

2025 5th International Conference on New Energy and Power Engineering (ICNEPE 2025)

**Guangzhou, China
14-16 November 2025**

Pages 1–603

IEEE Catalog Number:
ISBN:

CFP25UL4-POD
979-8-3315-6698-2



Copyright © 2025, IEEE

All Rights Reserved

Copyright and Reprint Permissions:

Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

*** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.

IEEE Catalog Number:	CFP25UL4-POD
ISBN (Print-On-Demand):	979-8-3315-6698-2
ISBN (Online):	979-8-3315-6697-5

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA

Phone:	(845) 758-0400
Fax:	(845) 758-2633
E-mail:	curran@proceedings.com
Web:	www.proceedings.com

TABLE OF CONTENTS

Mesh-Based Transmission-Distribution-Microgrid System Co-Optimization Technology	1
<i>Bingsong Chen, Yi Wang, Ke Yang</i>	
Accurate Assessment of Branch Power Outages in Substations Considering Sudden Load Drops	8
<i>Dandan Qi, Zhengyang Peng, Liyu Huang, Shaoliang Chen</i>	
Optimization Allocation Method of Power Supply Load in Distribution Network Based on Improved Adaptive Genetic Algorithm	14
<i>Cheng Wang, Lei Chen, Hui Huang, Ru Zhao</i>	
Research on Evaluation Method of Power Regulation Capability of Urban Industrial Loads	20
<i>Yucheng Ding, Guanglong Xie, Xiaoling Jin, Yibo Jiang</i>	
Research on Optimal Selection Method and Auxiliary Decision Making for Power Grid Infrastructure Planning Projects	26
<i>Huaide Lin, Qiang Liu, Dandan Nie, Zhaolong Zhang</i>	
Economic Benefit Evaluation of Park-Level Microgrid Considering Source-Grid-Load-Storage Coordination and Grid-Connected Operation	32
<i>Danman Wu, Zhijie Zheng, Yucheng Ding, Pu Zhao, Guanglong Xie, Xiaoling Jin</i>	
A Dynamic Fusion Attention Based Approach for Imputing Missing Values in Power Load Data	37
<i>Yipeng Xie, Guowei Xie, Wenshui Yang, JiuHong Huang, Rui Luo, Hongtao Bai</i>	
Research on Performance Evaluation Method for Virtual Power Plant Participation in Frequency Regulation Based on AHP-CRITIC-TOPSIS	41
<i>Zhimin Liu, Lirong Xie, Gangding Liu</i>	
Cognitive Network-Based Evolutionary Modelling of Failure Risk of Hydrogen-Doped Natural Gas Pipelines	47
<i>Pengcheng Kang, Xiangzhi Dai, Feng Wang, Qin Bie, Xinyi Wang, Sijia Zheng, Jinqiu Hu, Ruoxin Liu Shangrui Xiao</i>	
Research on the Ice Melting Method of LC Oscillatory Discharge Based on Voltage Control	52
<i>Wenbin Wang, Zhongming Li, Huayu Xu, Jin Yang, Zongying Song, Jingwei Liu, Xiaoyu Zhang</i>	
Regional Suitability Evaluation for Nuclear Power Plant Site Selection Based on IGA-SOM-G1	57
<i>Xuelong Tan, Zongyao Cui, Yuqing Xu, Xiangwei Zhao, Xianfei Huang, Chen Sun</i>	
Research on Game-Based Bidding Strategy for Regulated Electricity Pricing Mechanisms	61
<i>Zhen Liu, Kun Hu, Jun Liu, Xiaomeng Ren, Zhixin Zhang</i>	
Research on ATC Optimization Under Integrated Modeling of Regional Electricity Market	66
<i>Di Cheng, Man Jiang, Xialing Xu, Yinsheng Niu, Chengqing Gui, Xinke Qin</i>	
An Online Risk Assessment and Optimal Dispatch Method for Provincial Power Grids During Wildfire Disasters	72
<i>Yongqiang Gao, Jialu Li, Hengdao Guo, Aoyu Lei, Jianjun He, Fangneng Huang</i>	
Research on Dynamic Resource Allocation Strategies for Large-Scale Power Model Agents Based on GPU and Domestic Computing Chip Hybrid Scheduling	78
<i>Heyi Zhang, Feng Zhao, Shuo Zhang, Yana Zhu, Xinyu Cao, Jiaqi Chen</i>	

Research on Intelligent Cost Review Assistant Tool for Power Grid Based on BI Data Technology and Artificial Intelligence Algorithm	82
<i>Junru Lin, Xue Jiang, Jiannan Li, Chao Ge</i>	
A Carbon-Factor-Prediction-Based Coordinated Electricity Price–Asset Optimization Model for Multi-Energy Systems	86
<i>Jingyu Zhou, Yanzuo Chen, Shuhong Wu</i>	
Impacts of Super Typhoons on Power Grids and Online Decision Support	92
<i>Jialu Li, Aoyu Lei, Hengdao Guo, Yongqiang Gao, Jianxin Zhang, Feng Lin</i>	
Research on Panama's Electric Load Forecasting Based on Temporal Modal Decomposition and Feature Optimization	99
<i>Guocheng Tang</i>	
Research on the Transformation Path of Provincial Power System Under the Carbon Neutrality	104
<i>Yajie Li, Kaining Sun, Sen Xu, Liu Yang, Yong Zhang</i>	
Calculation Method for Power Quality Assessment Indices in Distribution Networks Based on Temporal Dynamic Features	108
<i>Qingliang Wang, Haonan Zhang, Yonghui Zhang, Weifeng Wang</i>	
Short-Term Power Load Forecasting Model Based on DWT-AFSA and Multi-Model Fusion	112
<i>Jing Zhi, Hongwei Hu, Yuantian Xue, Jie Wang, Zekun Wang, Tiejiang Yuan</i>	
Joint Scheduling Model for Multiple Energy Sources Based on Improved Boundary Contraction Method	123
<i>Xu Ling, Xiaowei Yu, Luyu Ma, Xinke Qin</i>	
Research on the Strategy of EV Aggregators Participating in the Day-Ahead Energy and Reserve Markets	128
<i>Nanhao Cui, Mingsheng Sun, Xiufan Ma</i>	
Research and Application of Intelligent Cost Platform for Distribution Network Engineering Based on Multi-Modal Data	133
<i>Xiaoyong Yang, Fuyan Liu, Qi Ying, Chi Zhang</i>	
Design of Distribution Network Operation and Maintenance Training System Under Virtual Reality Technology	139
<i>Yuhang Du, Ziqi Zhao, Shiping Yan, Haobo Shi, Chang Liu</i>	
Intelligent Retrieval Techniques and Platform Validation Based on Power-Domain Large Models and Knowledge Graphs	144
<i>Heyi Zhang, Feng Zhao, Yana Zhu, Shuo Zhang, Jiarong Xie, Jiaqi Chen</i>	
Research on Interactive Interface Design and Results Visualization for an Intelligent Simulation and Deduction Platform Oriented to Electricity Trading	148
<i>Feng Zhao, Heyi Zhang, Xiaofeng Wu, Shuo Zhang, Yana Zhu, Jiarong Xie</i>	
Spatio-Temporal Rolling Forecasting Method for Power Load Process Characteristics	152
<i>Jiubai Chen, Binliang Fan, Zuqin Xu, Chen Hu</i>	
Safety Management of Substation Construction Based on Digital Twin Technology	156
<i>Xiaobin Zheng, Yifei Pan, Ziman Liu, Chengwei Wu, Yijian Zhang, Yan Wang, Chenchen Liu</i>	

