Papers and Authors

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Concept Design and Characteristic Analysis of a 10 MW HTS Wind Generator Zai Qiang Jiang, Jian Xun Jin
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A HTS Linear Generator with HTS Coils as a Wave Energy Converter Lie Jun Ba, Jian Xun Jin
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Technology Research of High Temperature Superconducting Wind Turbine Generator Lu Hai Zheng, Xin Qiang Li Shanghai Electrical Apparatus Research Institute (Group) Co., Ltd. Shanghai 200063, China Jian Xun Jin University of Electronic Science and Technology of China Chengdu 611731, China

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High Temperature Superconducting Properties Measurement Instrument and Sample Application for Coil Design
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A HTS Linear Generator with HTS Bulks as a Wave Energy Converter Lie Jun Ba, Jian Xun Jin Center of Applied Superconductivity and Electrical Engineering University of Electronic Science and Technology of China Chengdu 611731, China

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Investigation of Step-Shaped Field Coil for Large Capacity Superconducting Motors Zai Qiang Jiang, Jian Xun Jin

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A Novel Arrangement of Field Coil for Large Capacity Superconducting Motors Zai Qiang Jiang, Jian Xun Jin
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Design and Digital Control of a Cryogenic Boost-Buck Chopper Xiao Yuan Chen, Hong Yan Luo, Lin Yu Li, Hai Hong Qian, Yuan Yuan Yang, Xiao Yan Ran, Chuan Guo School of Engineering Sichuan Normal University Chengdu 610101, China

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Feasibility Study of Low-Frequency Superconducting Inductive Coupled Power Transfer System Xiao Yuan Chen, Long Chen, Jiang Su, Ruo Cheng Huang, Xiao Yun Jiang, Cheng Gou, Jie Mao School of Engineering Sichuan Normal University Chengdu 610101, China

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Effects of Inner Air Gaps on the Leakage Field Optimization of HTS Transformer Windings Feng Mei Li, Jian Xun Jin
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Ri Ming Sun, Yong Ping Zhu, Chang Long Tang

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Analysis of a IGBTs-based Bridge Type Superconducting Fault Current Limiter Hu You, Jian Xun Jin
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HTS DC Cable and Transmission Development Zheng Hua Chen, Jian Xun Jin Center of applied superconductivity and electrical engineering University of Electronic Science and Technology of china Chengdu 611731, China

A New Simulation Method of Active Electrolocation System Based on Cole-Cole Model Jun Wu, Jie Gang Peng School of Automation Engineering and Center for Robotics University of Electronic Science and Technology of China Chengdu 611731, China

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Analyzing and Calculating of the Cogging Torque of Halbach Array Permanent Magnet Motor Lin Liu, Qi Xing Gao, Zheng Hao Luo College of Electrical Engineering and New Energy China Three Gorges University Yichang 443002, China Li Bing Jing *Hubei Micro-Grid Engineering Technology Research Center China Three Gorges University Yichang 443002, China

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Design of Remote Control Plug Yu Ping Zhang, Tao Liu, Zhong Xiao Yang, Yi Mou, Yu Hua Wei, Dong Chen Pattern Recognition and Intelligent Control Laboratory University of Electronic Science and Technology of China Chengdu 611731, China

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Exact Analytical Method for Magnetic Field Computation and Cogging Torque of SPM Motors Li Bing Jing
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Design of Photovoltaic Fan Drive Based on MPPT Yu Ping Zhang, Yu Hua Wei, Zhong Xiao Yang, Tao Liu, Yi Mou, Dong Chen Pattern Recognition and Intelligent Control Laboratory University of Electronic Science and Technology of China Chengdu 611731, China

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Feasible Study on Hybrid Power of Electric Vehicle Based on Aluminum Air Fuel Cell Yu Ping Zhang, Yi Mou, Zhong Xiao Yang, Yu Hua Wei, Tao Liu, Dong Chen Pattern Recognition and Intelligent Control Laboratory University of Electronic Science and Technology of China Chengdu 611731, China

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The Early Kick Monitoring Based on the Ultrasonic Measurement Techniques in Deep Drilling Sheng Nan Li, Hui Zhao, Quan Zhou School of Automation Engineering University of Electronic Science and Technology of China Chengdu 611731, China

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A Comparative Study of Compressed Sensing Approaches with Splitting Bregman Framework for Radial UTE MRI

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Low-Voltage Ride-Through Capability Enhancement of DFIG-Based Wind Turbine with a

Resistive-Type SFCL Connected in Series with Rotor Winding

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Novel Synchronous Machine with Permanent Magnet in Stator Yoke

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Two-Three Combined Vectors Direct Power Control Algorithm based Three-Phase Pulse Width

Modulation Rectifier

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Novel Efficiency Optimization Control Algorithm for Single-Sided Linear Induction Motor

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New Approach for Thrust Ripple Reduction on Permanent Magnet Flux-Switching Linear Motor Wei Xu, Xiang Li

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The Design and Implementation of TCP Hardwiring and Offloading Engine Shu Yan Jiang, Zhi Lu, Yuan Yuan Mao School of Automation Engineering University of Electronic Science and Technology of China Chengdu 611731, China Gang Luo, Qi Li Chengdu Technological University Chengdu 611730, China

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The Fault-tolerant NoC Techniques with FPGA
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A Study on the Effect of Object's Shape in the Underwater Active Electrolocation Lu Liu, Jie Gang Peng School of Automation Engineering and Center for Robotics University of Electronic Science and Technology of China Chengdu 611731, China

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New Model Predictive Current Control Strategy Based Rotor Flux for Linear Induction Machines Wei Xu, Jian Qiao Zou School of Electricaland Electronic Engineering Huazhong University of Science and Technology Wuhan 430074, China Chao Xu Mu School of Electrical and Automation Engineering Tianjin University Tianjin 300000, China

