

特种电源技术专辑

目次

高功率脉冲电源技术及应用

雷电间接效应多重脉冲组电流产生装置的设计 刘宏伟, 栾崇彪, 袁建强, 等 025001 (7)

多级 XRAM 型脉冲功率电源开关器件简化研究 张玉宸, 戴玲, 樊晟廷, 等 025002 (7)

具有快前沿的固态 Marx 电源的研究 李东升, 李孜, 王永刚, 等 025003 (7)

基于脉冲变压器的快前沿固态触发器 叶明天, 张迎鹏, 龙天骏, 等 025004 (6)

基于半桥结构的双极性脉冲电源的研究 潘英进, 熊奕鸣, 李孜, 等 025005 (7)

一种紧凑型固态 Marx 发生器的研究 姚皓伟, 李孜, 王永刚, 等 025006 (7)

新型全固态模块化多电平特种高压电源优化设计 李玉山, 钱伟刚, 滕甲训, 等 025007 (8)

三电极结构在双源激励下的介质阻挡放电特性 姜松, 张征东, 王永刚, 等 025008 (8)

特种电源设计及仿真技术

高压保护开关缓冲电路参数优化设计 李志恒, 马少翔, 张鸿洪, 等 025009 (12)

一种小型化脉冲行波管高压电源设计与实现 刘银川, 高文雷, 王桢枫, 等 025010 (7)

中性束注入系统加速极电源高压部件设计 张鸿洪, 李志恒, 马少翔, 等 025011 (9)

kA 级双阶梯脉冲电源方案设计与分析 陈俊宏, 肖东华, 熊玉珍, 等 025012 (7)

变母线电压的 LLC 高压电容充电电源设计 曾宇轩, 菲华·帕兰斯, 于克训, 等 025013 (7)

HEPS 增强器凸轨磁铁脉冲电源的设计与实现 王冠文, 陈锦晖, 霍丽华, 等 025014 (5)

一种快校正磁铁电源设计与仿真 王东兴, 黄毛毛, 武万锋 025015 (7)

电源控制技术及电磁兼容技术

千特斯拉级内爆磁压缩装置初始磁场电源系统研制 赵娟, 程诚, 李波, 等 025016 (7)

双差模非屏蔽线缆回路的电磁串扰研究 彭宁, 杨勇, 张明, 等 025017 (8)

基于等效磁路网络法的均匀正交磁场对环形磁芯等效电感的影响 王绍宇, 杨勇, 张明 025018 (11)

功率器件及电子封装技术

高速 SiC-MOSFET 叠层封装结构设计及性能评估 马久欣, 马剑豪, 任吕衡, 等 025019 (7)

全膜脉冲电容器电热老化分析 黄云祺, 王凌云, 张东东, 等 025020 (7)

空间电源技术及应用

基于副边 LLC 谐振变换器的功率处理单元建模与分析 卢泓霖, 吴鑫杰, 张德斌, 等 025021 (9)

TiO₂ 包覆高镍 NCM811 的电化学性能研究 叶创新, 宛传友, 瞿诗霞, 等 025022 (6)

Special Issue on Special Power Supply Technology

CONTENTS

• High Power Pulse Power Supply Technology and Its Application •

Design of multiple pulse group current generation device for indirect lightning effects Liu Hongwei, Luan Chongbiao, Yuan Jianqiang, et al. 025001(7)

Research on switching devices simplification of multistage XRAM pulse power supply Zhang Yuchen, Dai Ling, Fan Shengting, et al. 025002(7)

Research on solid state Marx power supply with fast front Li Dongsheng, Li Zi, Wang Yonggang, et al. 025003(7)

Fast-rise-time solid-state trigger pulse generator based on pulse transformer Ye Mingtian, Zhang Yingpeng, Long Tianjun, et al. 025004(6)

Investigation of bipolar pulse source based on half-bridge structure Pan Yingjin, Xiong Yiming, Li Zi, et al. 025005(7)

Investigation of a compact solid-state Marx generator Yao Haowei, Li Zi, Wang Yonggang, et al. 025006(7)

Optimization design of new all-solid-state modular multilevel special high-voltage power supply Li Yushan, Qian Weigang, Teng Jiaxun, et al. 025007(8)

Dielectric barrier discharge characteristics of three-electrode structure under dual-source excitation Jiang Song, Zhang Zhengdong, Wang Yonggang, et al. 025008(8)

• Special Power Supply Design and Simulation Technology •

Parameter optimization design of snubber circuit for high voltage protection switch Li Zhiheng, Ma Shaoxiang, Zhang Hongqi, et al. 025009(12)

Design and implementation of a miniaturized high voltage power supply for pulse traveling wave tube Liu Yinchuan, Gao Wenlei, Wang Yafeng, et al. 025010(7)

Design of high-voltage components for acceleration grid power supply of neutral beam injection system Zhang Hongqi, Li Zhiheng, Ma Shaoxiang, et al. 025011(9)

Design and analysis of kA stepped pulse current generation scheme Chen Junhong, Xiao Donghua, Xiong Yuzhen, et al. 025012(7)

LLC high voltage capacitor charging power supply design with variable bus voltage Zeng Yuxuan, Patrick J Palanas, Yu Kexun, et al. 025013(7)

Design and implementation of HEPS booster bumper pulser Wang Guanwen, Chen JinHui, Huo Lihua, et al. 025014(5)

Design and simulation of a fast corrector magnet power supply Wang Dongxing, Huang Maomao, Wu Wanfeng 025015(7)

• Power Control Technology and Electromagnetic Compatibility Technology •

Development of primary magnetic field coil power supply system of kilo-tesla cylindrical implosion magnetic flux compression generator Zhao Juan, Cheng Cheng, Li Bo, et al. 025016(7)

Research on electromagnetic crosstalk in double differential mode unshielded cable loop Peng Ning, Yang Yong, Zhang Ming, et al. 025017(8)

Influence of uniform orthogonal background magnetic field on equivalent inductance of toroidal magnetic cores based on magnetic equivalent circuit network method Wang Shaoyu, Yang Yong, Zhang Ming 025018(11)

• Power Devices and Electronic Packaging Technology •

High speed package-on-package structure designed for SiC-MOSFET and its performance evaluation Ma Jiuxin, Ma Jianhao, Ren Liheng, et al. 025019(7)

Electrical and thermal aging analysis of all-film pulsed capacitor Huang Yunqi, Wang Lingyun, Zhang Dongdong, et al. 025020(7)

• Space Power Technology and Applications •

Modeling and analysis of power processing unit based on secondary-side LLC resonant converter Lu Honglin, Wu Xinjie, Zhang Debin, et al. 025021(9)

Study on the electrochemical performance of TiO₂ coating on high nickel NCM811 Ye Chuangxin, Wan Chuanyou, Qu Shixia, et al. 025022(6)