A Power Flow-Based Model for Calculating Voltage-Level-Specific Electricity Carbon Emission Factors	165
<i>Shiyao Hu, Zhao Liu, Peng Xi, Xiaobin Xu, Jing Xia, Yong Zhang, Yuanbo Wu</i>	
Optimization Method for Carbon Energy Collaborative Operation of Integrated Energy System in Park Based on Internal Dynamic Carbon Price	172
<i>Yudi Ding, Kai Yuan, Zhijun Wu, Longjun Luo, Siqi Ma, Feng Zhao, Tiancheng Shi, Shibin Li</i>	
Mesh-Based Planning for Distribution Networks Considering the Risk of Voltage Imbalance	182
<i>Xin Yang, Ran Xu, Fan Zhou, Tiancheng Shi</i>	
Distributed Robust State Estimation for Distribution Networks Fusing Consensus and Variational Bayes	189
<i>Yanwei Chen</i>	
Data-Driven Inertia Evaluation of Power Systems Based on Electromechanical Response Characteristics	194
<i>Shanke Mou, Hao Chen, Nan Yang, Yingbei Yao, Yiqing Xu, Xiangwen Wu</i>	
Frequency-Voltage Interaction and Cascading Instability in the New Electricity System: Mechanisms and Disaster Risks	199
<i>Shengjian Li, Dexing Kuang, Zhan Shu, Liu Liu, Yuxiang Peng</i>	
Load Forecasting and Grid Capacity Assessment of Active Distribution Networks Based on SVM Algorithm and Entropy Weight Method	205
<i>Jingman Ma, Dong Yin, Min Wang, Jiayi Huang, Feng Liu</i>	
Research on Hierarchical Scheduling and Risk Prevention and Control of Active Distribution Networks Based on Nonparametric Kernel Density Estimation	210
<i>Jingman Ma, Dong Yin, Min Wang, Jiayi Huang, Feng Liu</i>	
Research on a Coupled Forecasting Model for Monthly Electricity Sales Based on Electricity Consumption Forecasting and Line Loss Analysis	216
<i>Huazhong Niu, Peng Du, Hongtao Xie, Chenhui Li, Zhifan Liu, Ying Shi</i>	
Fed-DCL: A Federated Dual-Continual Learning Framework for Adaptive Electric Power Load Forecasting Under Concept Drift	223
<i>Yueyang Gong, Bin Pan, Kai Lyu, Fenggang Sun, Peng Lan</i>	
Multi-Objective Optimal Scheduling of Integrated Energy Systems Based on Dynamic Demand Response Mechanism with Wind and Solar Prediction	228
<i>Weixi Liu</i>	
Equivalent-Projection-Based Optimization Method for Flexible Interconnected Distribution Networks	238
<i>Linbo Wang, Xi Zeng, Xueyang Wang, Binglang He, Shuai Zhao, Yushi Chen</i>	
Power Coordination Control Strategy for Multi-Terminal Flexible Interconnected Distribution Systems	247
<i>Qingsheng Li, Yuanfeng Wang, Enwei Wang, Wen Yan, Xingjian Gu, Shuai Zhao, Yushi Chen</i>	
Study on Flexible Networking Scheme of Distribution Network for Large-Scale Integration of PV, Energy Storage and Charging Systems	253
<i>Jian Wang, Kuanxiang Zhao, Qingsheng Li, Xuepeng Mou, Dongjunming Yang, Zhen Li, Zhanpeng Xu</i>	
A Planning Method for the Flexible Evolution Path of Distribution Networks with Large-Scale Integration of PV, Storage, and Charging Systems	261
<i>Kuanxiang Zhao, Jian Wang, Qingsheng Li, Xuepeng Mou, Dongjunming Yang, Zhen Li, Zejie Huang</i>	