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Maximum Power Point Tracking Strategy for Photovoltaic System Based on Probability Lei Tang School of Electrical Engineering Xi'an Jiaotong University Xi'an 710049, China

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Design and Implementation of Low-Phase-Noise Temperature-Compensated Crystal Oscillator Jun Jie Jiao, Xian He Huang, Wei Fu

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Comparative Study of Inductive and Resistive SFCL to Mitigate the DC Fault Current in a

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Magnetic Levitation Characteristics of 3-DOF Deflection Type PM Motor

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Airflow Pressure Pulsation of Contra-Rotating Fan and its Influence on the Motor

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Study on Deformations of the Two-Stage Impellers of Contra-Rotating Fan Driven by

Pole-Changing Motors

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Multi-Layer Windings Effect on Performance of Flux-Switching Permanent Magnet Machines

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An Efficient Conformal Mapping Method for Air-Gap Magnetic Field Analytical Calculation in an Eccentric Magnetic Harmonic Gear

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Simulation Analysis of Transformer Inrush Current Based on the Same Switching Angle Guo Zheng Qi, Zhi Zhen Liu, Yong Yang, Wei Ping Liao School of Electrical Engineering **Shandong University**

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Equivalent Magnetic Circuit Model of Novel Disk Transverse-Flux Segment-Stator Permanent

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Analysis of Heat Transfer Based on Fluid Network Decoupling in Submersible Motor Yong Ming Xu, Fei Liu, Fang Zhang College of Electrical and Electronic Engineering

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Conducted Common-mode Equivalent Circuit of Induction Motor for EMI Analysis Fang Xiao, Bao Jun Ge, Zhe Wang, Zhao Yang Ning

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Novel Negative Sequence Current Detection and Control Strategy for H-Bridge Three-Level

Active Power Filter

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Superconducting Magnetic Energy Storage Based Power System Control Using ADP

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Equivalent Parameter Estimation of a Single-Sided Linear Induction Motor Based on Electromagnetic Field Induced by Current FFT-Wave Jun Di, Yu Fan, Ya Jing Liu School of Electrical Engineering Beijing Jiaotong University Beijing 100044, China

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Harmonic Impact on Rotor Losses in Fault-Tolerant Interior Permanent-Magnet Machines Jun Qiang Zheng, Wen Xiang Zhao, Jing Hua Ji, Guo Hai Liu School of Electrical and Information Engineering Jiangsu University Zhenjiang 212013, China

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Cost Reduction of Vernier Permanent-Magnet Machine with Ferrite Magnets Ming Chen, Guo Hai Liu, Wen Xiang Zhao, Qian Chen, Wan Xiang Zhao, Yu Zeng School of Electrical and Information Engineering, Jiangsu University Zhenjiang 212013, China

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Characterization of Partial Discharge with Fluorinated Polyimide Films in High Temperature Superconducting Cable Insulation

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Influences of Terminal Current on Critical Current of DC HTS Cable with Large Current Capacity Han Zhang

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Magnetic Field Analysis of a Self-Shielding DC HTS Cable with Large Current Capacity

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Study on HTS/LTS Hybrid Superconducting Central Solenoid for Fusion Device

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An Optimal Flux-Switching Permanent Magnet Machine for Hybrid Electric Vehicles

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Vortex Properties of Nanosized Superconducting Strips with One Central Weak Link under an Applied Current Drive

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Electromagnetic Design and Research of 2.935MW Permanent Magnet Synchronous Generator for Wind Turbine

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Coupling Characteristics Research on the Subsections of Submersible Motor

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Magnetic Field Modulation Analysis and Experimental Research of Brushless Doubly Fed

Generator with Hybrid Rotor Feng Ge Zhang, Si Yang Yu School of Electrical Engineering Shenyang University of Technology Shenyang 110870, China Xiu Ping Wang School of Electric Power Shenvang Institute of Engineering Shenyang 110136, China

Multilevel Six-Sigma Robust Optimization of a Superconducting Magnetic Energy Storage Gang Lei, You Guang Guo, Jian Guo Zhu School of Electrical, Mechanical and Mechatronic Systems

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Application of Field-Circuit Coupled FEM in the Design of a HTS Controllable-Reactor Shi Feng Shen, Yue Jin Tang, Li Ren, Hong Da Dong, Xiang Zhao, Zuo Shuai Wang State Key Laboratory of Advanced Electromagnetic Engineering and Technology Huazhong University of Science and Technology Wuhan 430074, China

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Improvement in Dynamic Stability of Self-Excited Induction Generator with Short-Shunt Capacitors Xin Zhen Wu, Yang Zhang, Kai Wang Department of Electrical Engineering Qingdao University

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Steady-State Analysis of Islanded Three-Phase Induction Generator in Single-Phase Operation with Combined Equivalent Circuit Xin Zhen Wu, Yang Zhang Department of Electrical Engineering Qingdao University

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Multiobjective Design Optimization for High-Temperature Superconducting Linear Synchronous Motors with Different Primary Topologies Gang Lei, You Guang Guo, Jian Guo Zhu School of Electrical, Mechanical and Mechatronic Systems University of Technology Sydney

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Six-Sigma Robust Topology and Shape Optimization for Flux Switching Permanent Magnet Machines

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Design and Loss Analysis of the High Frequency PFC Converter Qiang Li, Huai You Zhao, Jun Chao Song Nanjing University of Science and Technology Jiangsu 210094, China

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Influence of Different Stator Cores on Electromagnetic Performance of Axial Field

Flux-Switching Permanent Magnet Machines

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Thermal Analysis of the Conical Rotor Motor using LPTN Combined with Fluid Simulation

