



微信号: PCSEE 1964

中国电机工程学报

ZHONGGUO DIANJI GONGCHENG XUEBAO

第 39 卷

第 7 期 (总第 618 期)

2019 年 4 月 5 日

目 次

(论文电子版 <http://www.pcsee.org/CN/volumn/home.shtml>)

“直线电机及驱动系统”专题特约主编寄语..... 徐伟, 卢琴芬, 赵吉文, 潘剑飞, Ion Boldea (1851)

· 直线电机及驱动系统 ·

双边水冷永磁直线电机的磁热耦合分析(英文)..... 陈轶, 卢琴芬, 沈焱明 (1852)

电磁轨道发射器临界速度仿真研究..... 鲁军勇, 杜佩佩, 冯军红, 谭赛 (1862)

直线永磁游标电机的开绕组单位功率因数直接推力控制..... 成瑀, 赵文祥, 吉敬华, 赵鹏, 杜育轩 (1870)

双初级耦合直线感应电动机电磁参数计算..... 孙兆龙, 马伟明, 吴旭升, 鲁军勇, 许金, 袁志方 (1878)

直驱波浪能发电系统综述..... 洪岳, 潘剑飞, 刘云, 王璨, 李灿, 付鹏飞 (1886)

双交替极横向磁通直线电机的基础研究..... 罗俊, 寇宝泉, 杨小宝, 张赫, 张鲁 (1900)

考虑机械气隙的无槽永磁直线电机热分析及改进(英文)..... 龙兴, 罗辞勇, 陆治国, 李景灿, 孙军 (1908)

· 智能电网 ·

变流器并网系统复电路模态功率分析..... 董炜, 杨超然, 辛焕海, 甘德强, 鞠平 (1919)

考虑线性化网络约束的电-热多能源系统最优能量流分析..... 于东立, 曹军, 屠聪为, 王之龙, 等 (1933)

考虑投资风险的含风电系统电源投资扩展规划研究..... 姜素华, 吕梦璇, 王永灿, 吴耀武 (1944)

电池柔性成组储能系统故障冗余控制策略..... 宋峻竑, 张维戈, 梁晖, 姜久春 (1956)

组串式光伏发电系统直流侧可变拓扑及多目标控制策略..... 薛世伟, 贾清泉, 苏亚超, 张海欣 (1968)

· 输变电技术 ·

近似强模式谐振下高压直流输电系统引起的次同步振荡仿真研究..... 甄自竞, 杜文娟, 王海风 (1976)

非依赖模型精度的多频无源控制用于 APF 高精度谐波抑制..... 慕小斌, 陈国富, 惠杰, 王翔, 徐云飞, 等 (1985)

基于虚拟阻抗补偿的数模混合仿真系统功率接口建模方法..... 乐健, 张好, 周谦, 冉晓红, 周文俊 (1996)

· 智能配用电 ·

独立海岛终端一体化系统下电动汽车的投放数量规划研究..... 王泽森, 唐艳梅, 门向阳, 曹军, 王海风 (2005)

基于稀疏成分分析的多直流馈入城市电网直流落点系统侧谐波阻抗计算方法..... 赵劲帅, 杨洪耕, 等 (2016)

电气化铁路飞轮储能技术研究..... 李群湛, 王喜军, 黄小红, 赵艺, 刘宇文, 赵思锋 (2025)

基于贝叶斯网络时序模拟的含微网配电系统可靠性评估..... 高立艾, 霍利民, 黄丽华, 唐巍 (2033)

· 继电保护、通信及自动化 ·

基于图论的宽带电力线 MIMO 信道特性研究..... 张慧, 赵雄文, 卢文冰, 李梁, 王新宇 (2041)

不依赖于边界元件的架空型多端柔直电网就地测距式接地保护原理..... 童宁, 林湘宁, 张雪松, 等 (2049)

· 发电 ·

基于移动边界模型的空冷阵列动态性能数值研究..... 江泽铭, 刘吉臻, 房方, 邓慧 (2060)

超临界二氧化碳火力发电系统比较研究..... 陈渝楠, 张纯, 蒋世希, 李红智, 姚明宇 (2071)

600MW S-CO₂ 循环燃煤流化床锅炉热量分布及锅炉效率..... 李平姣, 钟文琪, 陈晓乐, 刘雪娇 (2080)

利用时空相关性的多位置多步风速预测模型..... 陈金富, 朱乔木, 石东源, 李银红, ZHU Lin, 等 (2093)