Reinforcement Learning-Enhanced GOE Scheduling: Edge Energy Management for Substation Areas	268
<i>Bin Zhou, Di Huang, Liangrong Xu, Faxian Wu, Weimin Lu, Chaoyue Zhu</i>	
Short-Term Power Load Forecasting Enhanced by Feature Engineering and LSTM: a Hybrid Data-Driven Approach	274
<i>Mengwei Zhu</i>	
Transient Overvoltage Suppression Strategy Based on Voltage-Reactive Power Coordinated Control	281
<i>Haoran Ge, Jianan Mu, Tao Xu, Lin Cheng, Ning Chen, Luming Ge, Xiong Du</i>	
Graph-based Reinforcement Learning for Hour-Level Regional Power Grid Dispatch	286
<i>Xinhang Xiao, Chenxi Dai, Jin Yang, Xiaohui Bi, Dingjun Yao, Xiaopu Zeng</i>	
Load Simultaneity Factor Estimation Methodology Based on Analytic Hierarchy Process	290
<i>Jia Hou, Xuyang Wang, Yue Guo, Yu Song</i>	
Research on Two-Layer Optimal Scheduling Based on Electricity-Heat-Gas Coupled Multi-Energy Flow System	299
<i>Yinping An, Xiangping Meng, Youbo Jia, Xiaonan Sun</i>	
Synchronous Switching Prediction Method for VSC-Based Power System Simulation	303
<i>Yinsheng Su, Jiajun Luo, Qian Ma, Ziwei Zhao, Haicheng Yao, Yifu Liao, Shujun Yao</i>	
Research on Scalable Electric Vehicle Participation in Traceable Green Electricity Trading Mechanisms and Distributed Clearing Methods	309
<i>Xian Zhang, Peng Ji, Xin Chang, Hexiao Liang, Ziming Ma, Yuqing Yan</i>	
A Day-Ahead Electricity Price Forecasting Method Based on GMM Clustering and XGBoost	315
<i>Hongliang Wang, Xi Zhang, Daen Bao, Tong Yu</i>	
Construction of Clean Energy Bases and Its Impact on Regional Power Structure and Carbon Emissions	321
<i>Qiyuan Cai, Xiaofan Lin, Simin Chen</i>	
A Standard Operating Procedure for Analyzing the Value Elasticity of Industrial Electricity Consumption	325
<i>Ziyang Wu, Zesan Liu, Zhenan Xu, Ziheng Wang, Yapeng Liu, Ruipeng Yin</i>	
Optimization of Operational Strategies for a Planting-Based Courtyard Circular Economy Energy Supply and Utilization System	330
<i>Wentao Fan, Ze Wang, Qiang Yu, Hao Zheng</i>	
Optimal Load Control Method for Power System with Wind, Thermal and Storage Participating in Frequency Regulation	338
<i>Tenglong Lu, Xiaohui Zhao, Laifu Ming</i>	
A Data-Driven Method for Transient Voltage Stability Assessment in Power Systems with Highpenetration Renewable Energy	344
<i>Yunqi Li, Jing Wang, Huaizheng Zhang, Jing Liu, Zeyu Wang</i>	
Comprehensive Benefit Evaluation of Carbon Emission Reduction of Green Low Carbon Technology in Power System via Improved LSTM	349
<i>Jiawen Liu, Danhong Zhang, Jiajia Xun</i>	
Substation Inspection Path Planning Using an Improved Ant Colony Optimization Algorithm	353
<i>Yonggang Zhang</i>	

A Post-Fault Restorative Topology Reconstruction Method for Active Distribution Grids Based on Second-Order Cone Relaxation	358
<i>Wei Ye, Shiyuan Ni, Guilian Wu, Sudan Lai, Tingting Lin, Jia Lin</i>	
Adaptive Inertia Forecasting via Quantile Regression and KDE–GPD Fusion	364
<i>Keqiang Yin, Muyang Liu, Genzhu Wu, Peiyi Wang</i>	
Research on Hierarchical Collaborative Scheduling Method for Multi Energy Systems Considering Peak Shaving Initiative	369
<i>Juan Li, Yuejuan Yu</i>	
Research on Short-Term Power Load Forecasting Based on Improved BiLSTM Model	374
<i>Minghui Luan, Xiaonan Wang, Yanxi Wang, Yutong Li</i>	
Research on the Construction and Application of a Grid Investment-Indicator-Target Conduction Model	381
<i>Xiaoyong Yang, Chi Zhang, Qi Ying, Fuyan Liu, Yapeng Tang, Songkun Yang, Qian Wu</i>	
Intelligent Staffing Prediction for Power Grid Construction Management Based on XGBoost	387
<i>Xiaopeng Li, Tianlong E, Bailin Zhang, Zhixun Zhang, Ning An, Yijun Zhang, Xiaohu Chen, Yang Zhang</i>	
The impact of photovoltaic grid connection on the voltage for the power distribution network	391
<i>Tuo Lin</i>	
Analysis of Harmonic Characteristics Based on the Norton Model under the Grid -Integration Condition for the New Type Distribution Network	395
<i>Jun Xie, Chuihui Zeng, Shenzeng Luo, Jianming Zou, Renbin Su, Jian Fang</i>	
Analysis of Harmonic Characteristics in VSC-HVDC System Under Single-Phase Short-Circuit Fault	399
<i>Junxuan Li, Fengrui Cheng, Zhihui Li, Zheping Lin, Qingyong Zhang, Xixiu Wu</i>	
A Flyback Photovoltaic Inverter with Power Decoupling Function	403
<i>Wei Zhang, Shiyang Wang, Tuanhuan Duan, Xiaodong Yang, Danyang Bao, Guanfan Chen, Xuwei Pan</i>	
Spatial Correlation Analysis Method of Grid-Forming Wind Turbines Based on Moran Index	409
<i>Yaoyu Bai, Lu Liu, Xinyue Zhang, Xudong Li, Dan Dou</i>	
Improved Voltage Support Control for Grid-Forming Converters based on Transient Power Compensation	413
<i>Zhengkui Zhao, Delu Zhou, Zhi Geng, Laijun Chen, Xiaoling Su</i>	
A Method for Evaluating the Adjustable Capacity of Electric Vehicle Clusters Considering the Safe Operation Boundaries of Distribution Networks	421
<i>Qixian Guo, Xiufan Ma</i>	
Analysis and Countermeasures of AVC Remote Control Failure in Substation Based on NSD500M Measure-Control Device	427
<i>Xuefei Yang, Xiankun Qin, Youqiang Liu, Cong Huang, Ming Le, Junyan Ou, Shunjian Yang, Xiaodong Wu</i>	
Fault Diagnosis of Cross-Bonded Cable Systems Using Random Forest and Dual-End Sheath Current Signatures	431
<i>Huaqing Wang, Yongqiang Zhao, Han Li, Jiaxing Li, Ting Lei, Ying Li</i>	
A Multi-Scale Spatial-Temporal Fusion Framework for Distributed Photovoltaic Power Forecasting	438
<i>Fangmei Bie, Zhe Dong, Jing Wan, Wei Bi, Ya Xiao, Xing Tong</i>	

