

2026 6th International Conference on Electronics, Circuits and Information Engineering (ECIE 2026)

**Suzhou, China
8-10 May 2026**

IEEE Catalog Number: CFP26AE2-POD
ISBN: 979-8-3315-8240-1



Copyright © 2026, 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:	CFP26AE2-POD
ISBN (Print-On-Demand):	979-8-3315-8240-1
ISBN (Online):	979-8-3315-8239-5

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

An Adjustable Threshold Voltage FeFET Based Multiplexer Design for Arbiter PUF	1
<i>Yuqiang Hu, Yinshui Xia, Lunyao Wang, Xiaojing Zha</i>	
A Low Input Bias Current Operational Amplifier Based on Digital Trimming Technology	5
<i>Hongyi Wang, Zhan Zhang, Bingjie Zhao, Shengwen Wu</i>	
A Timestamp Stability Test Algorithm and FPGA Implementation Architecture for High-Dynamic Two-Way Ranging Receivers	9
<i>Liancheng Xi, Chen Sun, Guangkai Hao, Bo Huang, Shangyan Li, Ye Xie</i>	
Design and Verification of a PSFP-Based Anomaly Detector for Switch Chips	16
<i>Zhen Ying, Yu Liu, Minhua Ren</i>	
A $40.9 \sim nV / \sqrt{\text{Hz}}$ Low-Noise Bandgap Reference with Low Temperature Coefficient	21
<i>Yan Qian, Bin Zhou, Yingqi Niu, Qi Wei</i>	
A High-Precision Phase-Locked Loop Architecture for Noise Suppression in Hemispherical Resonator Gyroscopes	27
<i>Mushui Zhang, Jiarui Cui, Tianjian Zhong, Jucong Chen</i>	
An Enhanced Gray Wolf Optimizer: Adaptive Tangent Flight Strategy	33
<i>Jin Zhang, Yan Liu, Xiaoxian Xie</i>	
Diagnose of Radiation Induced Single-Event Latch-Up in NOR Flash Using Backside Pulsed Laser	38
<i>Wei Cao, Qichao Zha, Jiancheng Li, Xin Li, Zhe Huang, Chunqing Yu, Chenyang Zhao, Haochen Li Lei Chen, Yimao Cai</i>	
A Reflection Amplifier Design for Passive IoT Communication Systems	43
<i>Jianzhi He, Dejian Li, Xianren Hao, Zhe Wang, Xuelian Gao, Zhaochen Yin, Minghua Zhao</i>	
A 6-B 2-GS/s Speculative Loop-Unrolled SAR ADC with Calibratable Multi-Input Comparator	47
<i>Chaorong Shen, Yunchu Li</i>	
DC Operating-Point Analysis of an MVS-Based Common-Drain Circuit with Source Load	55
<i>Jiongtao Zhou</i>	
Pre-Mapping Partitioning and Parallel Reinforcement Learning for Multi-Chiplet FPGA Synthesis	60
<i>Junhan Zhu, Jicong Fan, Zhongyan Xu, Zhiguo Yu, Xiaofeng Gu</i>	
ST-GAT: A Spatial-Temporal Graph Attention Network for Multi-Agent Reinforcement Learning-Based PCB Routing	64
<i>Senru Cheng, Qinghai Liu</i>	
Design of Fast Start-Up Crystal Oscillator	68
<i>Yuchang Xu, Zhengwei Huang</i>	
DLA-Net: Dynamic Label-Aware Network with Dual-Branch Feature Fusion for Mixed-Type Wafer Map Defect Recognition	72
<i>Fei Xiao, Yalin Song, Jun Chen</i>	
Tight-Coupling Design and Implementation of MACsec Protocol in 10 Gigabit Ethernet Bridge Chips	79
<i>Zichuan Zhang, Liang Yang</i>	