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Thick Y(Dy)Ba₂Cu₃O_{7-δ} Films Fabricated at Low Pressure by Super-Low-Fluorine MOD Method Chuan Wei Cui, Zhi Yong Liu, Chuan Yi Bai, Yu Ming Lu, Yan Qun Guo, Zhi Ying Zhang, Chuan Bing Cai^{*}

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Research on the Improvement of the Quickness and Its Simulation for Magnetic-Valve Controllable Reactor

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Influence of Magnet Materials on Performances of Fault-Tolerant Permanent-Magnet Vernier Machines

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Normal Force and Vibration Investigation of Linear Permanent-Magnet Vernier Machine Yan Xin Mao, Guo Hai Liu, Wen Xiang Zhao, Jing Hua Ji, Yu Zeng, Jun Qiang Zheng School of Electrical and Information Engineering Jiangsu University

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Economic Dispatch Analysis of Wind Power Integration into Power System with Energy Storage Systems

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Dynamic Longitudinal Edge Effect of High-Temperature Superconducting Linear Induction Motor Bin Liu, Xiao Yue Zhang, Jin Fang*

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The Analysis and Compensation Control of the Detent Force for Slot-Less Tubular Permanent Magnet Linear Synchronous Motor

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Hybrid Stepping Motor with Permanent Magnets in Stator Presentation, Parameter Calculation and Design

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Electromagnetic Performance Analysis of Fully Stator-HTS Fault-Tolerant Motors Yu Zeng, Guo Hai Liu, Wen Xiang Zhao, Oian Chen, Liang Xu School of Electrical and Information Engineering Jiangsu University Zhenjiang 212013, China

Temperature and Current Distribution of High Temperature Superconducting Cable Itself under Large Fault Current

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Armature Reaction of A New Four-Phase Doubly Salient Electro-Magnetic Generator Li Wei Shi, Bo Zhou School of Automation Nanjing University of Aeronautics and Astronautics Nanjing 211106, China

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Improving FRT Capability and Alleviating Output Power of DFIG Wind Turbine by SMES-FCL Issarachai Ngamroo Department of Electrical Engineering, Faculty of Engineering King Mongkut's Institute of Technology Ladkrabang Bangkok 10520, Thailand

Microgrid Stabilization by SMES with SOC Control Issarachai Ngamroo Faculty of Engineering King Mongkut's Institute of Technology Ladkrabang Bangkok 10520, Thailand Sitthidet Vachirasricirikul School of Engineering University of Phayao Phayao 56000, Thailand

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Integrated Superconducting Coil into PV Generator for Power Smoothing and Voltage Regulation Worapong Kreeumporn, Issarachai Ngamroo Department of Electrical Engineering, Faculty of Engineering King Mongkut's Institute of Technology Ladkrabang Bangkok 10520, Thailand

Observation of Nonlinearity in Dual-Band Superconducting Filter Using Spirally Asymmetric Stepped-Impedance Resonators

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Compact Triple-Band High-Temperature Superconducting Filter Using Coupled-Line Stepped Impedance Resonator (C-SIR)

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Design of Dual-Band Superconducting Bandpass Filter Using Dual-Mode Hairpin Ring Resonator Bao Ping Ren, Hai Wen Liu, Xue Hui Guan, Fan Liu

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Determination of the Number of Turns and Voltage of Control Winding of Controllable Reactor of Transformer Type

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Analysis of the Eddy Current Loss in the Secondary of Tubular Flux-Switching Permanent Magnet Linear Motor (TFSPMLM)

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Risk Assessment of Power Systems Integrated with Wind Farm and SMES

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A Novel Active Boost Power Converter with Application to Torque Ripple Reduction Control for Switched Reluctance Motor

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Dynamic Simulation of a Superconducting Augmented Linear Propulsion System Si Zhuang Liang, You Tong Fang, Xiao Yan Huang College of Electrical Engineering **Zhejiang University** Hangzhou 310027, China

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Design and Temperature Rise Analysis of a High Speed PMSM for Pulsed Power System Yuan Wan, Shu Mei Cui, Shao Peng Wu School of Electrical Engineering and Automation Harbin Institute of Technology Harbin 150006, China

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Surface Plasmon Polariton Propagation Modeling for Graphene Parallel Pair Sheets Using FDTD Md. Masud Rana, Md. Biplob Hossain, Md. Rabiul Islam Department of Electrical and Electronic Engineering Rajshahi University of Engineering and Technology Rajshahi-6204, Bangladesh You Guang Guo Faculty of Engineering and Information Technology

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Structural Effect of the Permanent Magnet Guideway on the Dynamic Behavior of a Levitated High Temperature Superconductor

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Pole Ratio Effect on Performances of Linear Permanent Magnet Vernier Motor Shi Yuan Wang, Wen Xiang Zhao, Jing Hua Ji, Jun Qiang Zheng School of Electrical and Information Engineering Jiangsu University Zhenjiang 212013, China

Preliminary AC Loss Analysis for the CFETR Central Solenoid Model Coil Wei Zhou, Jin Fang School of Electrical Engineering Beijing Jiaotong University Beijing 100044, China

Computing the Radar Cross Section of Electromagnetic Scattering from Wind Turbine Rui Sun, Bo Tang, Li Ye, Fang Zou China Three Gorges University Yichang 443002, China

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Quantity Analysis on the Thermal Stability of LTS/HTS Composite Superconductor Ying Min Cui, Yin Shun Wang, Gang Lv, Wei Pi, Shi Hui Zhang The State Key Laboratory for Alternate Electrical Power System with Renewable Source School of Mathematical and Physical Science North China Electric Power University Beijing 102206 and Baoding 071003, China

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Application of Generalized Resonance Theory in Reradiation Interference from UHV Power Lines Hao Tian Jiang, Bo Tang, Hong Ying Cao, You Xian Peng, Ren Liu China Three Gorges University Yichang 443002, China,

