.

The Organizing Committee would like to extend their gratitude to all the keynote speakers and participants, international reviewers and members of the technical program committee for their dedicated contribution and commitment to the conference.

The Conference Chairs of NEFES 2023

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About the Conference

Peer Review Statement

Submitted papers: 84

Accepted peer reviewed papers: 12

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Contents

Preface	v
About the Conference	vii
Impact of Lightning-Induced Wildfires on Power System Based on Satellite Data and Climatological Projections <i>Amalija Božiček, Marta Đurović, Božidar Filipović-Grčić, Nina Stipetić and Bojan Franc</i>	1
Study on the Resilience Enhancement and Renewal Strategy of Traditional Village Public Space in the Post-Epidemic Era: A Study Considering Cuanxia Village in China as an Illustration <i>Qin Li, Chanting Yu, Nijing Chen, Ping Guo and Yijun Liu</i>	9
Development of Safety Design Technologies for Sodium-Cooled Fast Reactor Coupled to Thermal Energy Storage System with Sodium-Molten Salt Heat Exchanger <i>Hidemasa Yamano, Kenichi Kurisaka, Kazuya Takano, Shin Kikuchi, Toshiki Kondo, Ryota Umeda, Shota Shirakura and Masaaki Hayashi</i>	27
Optimization Strategy for the Synthesization of Carbonaceous Adsorbent from Waste Biomass for Sustainable Energy Applications <i>P.R. Chauhan and S.K. Tyagi</i>	35
A GIS Digital Twin Modeling Approach Applied to Partial Discharge Live Test <i>Yizhi Fang, Yuling Lin, Zicong Qiu, Minhua Huang, Tianshu Li, Daoyi Shen and Dan Zeng</i>	42
Renewable Energy Policy Planning for Low-Carbon Economy <i>Jan K. Kazak, Iwona Foryś, Arkadiusz Glogowski, Malgorzata Świąder, Katarzyna Tokarczyk-Dorociak, Tomasz Pilawka and Szymon Szewrański</i>	52
Analysis and Calculation of Energy Supply Capacity of Micro Energy Grid Considering Natural Gas Systems and Renewable Energy <i>Guodong Jiang, Tao Han, Hongwei Du, Dong Xia, Chenxi Huang and Beibei Zhang</i>	62
Research on the Technical Limit Well Spacing Under the Condition of Variable Starting Pressure Gradient Based on Pressure Sensitivity Effect <i>Bo Chi, Qi Yan, Chenglong Li, Chen Xu and Fugui Zhang</i>	75
Investigation on the Aging State Assessment of Transformer Insulation Paper Based on Multi-Feature Comprehensive Assessment Method <i>Liang Zhang, Wei Sun, Bing Wei, Yudong Wang and Song Cheng</i>	83

Performance Analysis of a Carbon Dioxide Transcritical Two-Stage Compression Refrigeration System	92
<i>Zhiyong Wei, Jinfeng Wang, Jing Xie, Hao Xu, Chenlong Wu, Guosen Ye, Jilin Jiang and Xinrong Han</i>	
The Current Status and Reflections on Sponge City Construction in the Context of Low Carbon	103
<i>Dianliang Kou and Cunli Liu</i>	
Monitoring of a Suction Pile Jacket for Offshore Wind Turbine During Installation	110
<i>Sen Li, Wei Guo and Hongyu Wang</i>	
Subject Index	127
Author Index	129

Subject Index

aging state estimation	83	partial discharge	42
climatological projection	1	post-epidemic	9
CO ₂	92	power system	1
COP	92	pressure sensitive effect	75
Cuanxi village	9	public policy	52
digital twin	42	public space	9
full-scale field test	110	resilience	9
GIS	42	rural	9
heat exchanger	27	safety design	27
infrastructure planning	52	satellite data	1
installation monitoring	110	simulation	92
LabVIEW	92	sodium	27
lightning	1	sodium-cooled fast reactor	27
linear regression	83	sponge city	103
live test	42	suction pile	110
low carbon	103	sustainable development	52
maximum energy supply capacity	62	technical limit well spacing	75
meteorological conditions	1	thermal energy storage	27
micro energy grid	62	transformer	83
mixed integer linear programming	62	two-stage compression	92
molten salt	27	ultra low permeability oil	
N-1 principle	62	reservoirs	75
N ₂ Ads-Des analysis	35	variable starting pressure gradient	75
natural gas pipelines	62	volume capture ratio of annual	
offshore wind power	110	rainfall	103
optimization strategy	35	waste biomass	35
paper insulation	83	wildfire	1

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Author Index

Božiček, A.	1	Liu, Y.	9
Chauhan, P.R.	35	Pilawka, T.	52
Chen, N.	9	Qiu, Z.	42
Cheng, S.	83	Shen, D.	42
Chi, B.	75	Shirakura, S.	27
Du, H.	62	Stipetić, N.	1
Đurović, M.	1	Sun, W.	83
Fang, Y.	42	Świąder, M.	52
Filipović-Grčić, B.	1	Szewrański, S.	52
Foryś, I.	52	Takano, K.	27
Franc, B.	1	Tokarczyk-Dorociak, K.	52
Głogowski, A.	52	Tyagi, S.K.	35
Guo, P.	9	Umeda, R.	27
Guo, W.	110	Wang, H.	110
Han, T.	62	Wang, J.	92
Han, X.	92	Wang, Y.	83
Hayashi, M.	27	Wei, B.	83
Huang, C.	62	Wei, Z.	92
Huang, M.	42	Wu, C.	92
Jiang, G.	62	Xia, D.	62
Jiang, J.	92	Xie, J.	92
Kazak, J.K.	52	Xu, C.	75
Kikuchi, S.	27	Xu, H.	92
Kondo, T.	27	Yamano, H.	27
Kou, D.	103	Yan, Q.	75
Kurisaka, K.	27	Ye, G.	92
Li, C.	75	Yu, C.	9
Li, Q.	9	Zeng, D.	42
Li, S.	110	Zhang, B.	62
Li, T.	42	Zhang, F.	75
Lin, Y.	42	Zhang, L.	83
Liu, C.	103		

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