A Shadow PV User Identification Method Based on PV Physical Characteristics Analysis and User Load Deviation	444
<i>Fangmei Bie, Zhe Dong, Jing Wan, Wei Bi, Ya Xiao, Xing Tong</i>	
Optimization Strategies for Electric Vehicles Based on Dynamic Wireless Charging Technology	451
<i>Chaoxiang Hu, Qixian Guo, Xiufan Ma</i>	
Coordinated Energy Management and Control Methods for Hydrogen Fuel Cell Hybrid Vessels under Multiple Operating Conditions	455
<i>Junjie Chang, Yonggang Peng, Haijiang Shen, Yayu Wang</i>	
Distributionally Robust Planning for Cyber-Physical-Coupled Distribution Systems Considering Multiple Uncertainties	459
<i>Sheng Zhang, Gang Zhang, Yi Ding, Feng Zhang, Shiyin Liu, Hongda Liu</i>	
Research on Anti-Interference Grounding Technology for Communication Systems in Wind Turbines	467
<i>Yang Gao</i>	
Research on the Improvement of New Energy Incentive Policies Under the Electricity Marketization Reform	474
<i>Yunling Sun, Hongwei Li, Henan Wang, Lei Jiao, Jilong Wu, Yantong Liu, Ying Zhou</i>	
Construction of Voltage-Power Model and Analysis of Power Balance for Grid-Forming Converters	480
<i>Bingwei Jiang, Hongzhi Liu, Baodi Ding, Xiaohui Qin, Yongning Chi, Shaobo Yang, Zhengji Meng</i>	
Game-Based Distributed Cooperative Optimal Operation Strategy for Regional Integrated Energy System	485
<i>Xianan Jiao, Le Du, Hedong Wang, Weiling Yu, Peihong Chen, Yunshou Mao</i>	
Evolutionary Game and Simulation Analysis of the Green Certificate Market under the Government Reward and Punishment Mechanism	489
<i>Tianyuan Wen</i>	
Moisture Condition Assessment of Oil-Immersed Insulating Paper Based on Frequency-Domain Dielectric Spectrum and Stirling Index Model	497
<i>Zhe Liu</i>	
Optimization of Torsional Vibration Control of Wind Turbine Transmission Chain	503
<i>Fei Li</i>	
Intelligent Safety Control Strategy for Multi-Point Maintenance in Active Distribution Networks with Coordinated Grid-Tied Switches	508
<i>Yong Peng, Yuhui Fan, Yinfei Du, Yanping Zheng, Bo Wu</i>	
Structural Impedance Reshaping Strategy for Suppressing Interactive Instability in Parallel Multi-Hybrid Control Converters System	512
<i>Lei Du, Xing Zhang, Xiangdui Zhan, Shuhong Li, Zixiang Sun, Yuan Zhuang</i>	
Te-Autoformer: Integrating Astronomical Features for Enhanced Tidal Energy Forecasting	519
<i>Yancheng Yang, Ying Hu, Liujing Chen, Hui Pan</i>	
Fuzzy-Enhanced Adaptive Model-Free Predictive Control for Robust Current Regulation in Three-Phase Grid-Connected Inverters	524
<i>Yugu Zhu</i>	

Clustering and Voltage Control Strategy for Remote Mountainous Distribution Networks Based on Comprehensive Indices	528
<i>Fangru Shi, Xiuhua Wang, Jianping Ye, Can Li</i>	
Transient Stability Enhancement of Renewable Energy Grids Incorporating Asynchronous Machines	532
<i>Boli Sun, Wanyi Zhu, Ying Li, Mengke Lu, Lin Ye, Wei Huang, Dong Xue, Xianye Guo</i>	
Toward a Low-Carbon Kitakyushu: Opportunities and Roadmap for Urban Renewable Energy Utilization	537
<i>Qianqian Lin</i>	
An Improved K-means Algorithm based on Density-Weighted Canopy for Typical Wind Power Scenario Extraction	542
<i>Dongliang Nan, Jian Ma, Yinzhang Peng</i>	
Research on the Design of Multi-Unit Power Take-Off System for Wave Energy Converter	546
<i>Yaqun Zhang, Guoyu Zhang, Zhaoji Lin, Zhenpeng Wang</i>	
RC-Informer: Reliable Photovoltaic Power Forecasting Under Extreme Weather Events	553
<i>Jiner Cheng, Qingshan Xu, Yongbiao Yang</i>	
Renewable Energy Output Variability and Grid Ramping Challenges in East China: A Statistical Analysis	557
<i>Yuchen Qi, Tianli Song, Yumeng Jiang, Linxin Miao, Ruanming Huang, Ziqiu Liu, Jingxuan Wang</i>	
Review of Novel Wind Power Generation and Key Technologies Exploring	562
<i>Shuai Feng, Bin Song, Shuju Hu</i>	
Research on Short Term Wind Power Prediction Method Based on VMD Decomposition and IPSO Optimization Transformer	568
<i>Yaguang Shi, Kenan Yang, Lijun Zhang, Shaopeng Wang, Kunpeng Wang, Bo Wang</i>	
Cost-Oriented Photovoltaic Power Forecasting for Economic Dispatch with Deep Learning	575
<i>Zhengliang Sun, Zhiqiang He, Yawei Zhou, Kaiming Zhang, Jingxuan Long, Can Wan</i>	
Voltage Risk Assessment of Wind Power Grid Connection Systems Based on CVaR	580
<i>Zhengyu Wang, Yingtong Liu, Fang Chen, Yanyi Fu, Ming Yang, Zhuhua Chen, Jie Jiang</i>	
Finite Element Analysis and Simulation of Wind Turbine Blade Icing	588
<i>Jing Luo, Bo Li, Xin Chen, Zhijia Zheng, Shuaige Zhu, Pan Long, Shiyang Zhou, Shuxin Tan</i>	
A Method for Isolated Renewable Energy to Participate in Primary Frequency Regulation Based on VSC-HVDC Inter-Station Communication	594
<i>Yinglin Liu, Jiaxian Li, Xinzhe Fan, Huan Xie, Tianxiao Huang, Jing Hao</i>	
Research on Self-Circulating and Forced-Circulation Evaporative Cooling Systems for Large Offshore Wind Turbines	599
<i>Tao Zeng, Wenbiao Hu, Chenyu Xie, Haifeng Wang, Yunyi Zhou, Huan Liu</i>	
Digital Twin and AI-Driven Data Augmentation for Defect Identification in Renewable Energy Equipment	604
<i>Qionglan Na, Peng Zang, Xin Li, Hongyan Jia, Yifei Wang, Yixi Yang</i>	

