

《电工电能新技术》2021年题目索引 (2021 Index)

(第40卷 Vol. 40, 总第211-222期 Issue 211-222)

总期号 首页

专家论坛

基于电容加压/续流回路的直流开断原理与仿真 肖立业, 张志丰, 滕尚甫, 韦统振, 等 211 1

论文报告

±100 kV/1 kA 超导直流输电系统建模与短路特性分析	张 建, 丘 明, 陈盼盼	211	9
基于扇区平滑过渡三电平整流器中点电位滞环控制研究	马 明, 肖宏伟, 王 玲, 雷二涛	211	17
基于差分-公共功率与滑模控制的直流互联交流电网振荡抑制	李 清, 彭光强, 熊林云	211	25
脉宽调制激励下电工钢片动态磁滞特性测量与模拟	刘 泊, 张殿海, 韩 宇, 薛 倩, 等	211	34
低电容用量高纹波 MMC 的三次谐波电压注入方法	孟经伟, 周月宾, 张 楠, 宋 强	212	1
计及系统级控制的柔性直流牵引供电系统潮流计算方法	席嫣娜, 王方敏, 李占赫, 李笑倩, 等	212	9
考虑换流器外环特性的双馈风电场并网稳定性分析	孙 瑶, 韩民晓, 黄永宁, 张汉花	212	15
正弦与非正弦激励下高频变压器磁心损耗计算与验证	刘福贵, 赵 琳, 蒋嘉诚	212	25
一种基于冻结磁导率的高频变压器直流偏置电流计算方法	田 煦, 金 平	212	33
高压并联电抗器器身-油箱间振动控制与仿真分析	田 一, 刘主光, 由伟翰, 易永利, 等	212	41
基于分轴燃气轮机发电的混合动力系统建模与分析	李鸿扬, 温旭辉, 王又珑	212	50
基于自适应无迹卡尔曼滤波的锂电池荷电状态估计	董祥祥, 武 鹏, 葛传久, 金俊喆, 等	212	58
间接矩阵变换器-双异步电机调速系统的简化模型预测控制	梅 杨, 穆希旺	213	1
源荷储协调的冷热电综合能源系统随机优化运行	祁晓敏, 孔 力, 熊 煌, 裴 玮, 等	213	10
光热电站的高比例可再生能源系统混合储能容量优化配置方法	周 平, 孙 悅, 康 朋, 马静波, 等	213	22
基于合作博弈的多微电网系统灾后恢复决策模型	姚维强, 周 健, 时珊珊, 高仕林, 等	213	32
拉紧螺杆对并联电抗器的振动影响分析	闫荣格, 谷浩伟, 张晓杰, 赵文月, 等	213	39
有源中点钳位型三电平逆变器开关器件损耗均衡调制方法	罗 龙, 李耀华, 李子欣, 赵 聰, 等	214	1
储能用宽范围输入改进型串联 Z 源逆变器	阚志忠, 姜春鹏, 何 浩, 徐菁远, 等	214	10
一种双输入高升压比直流变换器	林思圻, 林国庆	214	17
新型配电网同步相量装置测试与实际电网应用	朱 征, 李依泽, 顾黎强, 陆 超, 等	214	27
基于微增率下垂的交直流混合微电网分散式经济运行控制	李子衿, 杨鹏程, 郝 良, 于 森, 等	214	35
电动汽车无线充电系统的有源磁屏蔽研究	蒙金雪, 张玉旺, 郭彦杰, 王丽芳	214	44
一种新型空间无线电能传输系统耦合机构设计	蔡智斌, 张国荣, 徐晨林, 高 凯, 等	214	52
基于微型燃气轮机发电的混合动力系统小信号稳定性分析及前馈补偿控制	李鸿扬, 温旭辉, 王又珑	214	59
基于干扰观测器的多直线电机终端滑模交叉耦合控制	丁 波, 颜文旭, 倪宏宇	214	68
面向可靠性评估的两阶段聚类风-光-荷典型场景生成方法	李春燕, 赵晨宇, 胡 博, 陈正宇, 等	215	1
电-气多能源微网能流差异化求解	彭寒梅, 刘健锋, 李才宝, 苏永新, 等	215	10
电网故障下永磁直驱风电机组机电暂态全过程等值建模方法	杨畋才, 余建峰, 欧阳金鑫, 夏翰林, 等	215	22
自适应奇异值分解局放信号降噪方法	孙传铭, 魏 隆, 张梦楠, 刘 凯, 等	215	34
基于自适应粒子群优化 LSSVM 的变压器油中溶解气体浓度预测	连文莉, 耿 波, 周 舟, 司刚全	215	42
基于小波能量熵的配电网电压暂降源定位方法	胡安平, 姜玉洁, 陶以彬, 孙浩天, 等	215	50
基于高斯混合分布的混合储能电动汽车 DC-DC 变换器的优化设计	黎浩庭, 王学梅	216	1
电动汽车负荷虚拟同步机参与电网频率调节的充放电策略与实现	李秉宇, 杜旭浩, 曾四鸣, 尹利科, 等	216	11
考虑功率裕度的 MMC-MTDC 改进下垂平坦控制策略	宋平岗, 杨长榄, 龙日起, 雷文琪, 等	216	22