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Dynamic Performance Analysis of SMES for Sensitive Load Voltage Sag Compensation Zi Xuan Zheng, Xian Yong Xiao, Yang Liu, Chang Song Li College of Electrical Engineering and Information Technology Sichuan University Chengdu 610065, China

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Electromagnetic Scattering Field Calculation of UHV Power Transmission Line at VHF Based on Fitting Algorithm
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Development of an LTS/HTS Hybrid Superconducting Magnet Wei Pi

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Characteristics Analysis of PM Linear Synchronous Motor with Non-Uniform Air-Gap Xiao Zhuo Xu, Hai Chao Feng, Xu Dong Wang, Bao Yu Du

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Analysis of the Thermal Stability of a Quasi-Isotropic Strand Made from ReBCO Tapes

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Simulation on Heat-leakage of PCL with Natural and Water-Cooling Modes

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ID5147

The Influence of the YBCO Tape Arrangement and Gap between the Two Tapes on AC Losses

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ID5148

Twisting Characterization of 2G HTS Tapes

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ID5151

A Flux-Concentrating External-Rotor Switched Flux Hybrid Magnet Memory Machine for

Direct-Drive Automotive Applications

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Improved Finite-Control-Set Model Predictive Control Algorithm for Disc Coreless Permanent

Magnet Synchronous Motor based Three-Level NPC Inverter

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ID5153

Reducing Noise for an Amorphous Superconducting Distribution Transformer by Using

Micro-perforated Panel Absorber

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ID5154

Analysis on Critical Current of HTS Strand with Geometrically Symmetric Configuration

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ID5155

Design and Analysis a New Primary HTS Linear Motor for Transportation System

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ID5156

Current Distribution Characteristics of NbTi/Bi2223 Hybrid Superconductor

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ID5157

Effect of Backfill Soil Impurity on Electric Field Characteristics of HVDC Grounding-electrode

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ID5158

Parameter Estimation of Dielectric Response Circuit Using Improved Mathematical Model Tao Zhang, Xiao Qin Li, Qian Zuo, Bin Zhang, Ya Qin Liu College of Electrical Engineering and New Energy China Three Gorges University Yichang 443002, China

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Study on Initial Slope Characteristic Quantity of Return Voltage Tao Zhang, Xiao Rui Tan, Bin Zhang, Qian Zuo College of Electrical Engineering and New Energy China Three Gorges University Yichang 443002, China

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Analysis and Minimization of Cogging Force in Tubular Transverse Flux Linear Machines for Direct Drive Applications
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ID5161

Design and Analysis of High Speed Outer Rotor Permanent Magnet Claw Pole Machine Guang Wei Liu, Geng Wu Li, Feng Ge Zhang, Si Yang Yu School of Electrical Engineering Shenyang University of Technology Shenyang 110870, China

ID5162

Analysis of Restrike Overvoltage of Circuit Breakers in Wind Farms Qi Bin Zhou, Yang Zhao Shanghai Lightning Protection Center Shanghai 201615, China Yu Cheng, Xiao Yan Bian, Fei Fan Liu College of Electrical Engineering Shanghai University of Electric Power Shanghai 200090, China

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Design and Comparison of Interior Permanent-Magnet Machines for Hybrid Electric Vehicles Jun Qiang Zheng, Wen Xiang Zhao, Jing Hua Ji, Guo Hai Liu School of Electrical and Information Engineering Jiangsu University Zhenjiang 212013, China

ID5165

Comparison of Stator HTS Vernier Machines Having Different Stator and Rotor Pole Numbers Liang Xu, Guo Hai Liu, Wen Xiang Zhao, Jing Hua Ji, Xun Fan, Yu Zeng School of Electrical and Information Engineering Jiangsu University Zhenjiang 212013, China

Variable-Reluctance Resolver Rotor Design Based on FEA and Matlab Co-Simulation Wen Tao Li, Su Rong Huang School of Mechatronic Engineering and Automation Shanghai University Shanghai 20072, China

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Application of SFCL to Improve the Transient Voltage Stability of Grid-Connected Wind Farm With DFIG During Grid Faults
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ID5170

Harmonic Detection Method Based on Positive Sequence Extractor of Fundamental Current Tao Chen, Lu Yang Wang, He Xing Wang, Shu Juan Yuan, Ning Gao, Ran Li, Si Yuan Huang Electric Power Engineering Shanghai University of Electric Power Shanghai 200090, China

ID5171

Development of a Permanent Magnet Slotless Limited-Angle Torque Motor with a Moving Coil for Optical Scanning System
Ji Bin Zou, Guo Dong Yu, Yong Xiang Xu, Wang Qian, Yan Yu Wei, Jun Long Li
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ID5172

Design and Analysis of a Permanent Magnet Slotted Limited-Angle Torque Motor with Special Tooth-Tip Structure for Torque Performance Improvement
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dentification and Mixed-Sensitivity $H\infty$ Control of Permanent Magnet Biased Axial Magnetic Bearing with Multiple Air Gaps

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Bending Characterization of an HTS Strand with Geometrical Symmetric Structure Yin Shun Wang

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ID5175

Critical Current of a Quasi-Isotropic HTS Strand with Symmetric Configuration

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ID5176

Investigation on Phase Angle Mismatch of Multiple Air-Core Pulsed Alternators

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Experimental Research and Analysis of AC Critical Current in YBCO Tapes

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Novel Composite Sliding Mode Control for PMSM System Based on Disturbance Observer

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ID5180

The Prediction of Energy-Saving Electromagnetic Flowmeter Based on Kalman Filtering Method

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ID5183

Core Loss Analysis of Transverse Flux Tubular Motor in Variable-Speed Reciprocating Periodic Motion Mode

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ID5184

Analysis of High Temperature Superconducting Cable Model under Fault Current

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ID5185

The Thermal Stability of LTS/HTS Composite Round Wire

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ID5186

Effect of Direct Fluorination on Surface Potential Behavior of Polyimide Film under Low