A Photovoltaic Power Output Forecasting Method Based on Dual-Domain Time–Frequency Fusion	611
<i>Siyang He, Zhengming Luo, Xin Du, Jianhua Zhang, Changzi Zhang, Jingrong Meng, Chunxiao He</i> <i>Yiliang Li</i>	
Research on Yaw Control Strategy for Wind Turbines Based on Variable Universe Fuzzy PID	620
<i>Congcong Zhang, Keqilao Meng, Shuju Hu, Bin Song, Guangxi Zhang, Di Zhao, Kai Zhao</i>	
Mamba-iT-ECA: A Hybrid Deep Learning Model for Photovoltaic Power Forecasting via Dual-Stage ECA Attention and State Space Modeling	626
<i>Nanguai Fan, Zhenbin Chen, Peixin Li, Ruorui Lin, Kanghui Zhu</i>	
Research on Photovoltaic Panels with Reflective Concentration and Diverted Cooling	630
<i>Cikun Fu, Yabin Wu, Yongqing Yu, Mengqi Liu, Fei Li, Qi Zhang</i>	
Simulation and Analysis on the Influence of Fault Clearing Time on Transient Overvoltage in Grid-Connected Wind Power Systems	634
<i>Caoyang Jia, Tao Xu, Lin Cheng, Jianan Mu, Ning Chen, Luming Ge, Xiong Du</i>	
Research on BiLSTM Photovoltaic Power Forecasting Method Based on Meteorological Clustering	639
<i>Ming Xu, Jiahan Wang, Ze Li</i>	
Adaptive Intelligence-Driven Virtual Synchronous Generator Control for Enhanced Transient Stability in Multi-Terminal HVDC Systems	645
<i>Qihang Sun, Xiangyu Li, Jiaqi Yao, Yuxing Dai, Kamal Al- Haddad</i>	
Review of Key Technologies of Ground Test System for Large-Scale Wind Turbine Drivetrain	649
<i>Shuju Hu, Bin Song, Shuai Feng</i>	
Research on Intelligent Data Query and Visualization for Renewable Power Generation Industry Based on Generative AI	655
<i>Baoxin Wang, Hao Feng, Ruoxing Zhang, Jianxin Duan, Shen Wang</i>	
Adaptive Multi-Model Weighting for Wind Power Forecasting Based on Proximal Policy Optimization	660
<i>Qike Bai, Peidong Xu, Zeyu Mu, Jun Zhang, Tianlu Gao</i>	
The Wind Power Ramp Event Forecasting Method Based on the Swing Door Trending Improved by the Bat Algorithm	667
<i>Deqing Zhang, Wenze Li, Jiaying Ren, Qiang Li, Shuo Yu, Siyu Wang, Haiyang Jiang</i>	
Cloud-Edge Collaborative Digital Twin Platform for Intelligent Management of Renewable Energy Systems	671
<i>Qionglan Na, Hongyan Jia, Xin Li, Peng Zang, Haiming Zhang, Yixi Yang</i>	
Multi-Hazard Dynamic Response of a Large-Scale Grid-Type Dual-Platform Offshore Photovoltaic (PV) Structure Under Wind-Wave-Seismic Excitations	679
<i>Shijie Guan, Xiaotian Liu, Yingchong Jiang, Jianqiang Yu, Chen Chen</i>	
Photovoltaic Identification for a Large Scale with High-resolution Satellite data and Hybrid CNN and Transformer Model	685
<i>Yuanhao Chen, Fuyou Tian, Xin Zuo, Da Zhang, Fujia Tian</i>	
Simulation and Analysis of Traveling Wave Protection on 800 kV ShanWu HVDC Transmission Line	689
<i>Zhihui Li, Fengrui Cheng, Junxuan Li, Hui Hou, Junjie Mo, Xixiu Wu</i>	

Analysis of Sequence Voltage for Single-Phase Broken Faults Without Earthing in Distribution Network	693
<i>Chenggong Chen, Yulong Chen, Can Li, Wei Zhao</i>	
Research on On-Line Monitoring Device for Errors of Capacitive Voltage Transformers	697
<i>Junyang Wang, Qingyong Zhang, Yan Chen, Xi Lan, Shijie Chen, Xixiu Wu</i>	
Application of TRILL-Enabled Switches in Digital Substations	702
<i>Xia Cheng, An Peng, Shaoqian Hu, Haochuan Ding</i>	
Extraction of Deterioration Characteristics of FOCT Under Extreme Environments	707
<i>Huizeng Tang, Guoqing Jiang, Bo Ma, Engang Wang, Xinglong Run, Junyang Wang</i>	
Analysis and Optimization of Single Point of Failure in the Instrumentation and Control Signal Circuit for Auxiliary Transformer Switching at a Nuclear Power Plant	712
<i>Wenlong Du, Yanan Chen, Lei Tang, Qinglian Zhu, Xiqing Hu, Hongbao Han, Huiyi Zhou, Jie Mi</i>	
Research on Partial Discharge Mechanism of AC Cable Buffer Layer Under Typical Defects	719
<i>Shucheng Yuan, Shanpeng Zhao, Shuqi Li</i>	
Partial Discharge Signal Denoising Method Based on SVD Clustering and MESOC Optimized VMD	724
<i>Qingdong Zhu, Xucheng Wang, Xuebin Lv, Jian Wang, Wenbing Zhu, Hang Zhou, Faye Zhang</i>	
Research on Abnormal Risk Prediction and Linkage Response Mechanism of Smart Grid Network Security Based on Transformer-GRU Fusion Model	728
<i>Yunhao Yu, Chameiling Di, Ruibin Wen, Boda Zhang, Xiang Guo</i>	
Multimodal Anomaly Detection Algorithm for Machine Rooms Targeting Equipment and Events	732
<i>Qian Dang, Yu Qiu, Bokai Li, Rui Su, Xinrui Liu</i>	
Transmission Line Fault Identification Method Based on Markov Graph and Multi-Source Information Fusion	736
<i>Jiale Yao, Shuhan Wang, Tengyi Wan, Xiongfen Zheng, Jian Wang</i>	
Risk Grading Assessment of Power Grids After Transformer Faults Based on Load Variation Relationship	742
<i>Jing Xu, Yu Fu, Shenghui Li, Tianfang Zhang, Shuxin Liu</i>	
Study on Hierarchical Relay Protection Skill Evaluation and Adaptive Assessment Method	746
<i>Kun Wang, Jiasen Zhang, Weixing Pu, Xin You, Jianxin Zhou, Suisheng Zheng</i>	
Defect Detection Method of Power Transformation Equipment Based on Multi-Scale Attention Network	753
<i>Guofeng Yang, Tie Li, Boyang Liu, Zhenyang Zu, Chong Cheng, Dongsheng Li, Sihan Du</i>	
Research on an Intelligent Invigilation and Real-Time Guidance Method and System for Relay Protection Remote Training	758
<i>Jiasen Zhang, Kun Wang, Weixing Pu, Wei Tang, Jianfeng Lu, Suisheng Zheng</i>	
Fault Location Method for Three-Phase Distribution Lines with Different Load Characteristics Based on Electromagnetic Time Reversal	767
<i>Chao Tong, Haiyang Huang, Junxi Wang, Yuting Liu</i>	