基于局部拓展理论的直流多馈入系统分区方法	曹 昕, 韩民晓, 马立民, 郭知非, 等	216	32
电池储能参与电网一次调频的优化综合控制策略	孟高军, 张 峰, 赵 宇, 吴 田, 等	216	43
退役锂电池梯次利用主动均衡方法研究	杨 扬, 谢长君, 朱文超	216	50
一种混合开关电容和开关电感的新型均衡电路	范元亮, 吴 涵, 徐梦然, 黄建业, 等	216	57
低开关频率的五相永磁同步电机有限集模型预测电流控制算法	张 靖, 武雪松, 李婷婷, 余 彬, 等	216	64
基于光伏有功备用的电网预防-紧急协调控制方法	杨哲涵, 熊小伏	217	1
基于目标级联分析法的区域源网荷储系统日前运行优化	罗首权, 丁孝华, 韩 锯, 蒋国栋, 等	217	11
温度梯度下直流 GIL 三支柱绝缘子电荷积聚对电场分布的影响分析	胡 琦, 李庆民, 刘智鹏, 刘 衡	217	20
基于反射系数谱的 XLPE 电缆水树缺陷定位方法	周 漢, 王鑫源, 欧阳希, 姜 茜	217	28
级联 H 桥分布式潮流控制器的电压、阻抗和功率等值建模	管敏渊, 沈建良, 楼 平, 金国亮, 等	217	40
复杂电流波形下软磁复合材料磁特性的测试	崔一帆, 杨庆新, 李永建	217	48
基于多智能体强化学习的多园区综合能源系统协同优化运行研究	杨 照, 黄少伟, 陈 颖	218	1
新型 RISE-LADRC 逆变器电压控制策略	刘 勇, 沈贵妃, 章 耷, 盘宏斌, 等	218	11
基于双耦合电感高增益二次型 Boost 变换器	田东豪, 荣德生	218	22
电动汽车充电用 LCL 型 PWM 整流器输出阻抗分析及稳定性改善方法	常 征, 曾四鸣, 李秉宇, 杜旭浩, 等	218	32
基于谐波磁链偏差的多模式调制切换策略研究	周 亮, 苏和鹏, 韩金洋	218	43
500 kV 单相变压器直流偏磁下损耗及绕组热点温度的计算分析	李明洋, 张俊双, 李海明, 王泽忠, 等	218	51
基于随机响应面的电-气互联系统概率最优能流计算方法	杨 鑫, 任洲洋, 郭 冰, 丁 岩	219	1
基于改进锁频器频率偏差检测的光伏逆变器快速频率响应控制	宫 成, 王 卫, 赵正奎, 董 楠, 等	219	10
用于配电网过电压平抑的分布式光伏多模态协调控制算法研究	胡文平, 胡雪凯, 王 蒙, 曾四鸣, 等	219	18
波动载荷下弓网摩擦振动特性分析与建模	曲春利, 陈忠华, 任 仁, 高浩宁, 等	219	29
基于 IBBOA 优化 BP 神经网络的变压器故障诊断	赵玲玲, 王群京, 陈 权, 汪 伟	219	39
基于复合式增益配置的双频无线电能传输系统	朱哲辉, 周 玮, 张滨山, 麦瑞坤, 等	219	47
500 kV 充油海底电缆过负荷能力分析	陈 玉, 李涵之, 姚 凯, 贾 峰	220	1
换流变压器基波及谐波作用下损耗分布与特性的研究	王昊天, 李军浩, 宋颜峰, 孙 源, 等	220	10
计及金属护套环流影响的高压电缆温度场及载流量的数值分析	陈 悅, 杨仕友, 覃 喜	220	18
基于内部能量管理和外部路径规划协同的水下无人航行器能耗优化	侯 慧, 陈洋洋, 谢长君, 吴细秀, 等	220	27
10 kV 交流 XLPE 电缆熔接头的直流电场仿真分析	王启隆, 王国海, 王方舒, 黄 韵, 等	220	37
中频变压器用环氧树脂/纳米 BN 复合介质的导热和电气性能研究	张梦甜, 王国海, 孟繁博, 江 铁, 等	220	44
基于聚类分类算法的 IGBT 健康状态分类研究	王志远, 孙鹏菊, 王海波, 杨舒萌	221	1
智能软开关选址定容模型及其求解算法	张 利, 杨 洁, 仉志华, 曲泽奇	221	9
考虑脉冲负载影响的直流微电网变换器模型预测控制策略	赵新宽, 陈燕东, 姚 鹏, 姜洪朝	221	20
基于广义 S 变换和随机子空间的局放窄带干扰抑制方法	宋立业, 蒲霄祥, 李希桐	221	29
一种 SiC MOSFET 并联的稳态电-热分布预测模型	朱梓悦, 秦海鸿, 陈迪克, 潘国威	222	1
电化学储能及抽水蓄能全生命周期度电成本分析	徐若晨, 张江涛, 刘明义, 曹传钊, 等	222	10
基于 PSO 算法的直流近区光伏发电系统控制参数优化方法	王若谷, 刘佳玲, 刘宛菘, 秦博宇	222	19
220 kV 输电线周围电场对 ADSS 光缆挂点位置的影响	李正权, 张 禄, 高子涵, 尹锋雷	222	30
面向电力系统潮流仿真的语音交互研究	黄 森, 陈 仁, 钟 浩, 王强钢, 等	222	40

