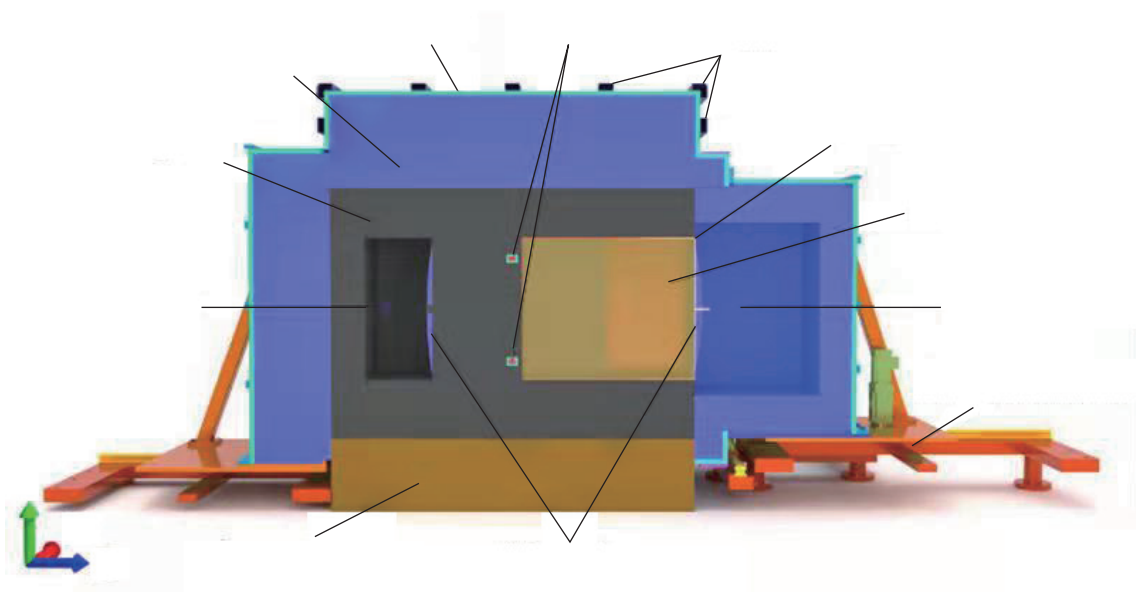


核
技
术
二
〇

N 核技术



科
学
出
版
社

目 次

综述

飞秒脉冲激光单粒子效应评估技术的研究现状及发展趋势
.....安 恒 李得天 杨生胜 王 鹞 曹洲 文轩 王俊 张晨光 银鸿 (110001)

同步辐射技术及应用

X 射线小角散射测量中可变温自动换样器.....
.....李海洋 胡海韬 段钰锋 白波 袁宝 孙远 黄志强 林权 程贺 王晶 张绍英 童欣 (110101)

加速器技术、射线技术及应用

靶表面粗糙度对低能电子致厚 Ni 靶特征 X 射线产额的影响研究田丽霞 尹毅 戴朝成 (110201)

15 MV 医用直线加速器 X 射线束的 MCNP 模拟
.....邓磊 周宁 瞿述根 王哲 王健 陈以水 涂彧 刘永泉 (110202)

水体在线放射性测量系统阵列溴化铯闪烁探测装置优化
.....郭生良 熊茂淋 葛良全 邓晓钦 钟经华 徐彬 罗明涛 余鹏 邓志鹏 (110203)

核化学、放射化学、放射性药物和核医学

M15 水泥砂浆的制备及其对 Co^{2+} 的吸附研究.....阳刚 潘跃龙 刘羽 冷阳春 成建峰 度先国 (110301)

核电子学与仪器

X 射线密度测井中 X 射线管高压对密度测量精度的影响.....于华伟 杨争春 刘超卓 张宇昕 祝倩 刘睿 (110401)

尖顶成形方法的参数优化选取与堆积识别钱云琛 张怀强 卢奋华 陈壑 (110402)

核物理、交叉学科研究

热中子参考辐射装置参数的实验测量杨竣凯 王平全 张辉 张健 (110501)