Design and Implementation of a High-Precision Train Speed Acquisition System Based on FPGA	91
<i>Meiyan Zhang, Zichen Zhu, Yunzhe Li, Ping Wang, Ke Tang, Chenghao Yang</i>	
A Global Clock Synchronization Approach for Multi-FPGA Simulation Platforms	95
<i>Lei Zhang, Jie Zeng, Xiaodong Zhang, Heng Lei</i>	
Design of Miniaturized Up/Down Converter Modules Based on Silicon MEMS Technology	100
<i>Enda Liu, Guangfu Li, Yanhong Gao, Yu Zhao</i>	
Design and Performance Study of a High-Efficiency Cooling System for a Data Acquisition Chassis Based on U-Shaped Heat Pipe Coupled with Forced Air Cooling	104
<i>Fangjie Liu, Dingwei Zhang</i>	
A 28.4-34.7 GHz Wide-Tuning VCO with Digitally Assisted Tuning in 28-nm CMOS	109
<i>Zelin Chen, Zhenyi Guo, Peimian Cai, Ning Cai, Xiongfeng Wang, Wugang Liao</i>	
Design of an Open-Loop Readout Circuit for a Capacitive MEMS Accelerometer Based on Programmable Compensation	113
<i>Xianzhong Wu, Chong Dong, Ting Fang, Zhihao Hu</i>	
A Fast Transient Response LDO Design with a Feed-Forward Ripple Cancellation Circuit	119
<i>Wenhao Li, Qianqian Lei, Jia Yan, Zicong Xu</i>	
Design of a Magnetic-Moment Signal Preprocessing Circuit for a Nuclear Magnetic Resonance Gyroscope	123
<i>Zhengguang Wang, Nan Liu, Peng Ding, Zhanqiang Ru, Zhizhen Yin, Ben Zhang, Tianyu Sun, Helun Song</i>	
Development of a Low-Power Indoor Inspection and Alert Robot Based on Multi-Modal Sensing	130
<i>Jinchen Ni</i>	
Signal Integrity Analysis of UCIe Interconnects Accounting for Bump Area Effects	136
<i>Xiao Cui, Haotian Li, Yan Luo, Junxiang Chen, Wang Jiang, Jinghui Wei</i>	
A Detection Method for Obstacles in Construction Sites Based on the Improved YOLOv8s	140
<i>Fengming Wang, Qingxi Liu, Yuting Huang, Chengye Liu, Xiangdong Li, Jinhuan Xu</i>	
Deployment and Optimization of Lightweight Neural Networks on Embedded ARM Devices	145
<i>Yiyang Guo</i>	
A Calibration-Free 10-Bit $100\text{ MS} / \text{ms}$ Asynchronous Sar Adc in 45 Nm Cmos	149
<i>Jiahuan Li, Roslina Mohd Sidek</i>	
Design of Continuous-Time Linear Equalizer Based on Gm-TIA Architecture	154
<i>Zhuo Chen, Ying Wang, Xingchen He</i>	
A Fully Digital Configurable FFE Design for Highspeed Serdes Transmitters	158
<i>Yanyun Yang, Yiming Shen, Liyongqi Zi</i>	
A 2.2–8.2 GHz Triple-Ring VCO with High Tuning Linearity and Phase Noise Optimization	162
<i>Yi Liu, Xiaofeng Yang, Yizhuo Han</i>	
Design of a Low-Phase-Noise 12 GHz LCVCO Circuit Based on a 55 NM Process	166
<i>Yizhuo Han, Ying Wang, Xiaofeng Yang</i>	
Design and Implementation of Vacuum Coating Control System	170
<i>Hui Zhang, Yuting Liu</i>	