综述和述评

SF ₆ 气体绝缘电气设备故障分解物检测的多组分交叉干扰及校正算法综述	陈图南, 马凤翔, 袁小芳, 邱宗甲, 等	211	43
车用锂离子电池热失控研究综述	胡 广, 廖承林, 张文杰	212	66
复合绝缘材料介电性能的相场模拟研究进展	郭玉金, 董紫薇, 李庆民, 韩智云, 等	220	53

高温超导磁通泵研究进展与发展趋势 翟雨佳, 刘欣怡, 汪 泊, 刘建华, 等 221 37

新技术应用

基于振动分析的变压器铁心故障诊断.....	闫荣格, 董正予, 焦佩林, 谷浩伟	211	55
基于 SE-DenseNet 的变压器故障诊断.....	郭如雁, 彭敏放, 曹振其	211	61
基于 VMD-LSTM 的小电流接地系统故障选线方法	翟二杰, 舒征宇, 汪 俊, 黄志鹏	211	70
基于事件检测与 CNN 模型的非侵入式负荷识别方法及实现	凌家源, 彭勇刚	213	46
基于气象映射函数的夏季日用电量组合预测方法	王瑞妙, 赵小娟, 孙 悅, 乐昕怡, 等	213	55
考虑皮尔逊相关系数和切比雪夫距离的电压暂降类型计算方法	杜 培, 林 炎, 张伟骏, 林 芳, 等	213	63
基于卷积网络的 GIS 局部放电缺陷诊断方法与应用	张聪聪, 王 刚, 高 栋, 殷 伟, 等	213	72
一种仿真 SF ₆ 断路器灭弧室气流场的新方法	高 飞, 桂美景, 张俊民	214	74
多馈入交互作用因子 MIIF 计算方法比较	毛晓明, 何 炜, 周忠健	215	57
基于最优配合效果的电压敏感设备低压脱扣配置策略	王 雪, 唐正聪, 刘兴杰	215	64
矿井电力线对信号电缆串扰的不确定度量化	刘 青, 丁 楠, 李艾娣, 杨佳仪, 等	215	73
高压变频器功率模块相变散热研究	石华林, 熊 斌, 刘作坤, 贾媛媛, 等	216	73
风功率异常数据检测方法对比研究	封焯文, 朱世平, 赵志华, 孙铭仁, 等	217	55
荧光光纤局部放电检测的优化匹配方法研究	缪 金, 陈 平, 顾 寅, 冷兆云, 等	217	62
矿用变频器辐射电磁干扰特性分析	杨 洋, 杨 楷, 荣 相, 史 晗, 等	217	70
一种基于对称 PCB 结构的 GaN 器件高带宽电流检测方法	梅 杨, 付 强	218	60
用于电源测试的馈能式交流电子负载的研究	安金龙, 刘祥洋	218	66
基于流固耦合的电动汽车轮毂电机不同工况瞬态温度场分析	陈丽香, 刘佳琛, 张 超, 王晓宇	218	73
基于 HMAC 和 TEA 算法的 CAN 总线身份认证方法研究	张之森, 李 劳, 王丽芳, 吴 艳	219	57
静止无功补偿器变论域模糊 PI 控制研究	闫 君, 王明东, 李忠文	219	64
基于 Davidson-Cole 模型与异方差检验的定子绝缘频域介电谱分析	赵德宇, 石 颀	219	71
基于能效的交直流混合配电母线配置方法研究	朱梦颖, 彭勇刚, 宋弘亮	220	64
超导故障限流器抑制短路电流直流分量的仿真分析	倪 辉, 黎 炜, 兰润栋, 项 彬, 等	220	74
谐波磁场下永磁体涡流损耗测试与分析	耿 惠, 李永建, 范子容, 粟浩森, 等	221	46
基于小样本及贝叶斯推理的避雷器缺陷分类技术	李亚锦, 刘英男, 于大洋	221	56
高压开关柜温度流场仿真研究	王辰旭, 李永华, 彭志敏	221	64
架空线路动态增容等效换热稳态模型的误差分析及改进	骆书剑, 王 锐, 黄 振, 余 欣, 等	221	72
基于 AUKF 的分布式电源系统虚假数据攻击检测方法	杨 怡, 王 勇	222	48
基于数据驱动的配电网停电预测模型	南东亮, 冯长有, 曹 晖, 王 昕, 等	222	56
一种对称式双 LCC 补偿无线电能传输系统参数设计方法	程福临, 刘春喜, 邵翔宇, 孙路成, 等	222	64