Temperature

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ID5187

Analysis and Design of a Novel Linear Generator for Harvesting Oceanic Wave Energy

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ID5190

Surface Flashover Characteristics of Fluorinated Polyimide Films in Liquid Nitrogen Bo Xue Du, Yun Qi Xing, Jian Xun Jin, Peng Hao Huang

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Calculation and Analysis of IGBT Power Loss in Drive System for EV

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Improved Discretization-Based Decoupled Feedback Control for Series Connected Converter of SCC

Jing Shi, Kang Gong, Yang Liu, Xiao Zhou, Yue Jin Tang, Li Ren, Jing Dong Li

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ID5197

AC Copper Losses Calculation of the Ironless BLDCM used in a Flywheel Energy Storage System

Kai Liu, Xin He Fu, Ming Yao Lin, Da Xu

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ID5199

Fabrication and Measurements of Nb/Al-AlOx/Nb Tunnel Junctions and DC SQUID

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ID5201

Superconducting Liquid Nitrogen Insulated Metal Enclosed Switchgear

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ID5203

Heat Generation and Temperature Rise in a Resistive Type Superconducting Fault Current Limiter Ya Xiong Tan, Kun Yang, Bin Xiang, Jing Yan, Zhi Yuan Liu, Ying San Geng, Jian Hua Wang, Satoru Yanabu

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Effect of Low Temperature on Tree Characteristics in Silicone Rubber under Repetitive Pulse Voltage

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ID5205

Resistive Type Superconducting Fault Current Limiter and Current Flowing Time

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Effect of Magnetic Field on Tree Characteristics in Silicone Rubber

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Comparison between KAPTON Polyimide Insulation Layers and Nylon Plates in Superconducting Tapes Winding

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ID5208

Rebalance of Superconducting Tapes in Parallel Connection

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ID5209

Comprehensive Magnetic Properties Measurement of the Silicon Steel Considering the Laminated Direction

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ID5210

Study on the Self-Excitation Condition of a Two-Phase Air-Core Pulsed Alternator

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ID5211

Effect of Liquid Nitrogen on Surface Charge of Polypropylene Film under DC and Pulse Voltages

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ID5212

Parameter Calculation of Solid Wires in Transformer Windings

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ID5213

Effect of Magnetic Field on Electrical Treeing Behavior in Silicone Rubber under Low

Temperature

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ID5214

Arcing Time in a Superconducting Current-Limiting Type DC Circuit Breaker

Bin Xiang, Li Cai Zhang, Ya Xiong Tan, Kun Yang, Zhi Yuan Liu, Ying San Geng, Jian Hua Wang, Satoru Yanabu

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ID5215

Ratios of Current Limiting and Its Distribution in a DC Resistive Superconducting Fault Current

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Voltage Distribution Characteristics of a Resistive Superconducting Fault Current Limiter in DC **Systems**

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ID5218

Design and Analysis of a Hybrid Axial Field Flux-Switching Permanent Magnet Machine Da Xu, Ming Yao Lin, Xing He Fu, Li Hao, Wei Zhang, Ji Long Zhao School of Electrical Engineering Southeast University Nanjing 210096, China

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Influence of Rotor Eccentricity on Magnetic Density and Core Loss for Induction Motors Shu Ye Ding, Shan Jiang, Meng Qi Wang, Tian Yu Guan, Guang Hui Cui College of Electrical and Electronic Engineering Harbin University of Science and Technology Harbin 150080, China

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Determination of JA Core Hysteresis Model Parameters Based on Fuzzy- Shuffled Frog Leaping Algorithm

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ID5224

Topology and Performance Comparison of a Novel Hybrid Excitation Linear Switched Reluctance Machine with High Force Density

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ID5225

Analysis and Design of an Annular Winding Dual Side Stator Linear Switch Reluctance Machine for Ropless Elevator Driving System

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ID5226

Effects of Atmospheric Pressure on Tracking Failure of Epoxy/SiO₂ Nanocomposite Ji Wei Zhang, Oing Ouan li, Ang Ren Shandong Provincial Key Laboratory of UHV Transmission Technology and Equipment

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ID5227

Research on Derivational Topologies and Control of Switched-Capacitor Converter

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ID5228

Prediction of the Overall Characteristics for High Power Permanent Magnet Synchronous Motor with Multi Phase Units

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ID5229

Rotational Magnetic Properties of Silicon Steel Laminations by 3-D Magnetic Properties

Measurement

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ID5230

Analysis and Experimental Study of Brushless Electrically-Excited Synchronous Generator with

Hybrid Rotor

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ID5232

Establishment of Core Dynamic Hysteresis Model under DC Flux

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A Novel Permanent Magnet Biased Heteropolar Radial Magnetic Bearing with Low Displacement Stiffness

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Design and Analysis of a Switched Reluctance Motor with High Temperature Superconducting Windings

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ID5235

Detent Force Minimization of a Novel Linear-Rotary Permanent Magnet Actuator with Independent Magnetic Circuit Structure
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ID5236

Quantities Comparative Analysis of a Linear-Rotary Permanent Magnet Actuator with HTS Field Winding
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ID5237

Numerical Computation of Static Magnetic Field Considering 2D Property of Silicon Steel You Xing Xiong, Jun Quan Chen, Zhen Zhong Su, Dong Wang, Zhong Jun Yu, Yu Wang National Key Laboratory of Science and Technology on Vessel Integrated Power System Naval University of Engineering Wuhan 430033, China

ID5238

Characterization Analysis on Performance of YBaCuO Coils Induced by Steady-State Current Kong Hui Liu, Wen Tao Li, Hao Yu Song, Chang Xin Chi, Chuan Bing Cai Shanghai Key Laboratory of High Temperature Superconductors, Department of Physics Shanghai University Shanghai 200444, China