A Design of High Precision Curvature Compensation Bandgap Reference	175
<i>Zhixiang Wang</i>	
Low-Drift Bandgap Reference With Multi-Branch Dynamic Compensation	179
<i>Biao Yan, Dawei Liu, Jianlin Fan, Wei Zhuang, Xingfu Wang</i>	
Design of a 0.2-30GHz Ultra Broadband Amplifier MMICs	184
<i>Haolin Guo, Xiaofeng Yang</i>	
A Workload Aware Dynamic Superblock Scheduling Method for SSD Performance Optimization	188
<i>Fengzhi Fu, Tai Guo, Dapeng Sun, Junpeng Fan</i>	
A Low-Noise Folded Cascode Operational Amplifier with Chopper Stabilization and Compact Active Resistors	193
<i>Yujun Zhang</i>	
Design of Blind Spot Monitoring System for Electric Forklift Operation Based on Single-Chip Microcomputer	197
<i>Zihao Liu, Hui Zhang</i>	
Optimization and Reliability Research on Three-Point Bonding Process Parameters	202
<i>Feifan Yan, Hailin Li</i>	
High-Precision Synchronization for HRG Time-Division Detection Using Farrow-Structured Fractional-Delay Filters	206
<i>Qi Wang, Weinan Xie, Lishan Yuan, Hanshi Li, Boqi Xi, Guoxing Yi</i>	
Design and Implementation of an FPGA-Based Real-Time Edge Detection System Using an Enhanced Sobel Operator	211
<i>Yanbo Liu, Feng Huo, Jiashu Zhang</i>	
Enhanced Beaver Behavior Optimization with Dynamic Parameter Tuning for Global Optimization	217
<i>Li Zhang, Yan Liu, Junwei Huang</i>	
A Multi-Level Dataflow Parallel Acceleration Framework for EPS-Based Equivalence Checking	221
<i>Ping Zhang, Hongxue Yang, Ying Liu, Lili Lei, Yongchang Zhang</i>	
A Hybrid Critical-Path and Load-Balance Scheduling Algorithm for Efficient Task-Parallel Execution on Multi-Core CPUs	226
<i>Haoran Wang, Xuerao Li, Ying Bai, Binglong Ji, Hongliang Wang</i>	
Electrostatic Discharge Failure Behavior of Asymmetric Top-Gate Carbon Nanotube Field-Effect Transistors	233
<i>Qinqin Wang, Zijie Zhou</i>	
Research on the Design of a Robot-Based Electric Control Pre-Charge System	237
<i>Dinghua Li</i>	
A Three-Axis Four-Channel Voltage-Controlled Current Source for Nuclear Magnetic Resonance Gyroscopes	242
<i>Zhengguang Wang, Nan Liu, Peng Ding, Zhanqiang Ru, Zhizhen Yin, Ben Zhang, Tianyu Sun, Helun Song</i>	
Parallel Transmission Semantic System Based on Kalman Filter	252
<i>Zixuan Wang, Jia Hou</i>	

An Integrated Sensing, Communication, and Security Scheme Over Multicarrier WDM Optical Fiber Link	257
<i>Jiajia Shen, Suiyao Zhu, Fengge Wang, Mingyi Gao</i>	
A Neural Network Based Trellis Coded Modulation Optimization Scheme	261
<i>Yu Wang, Meng Ma, Yuli Yang, Chaohai Du</i>	
Research on Neural Network-Based Digital Predistortion Technology for Power Amplifiers in 5G NR SSB Channels	267
<i>Ruiying Shi, Shikang Li, Ying Zhou, Jiahe Ye, Yingnan Zhang</i>	
Robust Positioning for mmWave Beam-Scanning in Diffuse Channels via Hybrid Optimization	274
<i>Zhuo Chen, Jide Yuan</i>	
Throughput Maximization for Pinching-Antenna System with Antenna Movement Delay	281
<i>Jingze Ding, Weihai Wang, Lifeng Lin, Zijian Zhou, Shihao Han, Tianhao Zhao, Bingli Jiao</i>	
Cross-Modal Framework for Small-Scale Object Contour Measurement Based on Fourier Descriptors	289
<i>Shufan Liu</i>	
Joint Optimization of Vehicle-Assisted Edge Computing Task Offloading and Resources Based on RSMA	293
<i>Yihan Wang, Peng Jiang</i>	
A Multi-UAV Mission Offloading and Trajectory Optimization Strategy With Low Latency, Low Energy Consumption and Stable Topology	297
<i>Peng Jiang, Yihan Wang</i>	
Design and Implementation of a TAS-CBS Hybrid Traffic Shaper in TSN	302
<i>Weiyao Wang, Yu Liu, Minhua Ren</i>	
A Self-Organizing Map-Driven Internet of Things System for Efficient Information Monitoring	308
<i>Tianbao Wu</i>	
FPGA-Accelerated Space-Temporal Graph Neural Networks for Adaptive Communication Optimization in Multi-Robot and UAV Swarms	312
<i>Chen Pan, Xuanyi Zhu</i>	
Research on SIC-Based Acquisition Algorithm for Multi-User Spread Spectrum Signals	317
<i>Yiyang Song, Wei Wang, Xiongfei Li</i>	
A Study on the Application of Deep Learning in Monitoring Security Threats in Satellite Communications	323
<i>Fengyi Tang, Liuli Wu, Jianhua Liao</i>	
Comparative Analysis of Redundant Architecture Design for Industrial Control Networks	328
<i>Jin Zhang, Meiyang Song, Haowei Sun, Yile Zhang</i>	
Outage Performance for NOMA-Based UAV-Assisted Hybrid RF-UWOC Relay Systems	335
<i>Yuxin Wang, Yueheng Li</i>	
Ergodic Capacity Analysis of NOMA-UWOC Systems Over Composite Fading Channels	339
<i>Xiaoge Tian, Yueheng Li</i>	