硅单晶辐照中子注量测量的反应截面影响研究
.....王云波 操节宝 吴清丽 陈浩 李延鹏 邹鹏 刘荣 唐锡定 邓才玉 王万金 (110502)

核能科学与工程

铅铋流体作用下螺旋管束的流致振动机理研究王正阳 瞿叶高 余晓菲 陈果 黄旋 彭志科 (110601)

翼型翅片 PCHE 的结构参数优化与流动传热的数值模拟.....刘晨 李启明 邹杨 徐洪杰 (110602)

大晶粒 UO_2 芯块及包壳涂层对燃料棒设计准则的影响分析尤奕 龚辛 李聪 (110603)

Nuclear Techniques

Vol.44 No.11

November 2021

Contents

INVITED REVIEW

Recent progress and development trend of femtosecond pulsed-laser for single event effects assessment
.....AN Heng LI Detian YANG Shengsheng WANG Yi CAO Zhou WEN Xuan WANG Jun
ZHANG Chengguang YIN Hong (110001)

SYNCHROTRON RADIATION TECHNOLOGY AND APPLICATIONS

Variable temperature automatic sample shifting device for X-ray small-angle scattering measurement
.....LI Haiyang HU Haitao DUAN Yufeng BAI Bo YUAN Bao SUN Yuan HUANG Zhiqiang LIN Quan
CHENG He WANG Jing ZHANG Shaoying TONG Xin (110101)

ACCELERATOR, RAY TECHNOLOGY AND APPLICATIONS

Effects of surface roughness on measurements of characteristic X-ray yields of thick Ni target by low-energy electron impact
.....TIAN Lixia YIN Yi DAI Chaocheng (110201)
MCNP simulation of X-ray beam for a 15 MV medical linear accelerator
.....DENG Lei ZHOU Ning QU Shugen WANG Zhe WANG Jian CHEN Yishui TU Yu LIU Yongquan (110202)
Optimization of array CeBr₃ scintillation detection device for water on-line radioactivity measurement system.....
.....GUO Shengliang XIONG Maolin GE Liangquan DENG Xiaoqin ZHONG Jinghua XU Bin
LUO Mingtao YU Peng DENG Zhipeng (110203)

NUCLEAR CHEMISTRY, RADIOCHEMISTRY, RADIOPHARMACEUTICALS AND NUCLEAR MEDICINE

Preparation of M15 cement mortar and its adsorption property as well as mechanism for Co²⁺
.....YANG Gang PAN Yuelong LIU Yu LENG Yangchun CHENG Jianfeng TUO Xianguo (110301)

NUCLEAR ELECTRONICS AND INSTRUMENTATION

Effects of X-ray tube high-voltages on the density measurement accuracy in X-ray density logging
.....YU Huawei YANG Zhengchun LIU Chaozhuo ZHANG Yuxin ZHU Qian LIU Rui (110401)
Parameter optimization and pile-up identification of cusp shaping for nuclear pulse signal.....
.....QIAN Yunchen ZHANG Huaiqiang LU Fenhua CHEN He (110402)

NUCLEAR PHYSICS, INTERDISCIPLINARY RESEARCH

Experimental measurement of parameters of thermal neutron reference field
.....YANG Junkai WANG Pingquan ZHANG Hui ZHANG Jian (110501)
Study on measurement influence of reaction cross-section for irradiated neutron fluence in single-crystal silicon
.....WANG Yunbo CAO Jiebao WU Qingli CHEN Hao LI Yanpeng ZOU Peng LIU Rong TANG Xiding
DENG Caiyu WANG Wanjin (110502)

NUCLEAR ENERGY SCIENCE AND ENGINEERING

Investigation on mechanism of flow induced vibration of spiral tube bundle in cross lead bismuth flow
.....WANG Zhengyang QU Yegao YU Xiaofei CHEN Guo HUANG Xuan PENG Zhike (110601)
Optimization of structural parameters and thermal-hydraulic numerical simulation of printed circuit heat exchanger with airfoil fins
.....LIU Chen LI Qiming ZOU Yang XU Hongjie (110602)
The impact of large-grained UO₂ pellet and coated zirconium cladding on design criteria for PWR fuel rod
.....YOU Yan GONG Xin LI Cong (110603)