并联双旋风分离器气固分布分析..... 蔡晋, 王志宁, 金燕, 吕俊复, 杨海瑞 (2106)

一种空气分级切向燃烧烟煤锅炉的燃尽特性..... 刘福国, 郭新根, 王守恩, 崔福兴 (2113)

· 电力电子与电力传动 ·

适用于多模式脉宽调制的通用切换策略研究..... 周明磊, 刘伟志, 邱腾飞, 王琛琛, 游小杰 (2125)

储能型准 Z 源逆变器的有限集模型预测控制策略..... 方番, 李媛, 肖先勇, 漆万碧, 游云峰, 丁隆耀 (2133)

独立输入并联输出双有源全桥 DC-DC 变换器无电流传感器均流控制..... 曾进辉, 孙志峰, 雷敏, 兰征 (2144)

一种多工况高增益多端口 DC/DC 变换器..... 王辉, 陈耀, 曾庆典, 李圣乾, 邾玢鑫 (2155)

一种 Boost-LCL 谐振变换器..... 袁义生, 梅相龙, 姬鹏远 (2166)

· 英文概述见论文电子版

PROCEEDINGS OF THE CHINESE SOCIETY FOR
ELECTRICAL ENGINEERING
(PROCEEDINGS OF THE CSEE)

Vol.39 No.7 (Ser. 618)

Apr. 5, 2019

CONTENTS

(Electronic Journals <http://www.pcsee.org/EN/volumn/current.shtml>)