Multi-Agent DRL for Lifetime-Oriented Joint Trajectory and Power Optimization in Multi-UAV Green Communications	343
<i>Yang Yu, Yinchao Ge, Jia Chen, Benjun Liu</i>	
Matrix Transformation-Based DOA Estimation Under Gain-Phase Errors	348
<i>Lin Yang, Sujie Wu, Zihao Pan, Guang Yang, Yuming Tang, Daoxing Guo</i>	
The Study of Outage Probability Performance in a Parallel Relay UWOC System with Amplify-and-Forward Mechanism Under Mixed Fading Environment	353
<i>Jiajun Zhang, Yueheng Li</i>	
A Semantic-Aware Resource Allocation Framework for RIS-Assisted 6G Vehicular Networks	357
<i>Chunran Zhu</i>	
A Wave-Domain Preconditioned Algorithm for FMS-Assisted Localization	362
<i>Guangzhi Sun, Yuehui Zhang, Jiguang He, Chu Luo</i>	
Beamforming and Phase Design for UAV-STAR-RIS Assisted Covert Multicasting Networks	368
<i>Xinzhuo Yang</i>	
Congestion Control Based on Multi-Agent Deep Deterministic Policy Gradient	374
<i>Jin Chen, Xuan Zhou, Rulong He, Haitao Lin, Yun Li</i>	
Multi-Task Heterogeneous Network Service Collaborative Optimization: A Dynamic Resource Scheduling Method Based on Graph Neural Networks	383
<i>Yinhai Lu, Rui Shi, Yue Sun, Jiyong Zhu</i>	
Comparative Study on Detection Algorithm Performance of MIMO Systems Under Rayleigh Fading Channels	387
<i>Jinyao Xu</i>	
ARAIM Subset Reduction Algorithm Based on Geometric Perception and Risk Feedback	392
<i>Hongyue Wu, Dan Han</i>	
An Automatic Modulation Recognition Method Based on Multi-Domain Feature Fusion and Self-Attention Mechanism	396
<i>Hao Huang, Longlong Shuang, Yanping Li</i>	
Ray-Tracing-Based Characterization of DME Adjacent-Channel Interference on LDACS in a Typical Plain Scenario	404
<i>Rong Zhang, Haitao Liu</i>	
Analysis of Audio Noise Characteristics and Design of Adaptive Digital Filtering Noise Reduction System in a Studio Environment	408
<i>Yue Sun, Jiyong Zhu, Yinhai Lu, Rui Shi</i>	
Grid-Off Super-Resolution Parameter Estimation for AFDM-ISAC Systems	412
<i>Shuyan Ni, Jieyige Ren, Tuofeng Lei, Jianqi Meng</i>	
Lightweight LPI Radar Waveform Recognition Using Choi-Williams Distribution and Depthwise Separable Convolutions	418
<i>Qing Jiang</i>	
Modeling and Performance of Aviation VHF Link Control (AVLC) Protocol for VDL Mode 2 System	423
<i>Yongzhang Dai, Haitao Liu</i>	

