

脉冲功率及特种电源技术专辑: II

目 次

高功率微波技术

- 用八孔耦合器识别 TM_{01}/TE_{11} 混模中 TE_{11} 模式的方法 任杰, 翁明, 雷乐, 等 093001 (8)
基于开放式 TEM 小室的电场探头校准及改进方法 王皓琰, 李俊娜, 奚渝涵, 等 093002 (6)

强流加速器与粒子束技术

- 国际高能脉冲 X 射线闪光照相加速器的发展综述 魏浩, 孙凤举, 邱爱慈, 等 094001 (10)
能散对直线感应加速器焦斑分布的影响 王科, 代志勇, 夏连胜, 等 094002 (5)

脉冲功率技术

- 全固态电感储能形成纳秒短脉冲功率调制器 马剑豪, 余亮, 马久欣, 等 095001 (8)
微秒长脉冲有磁场高功率微波二极管真空界面设计 杨汉武, 范涛, 高景明, 等 095002 (6)
基于光导开关的激光二极管触发三电极气体开关研究 付佳斌, 王凌云, 何泱, 等 095003 (6)
一种多通道高速数据采集系统软件 周文渊, 呼义翔, 尹佳辉, 等 095004 (7)
基于铁氧体传输线的脉冲陡化技术仿真研究 江进波, 曹宇, 罗正, 等 095005 (8)
水中针-板结构小能量脉冲火花放电特性 王芝, 韩若愚, 李显东, 等 095006 (7)
基于高压模块供电的 MCP-PMT 高压击穿故障分析及设计改进 马烈华, 龙继东, 陈永涛, 等 095007 (6)
Blumlein 主放电开关中绝缘结构对沿面闪络电压的影响 武庆周, 李劲, 李远, 等 095008 (5)
电触发真空沿面闪络开关工作特性初步研究 叶明天, 王真, 龙天骏, 等 095009 (4)
三平板传输线结构的解析分析方法 毛重阳, 王冠琼, 王小光 095010 (6)
一种调节 Marx 电源脉冲边沿的驱动电路 张睿, 饶俊峰, 李孜, 等 095011 (10)
基于能量回收原理脉冲变压器复位系统仿真与实验研究 王庆峰, 车永旺, 李相强, 等 095012 (7)
kA 级脉冲电流注入环的电路建模与分析 董亚运, 崔志同, 程引会, 等 095013 (6)

特种电源技术

- HEART-50 重复频率高功率脉冲驱动源研究 李嵩, 杨汉武, 樊玉伟, 等 095014 (5)
240 kJ 模块化能库型脉冲放电电源研制 李松杰, 赵娟, 康传会, 等 095015 (7)
正负双极性直流高压充电电源设计 李波, 赵娟, 李洪涛, 等 095016 (7)
600 A 重复频率脉冲恒流源研制 杨振宇, 李柳霞, 张钦, 等 095017 (5)
砷化镓光导开关的损伤形貌研究 沙慧茹, 肖龙飞, 栾崇彪, 等 095018 (6)

前沿技术与交叉科学

- 阵列式等离子体射流处理芽孢的实验研究 陈竑钰, 张勇, 刘振, 等 099001 (9)
一种波束赋形可调的导航天线设计 周凯翔, 袁健锋, 袁雪林 099002 (8)

Special Issue on Pulsed Power and Special Power Supply Technology: Part II

CONTENTS

• High Power Microwave Technology •

- Method for identifying TE₁₁ mode in TM₀₁/TE₁₁ mixed mode system with eight-hole coupler *Ren Jie, Weng Ming, Lei Le, et al.* **093001(8)**
Electric field probe calibration and improvement method based on open TEM cell *Wang Haoyan, Li Junna, Gong Yuhan, et al.* **093002(6)**

• High Current Accelerator and Particle Beams Technology •

- Review of development of high energy pulsed X-ray accelerators for flash radiography *Wei Hao, Sun Fengju, Qiu Aici, et al.* **094001(10)**
Influence of energy spread on the transverse profile of the focused electron beam *Wang Ke, Dai Zhiyong, Xia Liansheng, et al.* **094002(5)**

• Pulsed Power Technology •

- All-solid-state inductive energy storage pulse forming line nanosecond short pulse power modulator *Ma Jianhao, Yu Liang, Ma Jiuxin, et al.* **095001(8)**
Design of a vacuum interface of a microsecond timescale HPM diode with guiding magnetic field *Yang Hanwu, Xun Tao, Gao Jingming, et al.* **095002(6)**
LD triggered three-electrode gas switch based on photoconductive semiconductor *Fu Jiabin, Wang Lingyun, He Yang, et al.* **095003(6)**
A multi-channel high speed data acquisition system software *Zhou Wenyuan, Hu Yixiang, Yin Jiahui, et al.* **095004(7)**
Simulation research on pulse steepening technology based on ferrite transmission line *Jiang Jinbo, Cao Yu, Luo Zheng, et al.* **095005(8)**
Low-energy pulsed spark discharge characteristics of pin-plate structure in water *Wang Zhi, Han Ruoyu, Li Xiandong, et al.* **095006(7)**
Analysis and design improvement of MCP-PMT high-voltage breakdown fault based on high voltage module power supply *Ma Liehua, Long Jidong, Chen Yongtao, et al.* **095007(6)**
Influence of insulation system on surface flashover voltage in Blumlein main switch *Wu Qingzhou, Li Jin, Li Yuan, et al.* **095008(5)**
Primary research on the operating characteristics of electrically triggered vacuum surface flashover switch *Ye Mingtian, Wang Zhen, Long Tianjun, et al.* **095009(4)**
Analytical method of triplate transmission lines configuration *Mao Chongyang, Wang Guanqiong, Wang Xiaoguang* **095010(6)**
A driver circuit to adjust the pulse edges of Marx generators *Zhang Rui, Rao Junfeng, Li Zi, et al.* **095011(10)**
Simulation and experimental research of pulse transformer reset system based on energy recovery principle *Wang Qingfeng, Che Yongwang, Li Xiangqiang, et al.* **095012(7)**
Circuit modeling and analysis of kA level pulse current injection probe *Dong Yayun, Cui Zhitong, Cheng Yinhui, et al.* **095013(6)**

• Special Power Supply Technology •

- High power repetitive rate pulse generator HEART-50 *Li Song, Yang Hanwu, Fan Yuwei, et al.* **095014(5)**
Development of a 240 kJ modularized pulsed power supply *Li Songjie, Zhao Juan, Kang Chuanhui, et al.* **095015(7)**
Design of bipolarity DC high voltage charging power supply *Li Bo, Zhao Juan, Li Hongtao, et al.* **095016(7)**
Development of 600 A repetitively pulsed constant current source *Yang Zhenyu, Li Liuxia, Zhang Qin, et al.* **095017(5)**
Damage morphology of GaAs photoconductive switch *Sha Huiru, Xiao Longfei, Luan Chongbiao, et al.* **095018(6)**

• Advanced Interdisciplinary Science •

- Experimental study on spores treatment by array plasma jet *Chen Hongyu, Zhang Yong, Liu Zhen, et al.* **099001(9)**
Design of navigation antenna with adjustable beam forming *Zhou Kaixiang, Yuan Jianfeng, Yuan Xuelin* **099002(8)**