- Foreword From the Guest Editors in Chief of Special Columns for “ Linear Motors and Driving Systems ”
..... XU Wei, LU Qinfen, ZHAO Jiwen, PAN Jianfei, Ion Boldea (1851)
- **Linear Motors and Driving Systems** •
- Electromagnetic-thermal Coupled Analysis of Water-cooled Double-sided Permanent Magnet Linear Synchronous
Machines CHEN Yi, LU Qinfen, SHEN Yiming (1852)
- Simulation Study on Critical Velocity of Electromagnetic Rail Launcher
..... LU Junyong, DU Peipei, FENG Junhong, TAN Sai (1862)
- Unity Power Factor Direct Thrust Force Control of Linear Permanent-magnet Vernier Motor Fed by Dual Inverter
..... CHENG Yu, ZHAO Wenxiang, JI Jinghua, ZHAO Peng, DU Yuxuan (1870)
- Electromagnetic Parameters Calculation for Double Primaries Coupling Linear Induction Motors
..... SUN Zhaolong, MA Weiming, WU Xusheng, LU Junyong, XU Jin, YUAN Zhifang (1878)
- A Review on Linear Generator Based Wave Energy Conversion Systems
..... HONG Yue, PAN Jianfei, LIU Yun, WANG Can, LI Can, FU Pengfei (1886)
- Fundamental Study of Dual Consequent-pole Transverse-flux Linear Motor
..... LUO Jun, KOU Baoquan, YANG Xiaobao, ZHANG He, ZHANG Lu (1900)
- Thermal Analysis and Improvement of Slotless Tubular Permanent Magnet Linear Actuators Considering the
Mechanical Air Gap LONG Xing, LUO Ciyong, LU Zhiguo, LI Jingcan, SUN Jun (1908)
- **Smart Grid** •
- Complex Circuit Modal Power Analysis of Grid-connected Converters
..... DONG Wei, YANG Chaoran, XIN Huanhai, GAN Deqiang, JU Ping (1919)
- Optimal Energy Flow of Combined Electrical and Heating Multi-energy System Considering the Linear Network
Constraints YU Dongli, CAO Jun, TU Congwei, WANG Zhilong, et al (1933)
- Generation Investment Expansion Planning for Wind Power Accommodation Considering Investment Risk
..... LOU Suhua, LU Mengxuan, WANG Yongcan, WU Yaowu (1944)
- Fault Tolerant Control Strategy for Flexible Group Battery Energy Storage System
..... SONG Junhong, ZHANG Weige, LIANG Hui, JIANG Jiuchun (1956)
- Variable DC Side Topology and Multi-objective Control Strategy in Group-string PV Generation System
..... XUE Shiwei, JIA Qingquan, SU Yachao, ZHANG Haixin (1968)
- **Power transmission and Transformation Technologies** •
- The Simulation Study on SSOs Caused by the HVDC Under the Condition of Near Strong Modal Resonance
..... ZHEN Zijing, DU Wenjuan, WANG Haifeng (1976)
- High-precision Harmonic Suppression Using APF With Multi-frequency Passivity-based Control Without Dependence on
Model Accuracy MU Xiaobin, CHEN Guofu, HUI Jie, WANG Xiang, XU Yunfei, et al (1985)
- A Power Interface Modeling Method of the Digital-Physical Hybrid Simulation System Based on Virtual Impedance
Compensation LE Jian, ZHANG Hao, ZHOU Qian, RAN Xiaohong, ZHOU Wenjun (1996)
- **Smart Electric Power Distribution and Utilization Technologies** •
- Research on the Quantity Planning of Electric Vehicle on the Isolated Island Terminal Integration System
..... WANG Zesen, TANG Yanmei, MEN Xiangyang, CAO Jun, WANG Haifeng (2005)
- Method of Calculating System-side Harmonic Impedance for DC Drop Point in City Grid With Multi-infeed DC System
Based on Sparse Component Analysis ZHAO Jinshuai, YANG Honggeng, et al (2016)
- Research on Flywheel Energy Storage Technology for Electrified Railway
..... LI Qunzhan, WANG Xijun, HUANG Xiaohong, ZHAO Yi, LIU Yuwen, ZHAO Sifeng (2025)
- Reliability Evaluation Based on Bayesian Networks Time Sequence Simulation for Distribution Systems Containing
Microgrid GAO Liai, HUO Limin, HUANG Lihua, TANG Wei (2033)
- **Power System Relaying, Communication and Automation** •
- Research on Broadband MIMO Power Line Channel Characteristics Based on Graph Theory
..... ZHANG Hui, ZHAO Xiongwen, LU Wenbing, LI Liang, WANG Xinyu (2041)
- Fault Location Based Single-ended Protection Strategy for Overhead VSC-MTDC Independent on Boundary Component
..... TONG Ning, LIN Xiangning, ZHANG Xuesong, et al (2049)
- **Power Generation** •
- Numerical Study on Transient Thermo-hydraulic Characteristics of ACCs Array Based on Moving-boundary Model
..... JIANG Zeming, LIU Jizhen, FANG Fang, DENG Hui (2060)
- Comparative Study of Supercritical Carbon Dioxide Thermal Power System
..... CHEN Yunan, ZHANG Chun, JIANG Shixi, LI Hongzhi, YAO Mingyu (2071)
- Heat Distribution and Boiler Efficiency of 600MW Coal-fired CFB Boiler With S-CO₂ Power Cycle
..... LI Pingjiao, ZHONG Wenqi, CHEN Xiaole, LIU Xuejiao (2080)
- A Multi-Step Wind Speed Prediction Model for Multiple Sites Leveraging Spatio-temporal Correlation
..... CHEN Jinfu, ZHU Qiaomu, SHI Dongyuan, LI Yinong, ZHU Lin, et al (2093)
- Analysis of Gas-solid Flow Distribution in Double Identical Parallel Cyclones
..... CAI Jin, WANG Zhining, JIN Yan, LYU Junfu, YANG Hairui (2106)
- Burnout Characteristics of Bituminous Coal in Tangentially Fired Furnace With Air Staging
..... LIU Fuguo, GUO Xingen, WANG Shouen, CUI Fuxing (2113)
- **Power Electronics and Drives** •
- A General Switching Strategy for Multi-mod Pulse Width Modulation
..... ZHOU Minglei, LIU Weizhi, QIU Tengfei, WANG Chenchen, YOU Xiaojie (2125)
- An Finite Control Set-model Predictive Control for Energy-stored Quasi-Z-source Inverters
..... FANG Fan, LI Yuan, XIAO Xianyong, QI Wanbi, YOU Yunfeng, DING Longyao (2133)
- Sensorless Current Sharing Control Strategy of Independent-input-parallel-output Dual-active-bridge Converters
..... ZENG Jinhui, SUN Zhifeng, LEI Min, LAN Zheng (2144)
- A Multi-operating Mode Multi-port DC/DC Converter With High Step-up Voltage Gain
..... WANG Hui, CHEN Yao, ZENG Qingdian, LI Shengqian, ZHU Binxin (2155)
- A Boost-LCL Resonant Converter YUAN Yisheng, MEI Xianglong, JI Pengyuan (2166)
- **For Extended Summaries, Please See the Electronic Journals.**