Research on the Operational Status Evaluation and Aging Mechanism Characteristics of GIS Basin Insulators	771
<i>Gang Chen, Minggang Li, Mingguang Yu, Mengqi Yu, Yixin Gao, Xiangyang Li</i>	
Key Technologies for Autonomous and Controllable Low-Carbon, High-Reliability Power-Edge Intelligent Computing Equipment Based on Single-Phase Immersion Liquid Cooling Thermal Management	777
<i>Ying Wang, Hanqin Peng, Pengfei Cui</i>	
Anomaly Detection Virtual Simulation System for Meter Installation and Connection: A GAN-Based Approach	783
<i>Wenming Wang, Genkuan Lian, Wei Tan, Jing You, Wanying Kang</i>	
Multi-Objective Optimization Design of Power Transformer Based on MOPSO-NSGA3 Hybrid Algorithm	788
<i>Zixing Li, Baidi Shi, Wei Xiao, Lei Zhang, Yuliang Hao, Liangxian Zhang</i>	
An Improved Transformer-Based Power Equipment Partitioning Scheme for Complex Substation Scenarios	797
<i>Jian Fu, Qing Chen, Changxing Cai, Xixi Zeng, Wen Zhu, Renzhi Huang, Liang Ouyang</i>	
A Fault State Perception Method for Distribution Networks Based on Signal Decomposition and Feature Fusion	802
<i>Jiazheng Sun, Hengyu Liu, Zhi Zhang, Gechen Bian</i>	
Mixed Integer Programming Reconstruction Method for Rapid Recovery of Fault Lines in Active Distribution Network	806
<i>Hengyu Liu, Jiazheng Sun, Zhi Zhang, Gechen Bian, Ning Zhang, Hongyu Liu, Xiaoyan Du, Xingyang Xu</i>	
Distribution Network Topology Construction and Multi-Source Stitching Based on Recursive Grouping and Graph Attention Network	810
<i>Heyi Zhang, Feng Zhao, Guaiqiang Wang, Shuo Zhang, Yana Zhu, Xuhong Qin</i>	
Research on Fault Reconstruction Technology for Distribution Networks With a High Proportion of New Energy	818
<i>Yuanlai Zhang, Ming Gao, Huan Yan, Jing Nan</i>	
GIL Ultra High Frequency Flashover Positioning Method Based on Multi Threshold Optimization and Probability Statistical Analysis	824
<i>Sen Liu, Dong Yang, Changchun Zhai</i>	
Hybrid Modular Multilevel Converter Fault Clearance Strategy Based on Adaptive Current Limiting	828
<i>Chunyan Li, Hao Zeng, Yu Yang</i>	
Online Identification of Inductance Based on Signal Injection for Permanent Magnet Synchronous Motor	832
<i>Zhirui Xu, Xiaohong Wang</i>	
A Method for Early Warning of Circuit Breaker Failure Risks Based on Cross-Attention Fusion of Multimodal Signals	837
<i>Zhenghao Luo, Haihong Wu, Yi Zhu, Rongge Wang, Wentao Ma</i>	
Research on Intelligent Fault Diagnosis Method of Multi-Source Monitoring Data of Hydropower Units Based on Time Series Transformer	841
<i>Bing Ouyang, Ruiqiang Shi, Feng Zhang, Qingsen Cai</i>	

Experimental Study on Corona Inception Characteristics of Aviation Cables Under Low-Pressure and Temperature-Coupled Conditions	847
<i>Hongxu Zhao, Xilong Li, Qidong Yan, Xudong Shi, Dongmei Chen</i>	
Optimization of Surge Arrester Configuration for Collector Lines in Mountainous Wind Farms	852
<i>Zhijia Zheng, Bo Li, Honghua Hu, Shiyang Zhou, Jing Luo, Langtao Liu</i>	
Remote Calibration Technology Solution for Conventional Substation Secondary Systems	857
<i>Ming Liu, Xiao Su, Huanghe Li, Hua Liao, Shixun Mo</i>	
A Remaining Useful Life Prediction Method for Insulated Gate Bipolar Transistors Based on Transfer Learning	862
<i>Yongyi Li, Wei Ge, Wenwei Wang, Jinsong Liu, Gaige Chen</i>	
Design of a Dissolved Gas Monitoring System in Transformer Oil Based on Broadband Optical Frequency Comb Spectroscopy	866
<i>Xiaoyu Li</i>	
Research on No-Load Partial Discharge Test Technology for Large Three-Phase Power Transformers and Research for Equipment System Production	870
<i>Wenlong Liao, Rui Liu, Yueping Yang, Xinghui Jiang, Ming Lei</i>	
Research on Pollution Identification and Cleaning Technology of Converter Valve Heat Sink Based on Convolutional Neural Network	876
<i>Shiwei Jin, Wenyu Liu, Meng Li, Nannan Feng, Xiaodong Sheng, Guangyao Tian</i>	
A Method for Determining Arc-Extinguishing Anomalies of Relay Protection Devices Based on Multi-Feature Rolling Analysis	880
<i>Chuchu Zeng, Haixia Ma, Ming Gao, Jiaxin Wu, Zhemin Zeng, Jiajun Zeng</i>	
A Transformer-Based Multi-Modal Fault Diagnosis Model for Power Metering Terminals	884
<i>Qiang Song, Jing Yang, Qingqing Fu, Shengchun Zhang, Ke Shi, Hua Zhang</i>	
Research on Intelligent Sensor Networking Method Based on 485 Bus	889
<i>Fuqiang Chen</i>	
An Intelligent Data Verification and Anomaly Diagnosis System for Motor Testing in Engineering Practice	893
<i>Guang Wang, Zhe Wang, Lin Chen, Shaohua Li</i>	
Ablation Mechanism in Moist Cable Buffer Layers for Structural Improvement	897
<i>Ting Zhu, Haidong Wang</i>	
YOLOv10-Based Real-Time Object Detection for Power Infrastructure Inspection Using UAVs	901
<i>Junjun Chen, Kai Jia, Ning Zhang, Minzhen Wang, Guangmin Gao</i>	
Sneak Circuit Analysis of Quasi-Resonant Flyback Converters Considering Parasitic Parameter	906
<i>Ru Yang, Jiaming Ou, Jianwei Chen, Weihao Fan, Zerong Lin, Hong Yang</i>	
Theoretical Study on Error Differences and Error Limits in Electric Energy Meter Verification under Low Power Factor Conditions	910
<i>Xingzhi Liu, Wenbo Yao, Yingying Cheng, Hua Wu, Yan Zeng</i>	
Study on the Influence of DC Contactor Mechanism Breaking Speed on Breaking Performance	919
<i>Chenghao Ma, Wei Duan, Jing Li</i>	