ID5239

Effect of Low Temperature on Tracking Failure Process of Epoxy/BN Composite Meng Xiao, Ji Wei Zhang Jinan Power-Supply Company Jinan 250012, China Bo Xue Du, Yun Qi Xing School of Electrical Engineering and Automation

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ID5240

Study on PEG Assisted TFA-MOD Method for Rapid Fabrication of YBa₂Cu₃O_{7-δ} Thin Films:

Influence of PEG Additive Amount in Precursor Solutions

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ID5241

Analysis of Energy Storage Technology in Microgrid

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ID5242

Tracking Failure of Polyethylene/BN Composite with Pulse Voltage under Low Temperature

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Energy Efficiency Diagnosis of Smart Grid Park Based on Multi-Level Energy Transfer Model

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Electromagnetic Analysis of High Current Carrying Superconducting Cable Consisted of YBCO

Coated Conductor

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Superconducting Motor Developments at Guina Energy Technologies

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ID5249

Extended Finite Element Method for Electromagnetic Fields

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ID5250

Design and Calculation of Planar Eddy Current Coil in Coin Identification

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ID5251

Electromagnetic-Thermal Simulation of Cold Crucible Considering Surface-to-Surface Heat Radiation

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ID5252

Cumulative Deformation Analysis of Transformer Winding under Short-Circuit Fault Using 3-D FEM

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ID5253

Study on Engineering Design and Simulation method of Phase-Shifting Reactor Dong Sheng Yuan, Shu Hong Wang, Hai Lin Li, Hai Jun Zhang, Xi Tao State Key Laboratory of Electrical Insulation and Power Equipment Faculty of Electrical Engineering Xi'an Jiaotong University Xi'an 710049, China

ID5254

Two-Dimensional Elemental Operator for Modeling the Vectorial Hysteresis of Soft Magnetic Composite Material

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ID5255

Optimal Design of Rectifier Transformer Xi Tao, Shu Hong Wang, You Peng Huang Fu, Dong Sheng Yuan, Song Wang School of electrical engineering Xi'an Jiaotong University Xi'an 710049, China

ID5256

Modeling the Stress Dependence of Magnetic Hysteresis Based on Stoner-Wohlfarth Theory Wei Jie Xu^{1,2}, Na Na Duan¹, Shu Hong Wang¹

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ID5257

Energy Reclaim Control of an Air-Core Pulsed Alternator Xi Yuan Li, Li Wei Song, Shu Mei Cui Department of Electrical Engineering Harbin Institute of Technology Harbin 150080, China

ID5258

Drive System Design and Experiment Validation of 3-DOF Deflection Type PM Motor Zheng Li School of Electrical Engineering Hebei University of Science and Technology Shijiazhuang 050018, China Qun Jing Wang

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ID5259

Influence of Interface Reactions on the YBCO Films Grown by Fluorine-Free Solution Route

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Interior Permanent Magnet Motor Parameter and Torque Ripple Analysis for EV Traction

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ID5262

Fault analysis of VSC-HVDC System with Saturated Iron-Core Superconductive Fault Current Limiter

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ID5263

Adaptive Frequency Regulation Strategy based Integral Sliding Mode Control for Smart Grid with

Renewable Energy Sources

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Study on Quantitative Pulse Magnetization of NdFeB

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Development of Electric Motors with Soft Magnetic Composite Materials

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Qiu Liang Wang, Wen Hui Yang, Feng Liu, Ling Xia, Yi Li, Zhi Peng Ni, Lu Guang Yan, Jian Yi

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A 3-D Magnetic Equivalent Circuit of an Axial-Flux MEMS Micromotor

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Analysis of Electromagnetic Properties of Superconducting Suspension System for Gravity Measurement

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Flow Control of Magnetohydrodynamic Flow in a Cylindrical Spiral Channel Kai Yan, Qiu Liang Wang, Yin Ming Dai, Xin Ning Hu Institute of Electrical Engineering Chinese Academy of Sciences Beijing 100190, China

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A Novel Passive Shimming Method for 0.7T Biplanar Superconducting MRI Xu Chen Zhu, Hou Shen Wang, Hui Wang, Yi Li Key Laboratory of Applied Superconductivity, Institute of Electrical Engineering Chinese Academy of Sciences Beijing 100190, China

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Shape Optimization of Ferromagnetic Pole of a Superconducting MRI Magnet with Niching Genetic Algorithm
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Design and Test of a Five-Section Linear Induction Coil Launcher Xian Li, Hou Sheng Wang, Shun Zhong Chen, Jian Hua Liu Institute of Electrical Engineering Chinese Academy of Sciences Beijing 100190, China

Effect of Epoxy Insulation on Strain Distribution in Superconducting Coil Guang Zhu, Jun Sheng Cheng, Lan Kai Li, Jian Hua Liu, Jian Bo Zhou, Yin Min Dai Key Laboratory of Applied Superconductivity, Institute of Electrical Engineering Chinese Academy of Sciences
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ID5285

Simulation and Experimental Study on Lap Joint between YBCO Double Pancake Coils of High Field Insert Magnets
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Design and Test of Displacement Transducer for an Electrode-Insulated Electrostatically Suspended Gyroscope
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Preparation and Magnetic Properties of Nickel Nanowires by Magnetic Field-Induction Wan Shuo Sun, Jun Sheng Cheng, Lan Kai Li Institute of Electrical Engineering Chinese Academy of Science Beijing 100190, China Ying Liu School of Material Science and Engineering Beijing Institute of Technology Beijing 100081, China

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Fabrication of NbTi Superconducting Joint by Electromagnetic Forming Method Jun Sheng Cheng, Feng Zhou, Lan Kai Li, Chun Yan Cui, Wan Shuo Sun, Yin Ming Dai Institute of Electrical Engineering Chinese Academy of Sciences Beijing 100190, China You Tong Fang College of Electrical Engineering **Zhejiang University** Hangzhou 310058, China