行业动态

《电工电能新技术》2020 年度刊登稿件统计结果	211	54
更正启事	213	21
《电工电能新技术》2021 年题目索引	222	I

2021 Index Vol.40, Issue 211-222

issue page

Specialist's Forum

Principle and simulation for a novel DC breaker based on freewheeling circuit	XIAO Li-ye, ZHANG Zhi-feng, TENG Shang-fu, et al.	211	1
<u>Treatise and Report</u>			
Modeling and short-circuit characteristic analysis of a ±100 kV/1 kA superconducting DC transmission system	ZHANG Jian, QIU Ming, CHEN Pan-pan	211	9
Research on neutral point potential hysteresis control based on sector transition for three level rectifier	MA Ming, XIAO Hong-wei, WANG Ling, et al.	211	17
Oscillation mitigation of coupled AC grids with differential-common power and sliding mode control	LI Qing, PENG Guang-qiang, XIONG Lin-yun	211	25
Magnetic properties measurement and modeling for electrical steel sheet under PWM excitation condition	LIU Zhen, ZHANG Dian-hai, HAN Yu, et al.	211	34
A third-order harmonic injection method for low-capacitance modular multilevel converters with high ripples	MENG Jing-wei, ZHOU Yue-bin, ZHANG Nan, et al.	212	1
Power flow of voltage source converter based DC traction power supply system with system-level control	JI XI Yan-na, WANG Fang-min, LI Zhan-he, et al.	212	9
General impedance model with out-loop for DFIG wind farm stability analysis	SUN Yao, HAN Min-xiao, HUANG Yong-ning, et al.	212	15
Calculation and verification of core loss of high frequency transformer under sinusoidal and non-sinusoidal excitation	LIU Fu-gui, ZHAO Lin, JIANG Jia-cheng	212	25
A calculation method for high frequency transformer based on freezing permeability method	TIAN Yu, JIN Ping	212	33
Vibration control and simulation analysis between reactor body and oil tank for high-voltage shunt reactor	TIAN Yi, LIU Zhu-guang, YOU Wei-han, et al.	212	41
Modeling and performance analysis of a twin-shaft microturbine based power generation system	LI Hong-yang, WEN Xu-hui, WANG You-long	212	50
State of charge estimation of Li-ion battery based on adaptive unscented Kalman filter	DONG Xiang-xiang, WU Peng, GE Chuan-jiu, et al.	212	58
Simplified model predictive control for dual induction motor drives fed by indirect matrix converter	MEI Yang, MU Xi-wang	213	1
Stochastic optimal operation of integrated cooling, heating and power energy system considering coordination of source-load-storage	QI Xiao-min, KONG Li, XIONG Huang, et al.	213	10
Optimal hybrid energy storage capacity configuration for CSP integrated power systems with high renewable energy penetration	ZHOU Ping, SUN Yue, KANG Peng, et al.	213	22
Decision-making model of restoration of multi-microgrid system after disaster based on cooperative game	YAO Wei-qiang, ZHOU Jian, SHI Shan-shan, et al.	213	32
Analysis of vibration effect of tightening screw on shunt reactor	YAN Rong-ge, GU Hao-wei, ZHANG Xiao-jie, et al.	213	39
Loss balance modulation method of switching device for active neutral-point-clamped three-level inverter	LUO Long, LI Yao-hua, LI Zi-xin, et al.	214	1
Wide range input improved series Z source inverter for energy storage	KAN Zhi-zhong, JIANG Chun-peng, HE Hao, et al.	214	10
A dual-input high step-up DC/DC converter	LIN Si-qi, LIN Guo-qing	214	17