Multi-Dimensional Identifier-Driven eSIM Provisioning and Transport Optimization Architecture for Heterogeneous Consumer Networks	428
<i>Zhenyu Wang, Jiajun Li, Lili Yi, Haitao Wang</i>	
Guided-Bee ABC for Multi-UAV Search and Emergency Supply Delivery in Mountainous Terrain for Emergency Grid	433
<i>Youfang Gu, Kunmin He, Yu Song, Ronghua Zhang, Jun Cen, Yuxiong Bao, Yan Chen, Wenjuan Tao</i>	
<i>Changxin Liu, Junyu Li</i>	
Design of Data Link Layer Protocol for Lunar Surface Ad Hoc Networks	439
<i>Shuo Gao, Xia Zhang, Jiaming Wang, Chen Sun</i>	
Dynamic Guided Autoencoder With Spatial-Spectral Attention for Hyperspectral Image Target Detection	443
<i>Shiyuan Wang, Jihui Geng, Fengming Wang, Yanbo Zhang, Chengye Liu, Xiaobin Sun, Xiangdong Li</i>	
<i>Jinhuan Xu</i>	
Deep Learning-Based Hyperspectral Remote Sensing Inversion of Chlorophyll-a Concentration	448
<i>Jihui Geng, Fengming Wang, Kai Wang, Shiyuan Wang, Xiangdong Li, Yue Liu, Jinhuan Xu</i>	
Minimum Dispersion Criterion for Narrowband Interference Suppression in Wireless Communications	453
<i>Yiming Li, Yixuan Wu, Yan Wu</i>	
A Multi-Task Transformer-LSTM with Dual Attention for Blind Source Separation in Non-Cooperative Single-Channel Communications	457
<i>Yiming Pan, Xuefang Zhou</i>	
Neighbor-Attention Federated DQN for Substation Wireless Routing Under EMI	466
<i>Maoheng Jing, Wenhao Lu, Xiaoxia Li, Shuai Yan, Bingyuan Tan, Shuai Shao</i>	
Reinforcement Learning-Based Phase Control Optimization of Intelligent Reflecting Surfaces for 6G Wireless Communications	471
<i>Guansan Zheng, Lei Yuan</i>	
Embedded Real-Time 2D Localization Method Based on Bluetooth AoA	475
<i>Yang Zhang, Hu Ai</i>	
Research on Short Term Power Load Forecasting Method Based on Large Language Model	480
<i>Jing Ke, Zhongan Yu, Zihao Deng, Fengsheng Chen</i>	
Semi-Supervised Target Channel State Information Acquisition via Feature Learning in ISAC	484
<i>Xinli Feng, Hui Zhao</i>	
A Modeling Method for Rapid Path-Loss Evaluation in Wireless Communications of Extravehicular Payloads on the China Space Station	490
<i>Teng Wang, Lei Zhang, Qilin Zeng, Hong'en Zhong, Ronghan Qin, Yiping Wu, Kuanyu Gao, Xiaohua Wang</i>	
Secondary Denoising Method for Ship Signal	503
<i>Wenchao Jing, Yuxing Li, Qingxu Wang</i>	
Towards Robust Decision-Making for Autonomous Driving Under Perception Uncertainty and Execution Disturbance	507
<i>Zhiyuan Yue, Huiyuan Xiong</i>	