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Analysis of Driving Torque Generated by Superconducting Motor Based on the Meissner Effect Chun Yan Cui, Lan Kai Li, Xin Ning Hu, Hui Wang, Qiu Liang Wang

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Analysis of the Output Torque of a Superconducting Torquer for Drift Test Hao Wang, Xin Ning Hu, Chun Yan Cui, Hui Wang, Jing Wen Xu, Chen Chen Gou, Jian Bo Zhou Key Laboratory of Applied Superconductivity, The Institute of Electrical Engineering Chinese Academy of Sciences Beijing 100190, China

Experimental Study on Temperature and Heat-Leakage of Peltier Current Leads Gui Xin Chen, Yin Shun Wang State Key Lab. of New Energy Renewable Power System North China Electric Power University Beijing 102206, China

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High Starting Torque Research of Discrete Frequency Control for Soft Starter with Reduced **Starting Current**

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Model Perdictive Direct Torque Control of Permanent Magnet Synchronous Motor with Reduced Torque Ripple

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Effects of Low Temperature on Dielectric Properties of Ethylene-Propylene-Diene Terpolymer Filled with Carbon Black Nanoparticles Jin Li, Bo Xue Du, Yun Qi Xing, Jian Xun Jin School of Electrical Engineering and Automation

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Chemical Solution Derived YBa₂Cu_{3.3}O_{7-δ}/Y₂O₃(CuO) Multilayers on Oxide Buffered Metallic

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Twisting Characteristics of a Quasi-Isotropic Strand Fabricated by 2G HTS Tapes

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Evolution of Morphology and Residual Stress of GdBa₂Cu₃O₇₋₈/EuBa₂Cu₃O₇₋₈ Quasimultilayers Jian Xin Lin, Xu Ming Liu, Yan Oun Guo, Feng Fan, Yu Ming Lu, Chuan Yi Bai, Zhi Yong Liu, Chuan Bing Cai

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Numerical Analysis on RHEED Patterns Based on Gray Level: a Case Study of IBAD-MgO Film Xiao Liang Shi, Feng Fan, Yan Qun Guo*, Chuan Yi Bai, Yu Ming Lu, Zhi Yong Liu, Chuan Bing

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Optimal Design of Magnetic Gears with a General Pattern of Permanent Magnet Arrangement Wei Nong Fu

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Design and Analysis of a Novel Vernier Reluctance Fully Superconducting Synchronous Generator with LTS Windings for Wind Power Generation Shao Feng Jia, Rong Hai Qu, Jian Li, Hai Yang Fang, Da Wei Li, Jing Xuan Hu State Key Laboratory of Advanced Electromagnetic Engineering and Technology School of Electrical and Electronic Engineering Huazhong University of Science and Technology Wuhan 430074, China

ID5309

Performance Simulation of Flux Modulation Permanent Magnet Machines with Three Topologies Hui Juan Liu¹, Yue Hao¹

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Optimal Design of Permanent-Magnet Machines Using RSM Based Alopex Method Xiao Yu Liu
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Design Aspects of a High Thrust Density Dual Stator Yokeless Linear Switched Reluctance Machine for Harsh Conditions
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ID5313

Performance Analysis of a PM Brushless Rotor Claw Pole Motor Using 3D FEM Zhen Yang Zhang, Hui Juan Liu, Yue Hao
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Fabrication of CeO₂ Buffer Layers for Epitaxial Growth of Tl-2212 Films by the in Situ

Two-Temperature Process

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Critical Current of HTS Strand with Geometrical Symmetric Configuration in Magnetic Field

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ID5318

Anomalous Thermal Expansion of PrBCO Compounds Revisited at Low Temperatures

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A New Halbach Arc Permanent Magnet Synchronous Motor with Three-Dimensions Air Gap Used on Large Telescope

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Phase Transition During Sintering Process Before Nucleation of TFA-MOD YBa₂Cu₃O_{7-δ} Films Wen Zhi Dou, Zhi Yong Liu, Jie Yu, Fan Yang, Chuan Yi Bai, Yu Ming Lu, Yan Qun Guo, Chuan Bing Cai

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Pyrolysis Induced Surface Morphology Evolution of YBa₂Cu₃O₇-δ Films Prepared by Low-Fluorine Metal-Organic Deposition

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Estimation of Measurement Uncertainty for Devices with Extreme Fisher Information

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ID5324

Effect of LTS Background Coil Size on the AC Loss Generated in the REBCO HTS Insert Magnet

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A Novel Artificial Bee Colony Algorithm for Brushless DC Wheel Design

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Influence of Annealing Time on 5-layer $YBa_2Cu_3O_{7-\delta}$ Thick Films by Low-Fluorine Metal-organic Deposition

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Mechanical Properties of HTS Magnet for a 5MJ SMES Using Coated Conductor on Round Core Guo Lei Ma, Yin Shun Wang

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Modeling and Flux Leakage Analysis for Long-Stator PM Linear Motor Including Longitudinal

End Effects

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ID5334

Topologies for Fully Superconducting Machines

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ID5336

Design and Sensorless Control of a Novel Axial Flux Permanent Magnet Machine for in-Wheel

Applications

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MPPT Control of a Novel Axial Flux Permanent Magnet Machine for Wind Power Generation

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Optimized Design of the Saturated Iron Core Superconducting Fault Current limiter

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Torque Ripple Reduction for Interior Permanent Magnet Machines Using Overlapping windings with Fractional Slot Per Pole Pair

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Design and Analysis of a Novel Flux-Modulated Permanent Magnet Linear Generator with Sandwiched Armature Stator

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Thermal Stability of a Quasi-Isotropic Strand Consisting of Coated Conductors