Test and application of novel synchronous phasor device for distribution networks	ZHU Zheng, LI Yi-ze, GU Li-qiang, et al.	214	27
Decentralized economic operation in hybrid AC/DC microgrid based on incremental cost droop control	LI Zi-jin, YANG Peng-cheng, HAO Liang, et al.	214	35
Research of active magnetic shielding for wireless power transfer system of electric vehicles	MENG Jin-xue, ZHANG Yu-wang, GUO Yan-jie, et al.	214	44
Design of new space wireless power transmission system coupling mechanism	CAI Zhi-bin, ZHANG Guo-rong, XU Chen-lin, et al.	214	52
Small signal stability analysis of micro turbine based power generation system and feedforward compensation control	LI Hong-yang, WEN Xu-hui, WANG You-long	214	59
Disturbance observer based cross-coupled control for multiple linear motors via terminal sliding mode control	DING Bo, YAN Wen-xu, NI Hong-yu	214	68
Two-stage clustering algorithm of typical wind-PV-load scenario generation for reliability evaluation	LI Chun-yan, ZHAO Chen-yu, HU Bo, et al.	215	1
Differentiated solution for energy flow of electric-gas multi-energy microgrid	PENG Han-mei, LIU Jian-feng, LI Cai-bao, et al.	215	10
Equivalent modeling method of whole electromechanical transient state of permanent magnet direct-drive wind turbine under grid fault	YANG Min-cai, YU Jian-feng, OUYANG Jin-xin, et al.	215	22
Partial discharge denoising method based on adaptive singular value decomposition	SUN Chuan-ming, WEI Long, ZHANG Meng-nan, et al.	215	34
Predicting method for dissolved gas in transformer oil based on improved self-adaptive PSO algorithm and LSSVM	LIAN Wen-li, GENG Bo, ZHOU Zhou, et al.	215	42
Voltage sag source location in distribution networks based on wavelet energy entropy	HU An-ping, JIANG Yu-jie, TAO Yi-bin, et al.	215	50
Optimization of the DC-DC converter for hybrid energy storage electric vehicle base on gaussian mixture distribution	LI Hao-ting, WANG Xue-mei	216	1
Charge and discharge strategy based on load-side virtual synchronous machine for electric vehicles participating in grid frequency regulation and its realization	LI Bing-yu, DU Xu-hao, ZENG Si-ming, et al.	216	11
MMC-MTDC improved droop flat control strategy considering power margin	SONG Ping-gang, YANG Chang-lan, LONG Ri-qi, et al.	216	22
Segmentation method of a multi-infeed LCC system based on local fitness measure	CAO Xin, HAN Min-xiao, MA Li-min, et al.	216	32
Optimized integrated control strategy of battery energy storage participating in primary frequency regulation of power grid	MENG Gao-jun, ZHANG Feng, ZHAO Yu, et al.	216	43
Research on active equalization method of retired lithium-ion batteries for the echelon utilization	YANG Yang, XIE Chang-jun, ZHU Wen-chao	216	50
A novel equalization circuit combining switched-capacitor and switched-inductor	FAN Yuan-liang, WU Han, XU Meng-ran, et al.	216	57
Finite control set model predictive current control scheme with low switching frequency for five-phase permanent-magnet synchronous machines	ZHANG Jing, WU Xue-song, LI Ting-ting, et al.	216	64
Power grid prevention-emergency coordinated control method based on photovoltaic load shedding	YANG Zhe-han, XIONG Xiao-fu	217	1
Day-ahead operation optimization of regional scale source network load storage system based on analytical target cascading theory	LUO Shou-quan, DING Xiao-hua, HAN Tao, et al.	217	11
Impact analysis of charge accumulation on electric field distribution of DC GIL tri-post insulator under temperature gradients	HU Qi, LI Qing-min, LIU Zhi-peng, et al.	217	20