Current Sharing Measures for Asymmetrically Arranged DC Deep Well Ground Electrodes	923
<i>Lei Jia, Yongcong Wu, Shangmao Hu, Zhiwu Xiong, Qi Mei, Lu Qu, Hansheng Cai</i>	
PEMPE: Enabling PEM for Generalizable Power Equipment Image Segmentation via Efficient Feature Adaptation	929
<i>Jianjun Zhao, Wenheng Ma, Junyi Zhai</i>	
Kinematic Analysis and Trajectory Optimization of a 6-DOF Robotic Arm for Spacer Installation on High-Voltage Overhead Transmission Lines	934
<i>Xiaofa Zhou, Xiaofeng Wang, Yongming Xu, Boyang Sun, Yanfeng Xia, Diqing Fan</i>	
Research on Power Quality Analysis System of EMU Based on FPGA	941
<i>Jiale Zhang, Zhengwei Liu, Chao Guan, Dalei Ha</i>	
Impact of Co-Location of Deep Well Grounding Electrodes and Converter Stations on the Secondary System	948
<i>Shangmao Hu, Yongcong Wu, Lu Qu, Qi Mei, Yuan La, Gang Liu, Hansheng Cai</i>	
Capacity Planning Strategy for Photovoltaic-Storage-Charging Integrated Stations Considering Source-load Uncertainty and Battery Aging Characteristics	954
<i>Dali Huang, Shangkan Lin, Xiaobing Su, Ying Wang, Chenmu Li, Tao Wang</i>	
Research on Power Regulation of Variable-Speed Compressors in Compressed Air Energy Storage Systems Based on Dual-Modal Cooperative Control	961
<i>Xiankui Wen, Qiang Fan, Huayang Ye, Lingrong Pang, Shihai Zhang, Ke Zhou</i>	
Fuel Cell Thermal Management System Based on Model Predictive Control	965
<i>Jianguo Liu, Yupu Liu, Pan Zhao, Fuwu Yan, Hao Zheng, Youhua Wu, Chihua Lu</i>	
Operation Optimization Method for Wind-hydrogen Storage System Based On Improved Bat Algorithm	972
<i>Yitong Zhang, Peng Ye, Donghao Tao, Yingzhi Yuan, Xining Li, Ziwei Liu</i>	
State-of-Health Estimation of Lithium-Ion Batteries Using Partial Constant-Voltage Charging Data	976
<i>Feng Gao, Dehai Zhang, Ping Wang, Yujing Huang, Mingzhe Zhang</i>	
A High Robustness Underwater Wireless Power Transfer System	981
<i>Xinyu Tan, Zhihao Wei, Ya Liu, Chunfang Wang</i>	
Low-Temperature P2D Model of LFP Battery Based on Equilibrium Potential	985
<i>Jianqiang Kang, Jian Li, Jing V. Wang, Qian Wang, Zuxian Tan</i>	
Incentive Mechanism for Car Network Interaction Based on Master-Slave Game	990
<i>Daotong Xue, Yan Wang, Tieshi Li, Xiaolan Li, Fan Yang, Na Shao</i>	
Operation Optimization for Grid-Connected PV Farm Cluster with Shared Thermal Energy Storage	995
<i>Jie Wang, Lijun Xu, Yingchao Dong, Yue Liu, Xiaochao Fan, Yali Wang</i>	
Application of 5G Base Station Energy Storage Systems in Power Grid Regulation	1002
<i>Mingsheng Sun, Nanhao Cui, Xiufan Ma</i>	
A Joint Wind-Solar-Energy Storage Trading Strategy Model for the Spot Electricity Market Considering Power Grid Dispatching	1007
<i>Xihao Dou, Xiaoyu Pan, Yuqiong Guo</i>	

Protection Configuration Method for Pumped Storage Units Considering the Influence of Low-Frequency Current During Synchronous Startup	1012
<i>Wanchao Liu, Xiaoyu Liu, Zhende Zhao, Jiajia Sun, Xiaoxue Meng, Zechen Tan</i>	
Improved Adaptive Sliding Node Control Strategy for Switched Reluctance Motors	1017
<i>Zijian Han, Xintao Li</i>	
Optimal Configuration of Shared Energy Storage Considering Economic Penetration Rate of New Energy Sources	1022
<i>Changxing Cai, Song Zeng, Yu Zhong, Wen Zhu, Qing Chen</i>	
Design and Operation Strategy Analysis of Ice Storage System in an Office Building in Beijing	1028
<i>Fuzhen Zheng, Sijia Cheng, Adisak Sangsongfa, Noppadol Amdee</i>	
Study On Energy Storage Solution for Low-Voltage Regulation in Distribution Networks	1033
<i>Yingzhao Liu, Chensheng Wang, Honghai Niu, Man Zhang</i>	
Flexible DC Transmission System Cooperative Fault Ride-Through and Protection Scheme Based on Dynamic Modulation Ratio Correction	1037
<i>Chunyan Li, Luo Li, Huimin Huang, Pengda Chen</i>	
Development and Deployment of Standards for Solid-State Hydrogen Storage Based on Technologies	1041
<i>Jun Pan, Wei Wang, Xurui Huang, Dingrong Ou, Jiahang Zhang, Binbin He, Yanmei Yang</i>	
Study on the Internal Resistance Characteristics of Lithium-Ion Batteries Considering State of Charge	1046
<i>Bin Yi, Yu Zhang, Hui Ye, Cheng Chen, Aikui Li</i>	
TCM Control Strategy for 800V Three-Level Flying Capacitor Totem-Pole PFC	1053
<i>Ru Yang, Jianwei Chen, Jiaming Ou, Weihao Fan, Taoya Wang, Zuolian Liu</i>	
Subsidy Allocation Equivalence in V2G Systems: A Three-Level Stackelberg Game Approach	1058
<i>Fanghao Yuan, Na Li</i>	
Study on heat transfer characteristics during the melting process of triple-tube latent heat storage unit with snowflake-shaped fins	1063
<i>Shenao Li, Maocheng Tian</i>	
Study on the Influence of Flow Channel Size on PEMFC Durability under Multi-Field Coupling	1067
<i>Longkun Tan, Weiqun Liu, Jiahao Hu</i>	
Cost Allocation Method of Photovoltaic-Energy Storage System (PV-ESS) Systems Based on Data Envelopment Analysis	1071
<i>Mengqi Yu, Junlin Li, Hao Li, Yi Cao</i>	
Method for Analytical Solution of Heating Network Based on Spectrum Decomposition and Vectorization Calculation	1076
<i>Xuting Du, Kelun He</i>	
Quantitative Research on the Impact of Pumped Storage Plants Development on Renewable Energy Absorption and User Electricity Prices	1080
<i>Jingwei Zhang, Yushan Zhang</i>	
Operational Optimization and Benefit Analysis of User-Side Energy Storage in Electricity Markets	1085
<i>Hui Li, Cunbang Jia, Qi Wang, Qingping Qu</i>	