Intelligent Electronic Sensor Network Optimization Algorithms for the Internet of Things	512
<i>Yu Zhang, Hao Wang, Fuzhe Xie, Bingyu Hu</i>	
Communication Link Simulation and Verification Driven by Virtual-Real Fusion Under System-of-systems Confrontation	518
<i>Zhongchang Gao, Hongdong Qu, Min Tang</i>	
Fast Synchronization Technology of Short Code DS/FH Hybrid Spread Spectrum for Satellite Burst Communication	523
<i>Zixuan Chen, Yu Wang</i>	
Multi-Objective Water-Filling Algorithm for Joint Power and Bandwidth Allocation in High Throughput Satellites	530
<i>Shitian Han, Tengfei Hui</i>	
A Content-Level Authentication and Traceability Method for Emergency Broadcasting Against Anomalous Broadcasting	537
<i>Jiarui Li, Xiaohui Huang, Shaofei Liu, Hao Shi, Tiantian Xiao, Pengfei Wang</i>	
Link ID Selection Method Based on Channel Characteristics of VDE-SAT	546
<i>Ran An, Yubi Qian, Dongping Cao, Shijie Rong, Huihui Yin</i>	
Radar HRRP Open-Set Recognition via Synergistic Hypersphere Aggregation and Reciprocal Points Repulsion	550
<i>Haochen Dong, Chen Li, Pengcheng Guo</i>	
Container Cluster CPU Anomaly Spike Prediction Using Prophet and LSTM Hybrid Forecasting Model	556
<i>Xiaoming Cao, Libin Yin, Yuanyuan Ouyang, Zhuobiao Zhang</i>	
Operational Decision Dashboard Indicator System Construction Using Random Forest Feature Importance Driven Selection	561
<i>Hang Yang, Jie Zhan, Hui Yu, Wencheng Li</i>	
Research and Performance Verification of Spatial Adaptive Anti-Jamming Algorithm for Satellite Communications	567
<i>Peng Gao, Tengfei Hui, Xu Zhang, Shitian Han</i>	
Risk-Calibrated Uncertainty-Aware Edge-Cloud Scheduling for Reliable Multi-Tenant ML Inference	573
<i>Xinxin Huang, Tianjian Xia, Yihao Zhou, Jiajing Liao, Lu Ren, Feng Chang</i>	
Radar Signal Modulation Recognition Based on Self-Attention Augmented Multi-Scale Convolutional Network	579
<i>Yuncong Guo, Qilun Yang, Wei Zhao</i>	
Analysis of Electromagnetic Interference Malfunction in Liquid Crystal Display Screen on Medium-Low Speed Maglev Trains	583
<i>Yutao Tang, Shuxian Wang</i>	
Ceramic Waveguide for Electromagnetic Field Amplification	589
<i>Kai Huang, Xi Zhu, Yanjun Chen, Binbin Zhang, Haibo Chen</i>	
Broadband 1-Bit Reflective Programmable Metasurface	594
<i>Yu Han, Bingquan Xu, Zongru Li, Jiawei Liu, Miao Chen, Jianying Wang, Peng Han</i>	

Design of a Triple-Beam Vortex Generator Based on Geometric Phase Metasurface at Terahertz Frequencies	598
<i>Di Du, Shiyi Xiao</i>	
A Design of a Magnetostrictive Shear Horizontal Guided Wave Transducer Based on the Reversed Wiedemann Effect	603
<i>Yang Han, Peng Fei Liang, Xiao Rui Liu, Qin Wang</i>	
Method for Reducing Acoustic Interference Caused by Motor Harmonics Based on Sampling Aliasing Filtering	610
<i>Jiangong Zhang, Yiqun Zhai, Li Li</i>	
A Multifeed Circularly Polarized Folded Transmitarray Antenna with Low Beam Scanning Loss	617
<i>Yaping Huang, Min Wang, Jinhan Liu, Kejie Lv, Wen Wu</i>	
A Novel Approach to Planar Array Antenna Synthesis Based on Chinese Pangolin Optimizer	621
<i>Bin Liang, Yan Liu, Wenhui Dong</i>	
Chaotic Lévy-Enhanced Moss Growth Optimizer for Sparse Planar Arrays	625
<i>Wenhui Dong, Yan Liu, Bing Liang</i>	
Optimization of X-Band Rectangular Microstrip Patch Antenna Based on Centered Collision Optimizer	629
<i>Xiaoxian Xie, Yan Liu, Jin Zhang</i>	
Design and Simulation of a Novel Superjunction MOSFET with Superior Reverse Recovery Performance	635
<i>Shiguang Shang, Jintao Ma, Yijie Ma, Jiarui Wei</i>	
Damage Characteristics of Electromagnetic Railgun Under Pulsed High Current	639
<i>Jiajing Xiao, Tao Shu, Jiale Li</i>	
Design and Performance Analysis of Satellite Navigation and Positioning Antennas Based on Miniaturized Structures	644
<i>Wei Chang, Jingsong Li, Tushun Huang, Bingqi Liu</i>	
Research on Wide-Range and High-Precision Metering Technology for Ultra-Fast Charging Facilities in New Power Systems	649
<i>Ting Zhao, Xiaodong Wang, Honglang Jiang, Shuang Wang</i>	
A Low-Profile Wideband Pattern Reconfigurable Antenna Based on Dipoles for UAV Communications	656
<i>Lijing Qin, Yanzhe Wang, Chuang Wang, Bo Li, Wenquan Cao</i>	
Optimization of a Focused Proton Microbeam Lens System Based on a Multi-Objective Algorithm	661
<i>Kunlong Li</i>	
Topology Optimization Design and Experimental Validation of a Flat-Wire IPMSM for EV Traction	666
<i>Julian Zhu, Xin Zeng, Shichuan Yang, Yongyuan Wang</i>	
Research on Reliability Modeling and Failure Mechanisms of Power Electronic Devices	674
<i>Xingzhi Lu</i>	
Dual-Band Bandpass Filter Based on Multimode Resonator Loading Open Stubs with Wide Stopband	678
<i>Peng Tang, HaoXiang Chen, ShiYu Yin, Yang Yang, Fei Shen</i>	