Location of water tree in XLPE cable based on reflection coefficient spectrum	ZHOU Quan, WANG Xin-yuan, OUYANG Xi, et al.	217	28
Equivalence analysis of voltage, impedance and power relationships of distributed power flow controller based on cascaded H-bridge converter	GUAN Min-yuan, SHEN Jian-liang, LOU Ping, et al.	217	40
Test of magnetic properties of soft magnetic composite materials under complex current waveforms	CUI Yi-fan, YANG Qing-xin, LI Yong-jian	217	48
Research on cooperative optimal operation of multi-park integrated energy system based on multi agent reinforcement learning	YANG Zhao, HUANG Shao-wei, CHEN Ying	218	1
A novel RISE-LADRC voltage control strategy of microgrid inverter	LIU Yong, SHEN Gui-fei, ZHANG Jing, et al.	218	11
A high-gain quadratic Boost converter based on double coupled inductors	TIAN Dong-hao, RONG De-sheng	218	22
Output impedance analysis and stability improvement method of PWM rectifier with <i>LCL</i> for electric vehicle charging	CHANG Zheng, ZENG Si-ming, LI Bing-yu, et al.	218	32
Research on multi-mode modulation switching strategy based on harmonic flux deviation	ZHOU Liang, SU He-peng, HAN Jin-yang	218	43
Calculation and analysis of loss and winding hot spot temperature under DC bias of 500 kV single-phase transformer	LI Ming-yang, ZHANG Jun-shuang, LI Hai-ming, et al.	218	51
Probabilistic optimal energy flow of the integrated electric power and natural gas system using stochastic response surface method	YANG Xin, REN Zhou-yang, GUO Bing, et al.	219	1
Fast frequency response control strategy for PV inverter based on improved frequency lock loop	GONG Cheng, WANG Wei, ZHAO Zheng-kui, et al.	219	10
Research on distributed photovoltaic multi-mode coordinated control algorithm for distribution network overvoltage suppression	HU Wen-ping, HU Xue-kai, WANG Meng, et al.	219	18
Analysis and modeling of pantograph catenary friction vibration under wave load	QU Chun-li, CHEN Zhong-hua, REN Ren, et al.	219	29
Fault diagnosis of transformer based on BP neural network optimized by IBBOA	ZHAO Ling-ling, WANG Qun-jing, CHEN Quan, et al.	219	39
Dual-frequency wireless power transfer system based on compound gain configuration	ZHU Zhe-hui, ZHOU Wei, ZHANG Bin-shan, et al.	219	47
Analysis on overload capacity of 500 kV oil-filled submarine cable	CHEN Yu, LI Han-zhi, YAO Kai, et al.	220	1
Study on loss distribution and characteristics under fundamental wave and harmonics of converter transformer	WANG Hao-tian, LI Jun-hao, WANG Hao-yang	220	10
