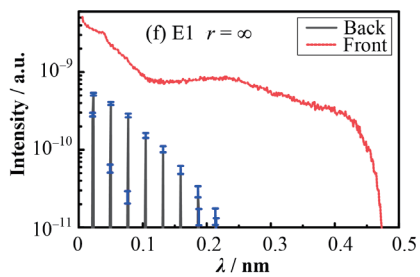
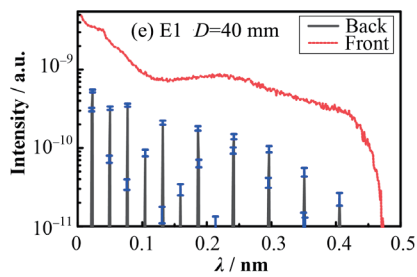
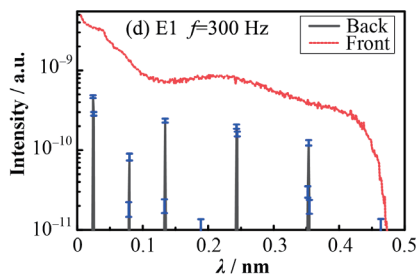
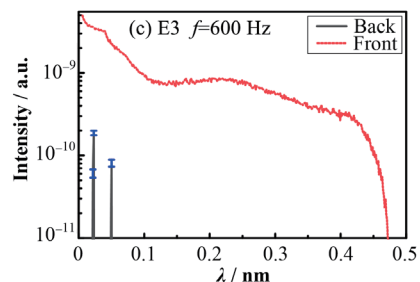
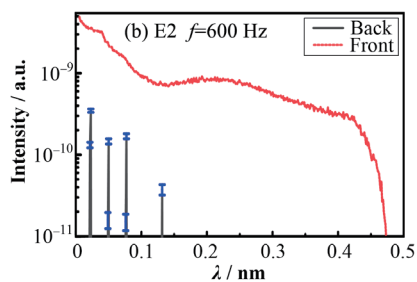
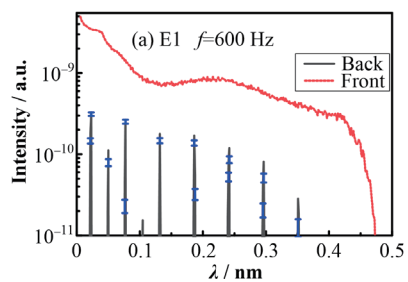




核技术



目 次

同步辐射技术及应用

辐射测量仪的宇宙射线响应和校准系数的陆地测算方法验证张 华 陈志东 徐润龙 林炜伟 梁明浩 (050101)

加速器技术、射线技术及应用

CSNS 费米斩波器样机中子狭缝包设计郭 娟 蔡伟亮 耿艳胜 王 平 张 鸿 (050201)

162.5 MHz RFQ 加速器的单束团选择马志国 陈伟龙 王志军 秦元帅 (050202)

1.3 GHz 连续波超导射频腔的数字低电平系统和模拟腔研究刘 奎 顾 强 张俊强 赵明华 (050203)

核电子学与仪器

放射性钠气溶胶监测仪校准方法研究李 明 徐利军 戎永华 林 敏 叶宏生 张卫东 罗 瑞 陈克胜 (050401)

用于软 X 射线探测器标定的 X 射线二次多靶源祝宇轩 王于仁 陈 勇 崔苇苇 王 昊 张子良 王皓迪 侯懂杰 赵晓帆 虞 年 赵子健 陈 灿 (050402)

康普顿相机成像技术进展武传鹏 李 亮 (050403)

核物理、交叉学科研究

氢离子辐照诱导的钨表面周期性刻蚀研究谢 俊 范红玉 罗一语 杨秀园 覃纪英 李园园 牛金海 (050501)

双极运算放大器 LM158 电离总剂量与重离子协同辐射效应研究蔡 娇 姚 帅 陆 妩 于 新 王 信 李小龙 刘默寒 孙 静 郭 旗 (050502)

核能科学与工程

多群截面处理模块 ARES-MACXS 屏蔽计算适用性分析胡家驹 张 斌 刘 聪 陈义学 (050601)

矩形通道局部变形堵塞对流传热实验研究郭玖元 邓永皓 许 巍 刘晓晶 何晓强 (050602)

后处理厂乏燃料储运吊篮设计与分析梅华平 杨国威 段成君 刘书勇 (050603)

一种自适应差分进化算法及其在空间堆智能设计中的初步应用方 力 陈春花 周 文 杨子辉 汪建业 (050604)

Nuclear Techniques

Vol.44 No.5

May 2021

Contents

SYNCHROTRON RADIATION TECHNOLOGY AND APPLICATIONS

The verify of the terrestrial measuring method of the cosmic ray response and calibration coefficient for the radiometer
.....ZHANG Hua CHEN Zhidong XU Runlong LIN Weiwei LIANG Minghao (050101)

ACCELERATOR, RAY TECHNOLOGY AND APPLICATIONS

Design of the neutron slit package for Femi chopper prototype of CSNS
.....GUO Juan CAI Weiliang GENG Yansheng WANG Ping ZHANG Hong (050201)

Single bunch selection for 162.5 MHz radio-frequency quadrupole accelerator
.....MA Zhiguo CHEN Weilong WANG Zhijun QIN Yuanshuai (050202)

Digital low-level radio frequency system and cavity simulator for 1.3 GHz continuous-wave superconducting radio-frequency cavity
.....LIU Kui GU Qiang ZHANG Junqiang ZHAO Minghua (050203)

NUCLEAR ELECTRONICS AND INSTRUMENTATION

Study on calibration method of radioactive sodium aerosol monitors
.....LI Ming XU Lijun RONG Yonghua LIN Min YE Hongsheng ZHANG Weidong LUO Rui CHEN Kesheng (050401)

X-ray secondary multiple target sources for calibration of soft X-ray detectors
.....ZHU Yuxuan WANG Yusa CHEN Yong CUI Weiwei WANG Hao ZHANG Ziliang WANG Haodi
HOU Dongjie ZHAO Xiaofan YU Nian ZHAO Zijian CHEN Can (050402)

Review of Compton camera imaging technology developmentWU Chuanpeng LI Liang (050403)

NUCLEAR PHYSICS, INTERDISCIPLINARY RESEARCH

The periodic etching of tungsten surface induced by hydrogen ion irradiation
.....XIE Jun FAN Hongyu LUO Yiyu YANG Xiuyuan QIN Jiying LI Yuanyuan NIU Jinhai (050501)

Synergistic effect of total ionization dose and single event transient in bipolar operational amplifier LM158
.....CAI Jiao YAO Shuai LU Wu YU Xin WANG Xin LI Xiaolong LIU Mohan SUN Jing GUO Qi (050502)

NUCLEAR ENERGY SCIENCE AND ENGINEERING

Applicability analysis of multi-group cross sections processing code ARES-MACXS for shielding calculation
.....HU Jiaju ZHANG Bin LIU Cong CHEN Yixue (050601)

Experimental study on convection heat transfer in rectangular channel with partial blockage
.....GUO Jiuyuan DENG Yonghao XU Wei LIU Xiaojing HE Xiaoqiang (050602)

Design and analysis of the spent fuel transfer basket for the reprocessing plant
.....MEI Huaping YANG Guowei DUAN Chengjun LIU Shuyong (050603)

An adaptive DE algorithm and its preliminary application in intelligent design of space reactor
.....FANG Li CHEN Chunhua ZHOU Wen YANG Zihui WANG Jianye (050604)