Compact High-Isolation High-Gain All-Metal Dual-Polarized Array Antenna	682
<i>Minqi Yue</i>	
Comparative Study on Remaining Useful Life Prediction of Domestic and Imported Electrolytic Capacitors Based on a Power-Function Nonlinear Wiener Process	686
<i>Shaoqian Zhang, Jiantao Zhang, Jun Huang, Chunbo Zhu</i>	
Study on the Precise Distribution of Reactive Power in Parallel Inverters	693
<i>Chuanyu Tian, Yuanchun Zhou, Guangxu Zhou, Wenguang Tian, Guotao Zhao, Qingjie Yang</i>	
<i>Lanfang Chen, Xiaobo Zhang</i>	
An Improved-Droop-Control-Strategy Based-Current Sharing Method of Parallel-DC/DC-Converters	697
<i>Yuanchun Zhou, Chuanyu Tian, Guangxu Zhou, Mengmei Zhu, Xiaobo Zhang, Huafeng Zhang, Yujie Chen</i>	
<i>Ruixing Jia</i>	
Electric Field Modeling and Separation Performance Simulation of a Square Ion Mobility Spectrometer Based on Continuous Potential Boundaries	701
<i>Xingjian Lu, Liang Guo, Lanchang Xing, Mengjing Zhang</i>	
A Parametric Study of Microwave Detection of Metallic Foreign Objects on Coal Conveyor Belts	705
<i>Yingchi Zhang, Haoyu Tian, Feng Gao, Xingwei He, Xubing Lei, Shuai Li, Weitao Liu, Zhan Wang</i>	
Speed Control of Synchronous Reluctance Motor Based on LQI and Disturbance Observer	710
<i>Huan Sun, Xiao Liu, Baojiang Sun, Xiaoyue Dou, Zihan Wang</i>	
Research on Sensorless and Model Predictive Compound Control Strategy of Permanent Magnet Synchronous Motor	716
<i>Zihan Wang, Xiao Liu, Huan Sun, Xiaoyue Dou, Baojiang Sun</i>	
Microwave Power Transmission Transmitting System and High Power Amplifier Design	722
<i>Zhi Liu, Di Wang, Shanshan Fu, Fulin Du</i>	
A Broadband and Tunable Multifunctional Terahertz Polarization Converter Based on Graphene Metasurface	726
<i>Jing Zhao, Ling Fan, Zun Ji, Kai Lian</i>	
Asymmetric Virtual Excitation Reshaping for Seamless Fault Ride-Through of Grid-Forming Inverters in Weak Grids	730
<i>Zixuan Liu, Yu Ji, Xin Gu, Butian Chen, Xinghao Feng, Minghao Lv, Cheng Zhang</i>	
Design of an X-Band Frequency-Tunable Sled Microwave Pulse Compressor	734
<i>Jiaxi Liu, Qiang Zhang, Yunfei Sun, Jiaqi Tan</i>	
Adaptive Coordinated Current Control Strategy for PMSG LVRT Considering PLL Deviation in Weak Grids	739
<i>Xinghao Feng, Yuhao Zhu, Zixuan Liu, Butian Chen, Xin Gu</i>	
Direction-Aware Dynamic-Weight Small-Vector Allocation for Neutral-Point Balancing in Three-Level NPC Energy Storage Converters	743
<i>Xindi Yang, Xiaoming Ren</i>	
Design of a Four-Phase Interleaved Parallel Bidirectional Buck-Boost Converter for Low-Voltage High-Current Energy Storage Applications	747
<i>Xiaoming Ren, Minlong Li</i>	