Numerical study on temperature field and ampacity of high voltage cables considering effect of circulating current in metal sheaths	CHEN Yue, YANG Shi-you, QIN Xi	220	18
Energy consumption optimization of unmanned underwater vehicle based on internal energy management and external path planning	HOU Hui, CHEN Yang-yang, XIE Chang-jun, et al.	220	27
DC electric field simulation analysis for 10 kV AC XLPE cable melting joint	WANG Qi-long, WANG Guo-hai, WANG Fang-shu, et al.	220	37
Study on thermal conductivity and electrical properties of epoxy resin/nano BN composites in medium frequency transformers	ZHANG Meng-tian, WANG Guo-hai, MENG Fan-bo, et al.	220	44
Research on IGBT state classification based on cluster and classification algorithm	WANG Zhi-yuan, SUN Peng-ju, WANG Hai-bo, et al.	221	1
SNOP locating and sizing model and optimization algorithm	ZHANG Li, YANG Jie, ZHANG Zhi-hua, et al.	221	9
Model predictive control strategy of DC microgrid converter considering influence of pulsed power loads	ZHAO Xin-kuan, CHEN Yan-dong, YAO Peng, et al.	221	20
Partial discharge narrowband interference suppression method based on generalized S-transform and stochastic subspace	SONG Li-ye, PU Xiao-xiang, LI Xi-tong	221	29

A forecasting model of static electro-thermal distribution between paralleled SiC MOSFETs	ZHU Zi-yue, QIN Hai-hong, CHEN Di-ke, et al.	222	1
Analysis of life cycle cost of electrochemical energy storage and pumped storage	XU Ruo-chen, ZHANG Jiang-tao, LIU Ming-yi, et al.	222	10
Control parameter optimization method of DC near-field photovoltaic power generation system based on particle swarm optimization	WANG Ruo-gu, LIU Jia-ling, LIU Wan-song, et al.	222	19
Effect of electric field around 220 kV transmission line on position of ADSS optical cable hanging point	LI Zheng-quan, ZHANG Lu, GAO Zi-han, et al.	222	30
Research on voice interaction for power flow simulation of power system	HUANG Miao, CHEN Ren, ZHONG Hao, et al.	222	40

Summary and Review

Review on cross interference and its modification in multiple component gas detection for SF ₆ insulated equipment	CHEN Tu-nan, MA Feng-xiang, YUAN Xiao-fang, et al.	211	43
A review on thermal runaway of lithium-ion batteries for electric vehicle	HU Guang, LIAO Cheng-lin, ZHANG Wen-jie	212	66
Research advances in phase field simulation of dielectric properties of composite insulating materials	GUO Yu-jin, DONG Zi-wei, LI Qing-min, et al.	220	53
Research progress and development trend of high temperature superconducting flux pump technology	ZHAI Yu-jia, LIU Xin-yi, WANG Feng, et al.	221	37