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Analysis and Modeling of Novel Brushless Exciter Based on Hybrid Excitation Topology Zhen Zhong Su, Dong Wang, Yun Jun Guo, Xin Qiang Yi, You Xing Xiong National Key Laboratory of Science and Technology on Vessel Integrated Power System Naval University of Engineering Wuhan 430033, China

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Optimization and Modeling of the Homo-Polar Radial Magnetic Bearing Lei Tao Wu, Dong Wang, Kang Wang, Zhen Zhong Su, Xian Biao Zhang National Key Laboratory of Science and Technology on Vessel IPS Naval University of Engineering Wuhan 430033. China

ID5347

An Efficient and Polarization Sensitive SNSPD with Coupled Asymmetric SRR-Loaded Cavity Meng Meng Yang, Fan Zheng, Guang Hao Zhu, Biao Bing Jin Research Institute of Superconductive Electronics Nanjing University, 22 Hankou Rd Nanjing 210093, China

ID5348

Effect of External Magnetic Fields on the Breakdown and Partial Discharge Characteristics of Vegetable Oil

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ID5349

2D FEM Transient Analysis of Permanent Magnet Motor Considering Skin Effect of Stator Winding

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ID5350

A Novel 3D Magnetic Field Generator with Larger Uniform Region Jun Quan Chen, Dong Wang, You Xing Xiong, Si Wei Cheng, Kun Wei, Zhi Xin Liu National Key Laboratory of Science and Technology on Vessel Integrated Power System Naval University of Engineering Wuhan 430033, China

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Theoretical Analysis and Design of an Extremely Low Frequency Magnetic Field Stimulation System for Tumor suppression
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Modeling and Dynamic Performance Analysis of a High Power Density Tubular Linear Switch Reluctance Generator for Direct Drive Marine Wave Energy Conversion Dao Han Wang, Xiu He Wang, Chun Lei Shao School of Electrical Engineering Shandong University
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A Study of a SMES in Smart Grid with Electric Vehicle Shan Chuan Wang^{1, 2}, Jian Xun Jin¹, Ying Li Wang¹
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Determination of Level Populations in Superconducting Phase Qutrits Shi Ping Zhao Beijing National Laboratory for Condensed Matter Physics, Institute of Physics Chinese Academy of Sciences Beijing 100190, China

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EMC Prediction Method of High Voltage Multi-Circuit Transmission on the Same Tower Based on Improved Least Squares Method Hua Xue, Hai Xia Li, Xu Hu College of Electrical Engineering Shanghai University of Electric Power Shanghai 200090, China

Modeling and Finite Element Analysis of Suspension Force for a Bearingless Permanent Magnet Synchronous Motor

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A Novel Triple-Rotor Axial-Flux Vernier Permanent Magnet Machine

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Operating Parameters Optimization of SMES Considering Transient Thermal Stability Kang Gong, Jing Shi, Li Ren, Yin Xu, Yi Zhang, Yang Liu, Li Hui Zhang, Xiao Zhou, Ao Bo

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ID5362

Studies on the Influences of SFCL on the Transient Recovery Voltage of Circuit Breaker

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ID5363

Studies on the Effect of SFCL on the Transient Stability of Power System

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ID5364

Calculation and Measurement of Electromagnetic Parameter for High Speed Slotless PM Motors

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ID5365

Permanent Magnet Reduction of IPMSM on Efficiency Map Simulation

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Analyze of Permanent Magnet Loss of High Speed Permanent Magnet Synchronous Motor for Flywheel Energy Storage System

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ID5368

Analytical Calculation of PMSG Optimization for Compact ER-EVs Application

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Developing Process of Partial Discharge in Oil-Paper Insulation under Needle-Plate Defects

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FEA Study on the Axial Vibration of Power Transformer Windings

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ID5372

The Levitation of Magnetized Water by a Superconductive Magnetic-Field and Its Magnetism

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Stainless Steel Weld Defect Detection Using Eddy Current Pulsed Thermography Yu hua Cheng¹, Li Bing Bai¹, Fan Yang², Yi Fan Chen¹, Shen Hua Jiang³, Chun Yin¹

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An Improved Active Islanding Detection Method Applying to Multi-Inverter Power System

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ID5375

Grid-Connected Photovoltaic System Using Compound Current Control of the Novel Repetitive and PI

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ID5376

Experimental and Numerical Study on an HTS Air Core Transformer with Pancake Structure

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Inductance Evaluation of a 22.9 kV/50 MVA HTS Cable with Shield by Electrical Method

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An Upgraded Soft Winding Machines Based on Advanced Yarn Tension Modelling

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Design and Operation of Cryogenic System for 35kV/2000A HTS Power Cables Tao Tang, Xi Hua Zong, Zhi Guang Yu, Xiao Hong Lu, Yun Wu Han Superconducting Project Technologies Research Centre Shanghai Electric Cable Research Institute Shanghai 200093, China

ID5382

Research of the Loss of the Corrugated Stainless Steel Pipe in HTS Cable Xi Ze Zhang, Xi Hua Zong, Yun Wu Han, Xiang Tian, Xiao Hong Lu, Zhi Guang Yu Superconducting Project Technologies Research Centre Shanghai Electric Cable Research Institute Shanghai 200093, China

ID5383

Current Imbalance and AC Losses of Long Distance DC HTS Cable
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CD HTS Cable Control System and Running Situation
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ID5385

Development and Superconducting Properties of 18 Filaments Jelly-Roll Nb₃Al Superconducting Wire with Rapid Heating and Quenching Heat-Treatment Xi Feng Pan Western Superconducting Technologies Co., Ltd. Xi'an, China

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Advances in $Bi_2Sr_2CaCu_2O_x$ Superconducting Wires (and Related Technologies) for High Field Superconducting Magnets
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