Quantile-Corridor Rolling MPC for Coordinated Charging of PV-Integrated EV Parking Lots	752
<i>Butian Chen, Ting Yang, Xin Gu, Zixuan Liu, Xinghao Feng</i>	
Research on Active Disturbance Rejection Control for Switched Reluctance Motors Based on a Chaos-Adaptive PSO-DE Algorithm	756
<i>Xiaoyue Dou, Baojiang Sun, Zihan Wang, Huan Sun, Chao Feng</i>	
Research on Homogeneous Fusion Splicing Technology of Five-Tube Nested Nodeless Hollow-Core Anti-Resonant Fibers	763
<i>Entao Chu, Wenhua Gu, Lei Wang, Zhouyu Xu, Xixi Huang</i>	
Design of a Distributed Lightweight Battery Management and Protection System for Small-Scale Lithium-Ion Battery Packs	768
<i>Chengjie Wu, Xiaoming Ren</i>	
Partially Coherent FDA for Practical Target Range-Angle Decoupling	772
<i>Ben Zhang, Yongsheng Zhang, Feng He, Lei Yu</i>	
Two-Stage Day-Ahead and Intra-Day Voltage Optimization Control of Active Distribution Networks Based on Deep Reinforcement Learning	777
<i>Hongsheng Jiang, Shanglin Zhao, Rumeng Du, Yujie Zhang, Yubei Zheng, Teng Xiong</i>	
HVDC Transmission Line Protection Scheme Based on Stockwell Transform and REE	782
<i>Bohao Yang, Kunlun Han, Rongrui Wei</i>	
Adaptive DC-Link Voltage Coordinated Inertia-Damping Control for Grid-Forming Photovoltaic Systems Under Irradiance Disturbances	787
<i>Qian Yan</i>	
Research on Energy Fusion Charging Technology for Heterogeneous Bus in Energy Storage Systems	791
<i>Fengjin Chen, Xiaoming Ren</i>	
A Pulse-Width-Tunable Low-Frequency High-Intensity Magnetic Field Interference Source	796
<i>Qihan Dong, Xianfei Chen, Yicheng Lu, Junfeng Chen</i>	
Transient Stability Enhancement of Energy-Lean Grid-Forming SVGs Using Asymmetric Large-Signal Constraints	800
<i>Xin Gu, Yu Ji, Zixuan Liu, Butian Chen, Gongxi Guo, Yuan Cong, Liming Chen, Xinghao Feng</i>	
Flexible Resource-Based Collaborative Load Management for Multi-Building Systems	804
<i>Yucong Dai, Shitong Bi, Mingming Mao, Cheng Zhang</i>	
Design and Simulation Analysis of a Self-Cooling Integrated Auxiliary Power Box for Rail Transit	811
<i>Dongdong Zhang, Chuanlei Xu, Qisen Li, Zhiyong Wang, Bo Yin</i>	
Fault Location for Flexible DC Transmission Lines Based on COA-VMD-HT	815
<i>Chuxun Yao, Kunlun Han, Zhenyu Li</i>	
Dual-End Fault Location Method for Flexible DC Transmission Lines Based on MOPSO-VMD-TEO	819
<i>Jingyuan Bi, Kunlun Han, Qinwei Zhu</i>	
A High-Performance Active Inductor-Based Band Reject Filter with Small Size, Low-Noise, Highly Reconfigurable Center Frequency	824
<i>Jian Cao, Wanrong Zhang, Weicong Na, Dongyue Jin, Hongyun Xie, Xida Deng, Hanmin Chen</i>	

Design and Implementation of a Compact Scalar–Vector Collaborative System for Radiated Noise Measurement	828
<i>Shengxue Chen, Zhi Zhong</i>	
Single-Machine Equivalent Modeling of Grid-Forming Energy Storage Stations	833
<i>Bohan Li, Zehua Wang, Jiaoxin Jia, Guang Cai, Shurui Zhang</i>	
Demonstration of 650 V SiC Semi-Superjunction Trench Gate MOSFET Based on Channeling Implantation and Epitaxial Process	839
<i>Yangyang Wu, Wei Chen, Zhijie Cheng, Yuan Jun, Guoqing Xin, Zhiqiang Wang</i>	