New Technology Application

Fault diagnosis of transformer core based on vibration analysis	YAN Rong-ge, DONG Zheng-yu, JIAO Pei-lin, et al.	211	55
Fault diagnosis of power transformer based on SE-DenseNet	GUO Ru-yan, PENG Min-fang, CAO Zhen-qi	211	61
Fault line selection method of small current grounding system based on VMD-LSTM	ZHAI Er-jie, SHU Zheng-yu, WANG Jun, et al.	211	70
Implementation of a non-intrusive load identification method based on event detection and CNN model	LING Jia-yuan, PENG Yong-gang	213	46
Combination forecasting model of daily electricity consumption in summer based on meteorological mapping function	WANG Rui-miao, ZHAO Xiao-juan, SUN Yue, et al.	213	55
Voltage sag type calculation algorithm considering Pearson correlation coefficient and Chebyshev distance	DU Pei, LIN Yan, ZHANG Wei-jun, et al.	213	63
Partial discharge pattern recognition based on convolutional neural network	ZHANG Cong-cong, WANG Gang, GAO Dong, et al.	213	72
New method to simulate the airflow field of SF ₆ circuit breaker	GAO Fei, GUI Mei-jing, ZHANG Jun-ming	214	74
Comparison of calculation methods for multi-infeed interaction factors	MAO Xiao-ming, HE Wei, ZHOU Zhong-jian	215	57
Low-voltage release configuration strategy of voltage sensitive equipment based on optimal coordination effect	WANG Xue, TANG Zheng-cong, LIU Xing-jie	215	64
Uncertainty quantification of crosstalk between coal mine power lines and signal cables	LIU Qing, DING Nan, LI Ai-di, et al.	215	73
Research on phase change heat dissipation of high voltage inverter power module	SHI Hua-lin, XIONG Bin, LIU Zuo-kun, et al.	216	73
Comparative study on detection methods of wind power abnormal data	FENG Zhuo-wen, ZHU Shi-ping, ZHAO Zhi-hua, et al.	217	55
Influence factors and optimization of partial discharge detection based on plastic fluorescent bare fiber	MIAO Jin, CHEN Ping, GU Yin, et al.	217	62

Analysis of radiated electromagnetic interference characteristics of mine used frequency converter	YANG Yang, YANG Zhen, RONG Xiang, et al.	217	70
A high bandwidth current measurement method for GaN devices based on symmetrical PCB structure	MEI Yang, FU Qiang	218	60
Research on energy feedback AC electronic load for power supply test	AN Jin-long, LIU Xiang-ying	218	66
Analysis of transient temperature field of electric vehicle hub motor based on fluid-solid coupling	CHEN Li-xiang, LIU Jia-chen, ZHANG Chao, et al.	218	73
CAN bus identity authentication method based on Hash Algorithm and Tiny Encryption Algorithm	ZHANG Zhi-sen, LI Fang, WANG Li-fang, et al.	219	57
Research on variable universe fuzzy PI control of static var compensators	YAN Jun, WANG Ming-dong, LI Zhong-wen	219	64
Spectrum analysis of stator insulation based on Davidson-Cole model and heteroscedasticity test	ZHAO De-yu, SHI Jie	219	71
Study on configuration of hybrid AC/DC distribution bus line based on energy efficiency	ZHU Meng-ying, PENG Yong-gang, SONG Hong-liang	220	64
Simulation analysis of superconducting fault current limiter to suppress DC component of short circuit current	NI Hui, LI Wei, LAN Run-dong, et al.	220	74
Measurement and analysis of eddy current loss of permanent magnet under harmonic magnetic field	GENG Hui, LI Yong-jian, FAN Zi-rong, et al.	221	46
Classification of arrester defects based on small sample data and Bayesian inference	LI Ya-jin, LIU Ying-nan, YU Da-yang	221	56
Simulation of temperature flow field in high voltage switchgear	WANG Chen-xu, LI Yong-hua, PENG Zhi-min	221	64
Error analysis and improvement method of equivalent heat transfer steady-state model for dynamic thermal rating of overhead conductors	LUO Shu-jian, WANG Rui, HUANG Zhen, et al.	221	72
Detection method of false data attack in distributed generation system based on AUKF	YANG Yi, WANG Yong	222	48
Data-driven predictive model of distribution system blackout	NAN Dong-liang, FENG Chang-you, CAO Hui, et al.	222	56
Parameter design method for symmetric dual LCC compensated wireless power transfer system	CHENG Fu-lin, LIU Chun-xi, SHAO Xiang-yu, et al.	222	64
2021 Index		222	I