Light-Load Dual-Pulse Control Method for CLLC Resonant Converters	1091
<i>Hong Yang, Zhilin He, Ru Yang, Neng Li</i>	
Experimental Investigation into the Magnet Structure of Wave Energy Piston Generators	1096
<i>Ruzhen Liu, Jun Yu, Wenbiao Hu, Haifeng Wang</i>	
The Relationship Between Gas Flow Rate and Power Generation in Compressed Air Energy Storage System	1101
<i>Hao Chen, Nan Yang, Shanke Mou, Yiqing Xu, Xuanwen Zhu</i>	
Application Prospects of Power-Hydrogen-Power Distributed Energy Storage Based on Electrolyzers and Fuel Cells in Weak-Grid Areas of the Plateau	1106
<i>Linfeng Li, Zichen Shen, Jimin Zeng</i>	
A Coordinated Configuration and Evaluation Method of Multi-Type Energy Storage Considering Different Parameters	1111
<i>Cong Wang, Jiayi He, Wei Cui, Bingqian Tang, Guankun Zhao, Haotian Li</i>	
An Analytical Study of Energy Consumption for Multi-Architecture Hybrid Vehicles in Low State-Of-Charge Under Two Driving Conditions	1119
<i>Shuang Liu, Heng Guo, Kai Zhao, Zhang Gao, Hang Liu, Kun Zeng</i>	
Segmented Control Strategy for Flywheel Energy Storage Assisting Heat Energy Plants in Engaging in Primary Frequency Regulation of Power Grids	1125
<i>Jun Zhang, Peng Ye, Shixuan Lu, Lin Qu</i>	
Design and Simulation of an Ammonia Fuel Supply and Auxiliary System Based on MWORKS	1129
<i>Xiaoliang Dou, Yintao Li, Meng Cui, Xin Chen, Chuanrui Wang</i>	
A Safety-Enhanced Zebra Optimization Framework for Secure and Economic Scheduling of PV–Storage–Charging Integrated Systems	1134
<i>Siyang He, Weihua Xiang, Song Xu, Anke Huang, Ziwei He, Jingrong Meng, Chunxiao He, Yiliang Li</i>	
Phase and Amplitude Pre-Synchronization Control for Seamless Transition of Energy Storage Converters	1139
<i>Zecheng Zhao, Zhijian Feng, Zixiang Sun, Xinyuan Zhang, Qianlei Cao, Tao Zhao</i>	
Study on Multi-Objective Optimization Configuration Model of Wind-Solar-Storage Capacity Based on the Integration of Source-Grid-Load-Storage	1145
<i>Xiangfei Meng, Mu Li, Yan Wen, Rui Liu, Peng An, Xian Wang</i>	
Dynamic Collaborative Operation Strategy for Offgrid Large-Scale Wind and Solar Power Consumption with Multiple Electrolyzers	1151
<i>Jian Huang, Shiwang Yang, Li Wang, Mingxing Mei, Jianfang Ye, Zeyu Chen</i>	
Design and Applications of MOF-Based Solid-State Electrolytes in Lithium Batteries	1157
<i>Zehui Zhang</i>	
Study on the Threshold of Sturgeon Positive Response Under Uniform Current Field	1164
<i>Yongcong Wu, Shangmao Hu, Qi Mei, Lu Qu, Gang Liu, Hansheng Cai</i>	
Port Small Signal Modeling of M ³ C Considering Multi-Frequency Harmonics Composed of Two Fundamental Frequencies	1169
<i>Shangning Tan, Guanghui Li, Keke Liu, Dianqing Zhang, Ni Zhen, Haiyang Lu</i>	

Modeling Uncertain Decision Factors in Power Battery Recycling Using a Pythagorean Fuzzy Bayesian Network	1175
<i>Jia Li, Maokang Du</i>	
Study on Operational Characteristics of Integrated Carbon Sequestration and Energy Storage Systems: A Case Study of the Sleipner GCS Site	1180
<i>Hao Yu, Jianhua Guo, Xiaokang Zheng, Fan Liu</i>	
Characteristic Analysis of Seawater Hydrogen Production Incorporating Multi-Factor Modeling	1187
<i>Wu Lu, Jichao Ye, Gangxiao Wu, Hanbing Zhang, Fangzhou Liu, Dongchen Ma</i>	
Two-Stage Modal Decomposition-Based Optimal Capacity Allocation for Hybrid Energy Storage Integrating CEEMDAN and VMD	1191
<i>Peng Ye, Lin Qu, Shixuan Lu, Xuejie Wang, Huan Wang</i>	
Multi-Dimensional Constraints and Collaborative Optimization of Power Grid Energy Storage Planning and Layout Under the New-Type Power System	1195
<i>Jungang Wu, Shiling Zhang, Fan Ye, Ye Li</i>	
Applicability Analysis of Multi-Type Energy Storage Participating in Inertia and Primary Frequency Regulation Ancillary Services for Power Systems	1200
<i>Shijia Lu, Muiyang Liu, Yushan Liu, Junru Chen</i>	
Research on Integrated Design and Thermodynamic Performance of SOFC-GT Hybrid Power Generation System	1204
<i>Zilong Wang, Xiaochao Fan, Ruijing Shi</i>	