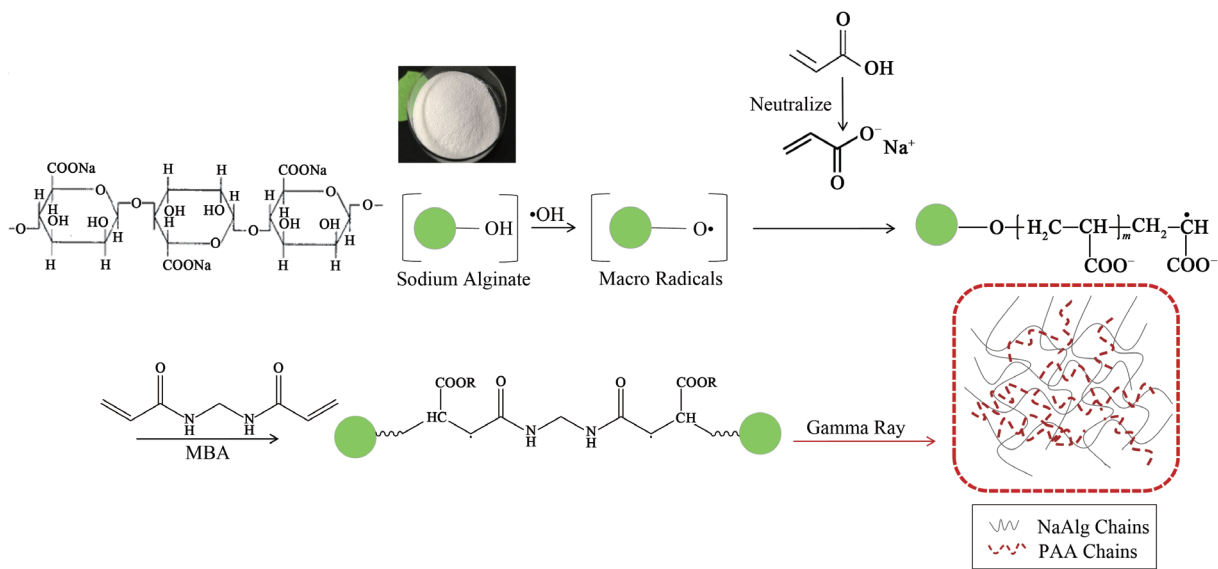


核技术



目 次

应用综述

核技术在新冠疫情防控中的应用评述王 哲 林璠珣 孙 贤 叶高阳 陆跃翔 (120001)

研究论文

同步辐射技术及应用

时变工作点分析算法在上海光源的应用研究杨 星 赖龙伟 陈方舟 (120101)

基于位置敏感半导体光电器件的同步辐射光斑位置检测孟 楠 曾建荣 李中亮 边凤刚 (120102)

加速器技术、射线技术及应用

地面模拟空间电子环境束流均匀化设计王常强 向益淮 李金海 杨京鹤 (120201)

衍射极限储存环注入薄切割磁铁设计仿真与磁场测量童 金 谷 鸣 刘 波 刘永芳 (120202)

核化学、放射化学、放射性药物和核医学

辐射接枝交联制备海藻酸钠系高吸水树脂
.....叶 枫 谷 雨 韩 斐 徐 晓 黄 晨 马 琳 丁仁浩 马红娟 李景烨 (120301)

核电子学与仪器

空间中子探测器能量响应仿真分析及验证
.....文 轩 安 恒 杨生胜 王 鷗 常思远 高 欣 王 俊 张晨光 冯展祖 (120401)

核物理、交叉学科研究

核废物桶放射性检测的螺旋 γ 扫描技术唐新海 顾卫国 杨 桢 王德忠 (120501)

非易失性阻变存储器总剂量效应试验研究常思远 杨生胜 文 轩 安 恒 王 鷗 曹 洲 银 鸿 (120502)

核能科学与工程

利用超铀核素启动的小型模块化钍基熔盐堆中子学性能研究
.....邹春燕 余呈刚 朱贵凤 郭 威 蔡翔舟 陈金根 邹 杨 (120601)

中国先进研究堆启动临界外推优化研究冉怀昌 甄建霄 李建龙 葛艳艳 王玉林 (120602)

2020 年总目次

Nuclear Techniques

Vol.43 No.12

December 2020

Contents

TECHNOLOGY REVIEW

Review of nuclear technology in the application of COVID-19 epidemic prevention and control
.....WANG Zhe LIN Fanyu SUN Xian YE Gaoyang LU Yuexiang (120001)

RESEARCH ARTICLES

SYNCHROTRON RADIATION TECHNOLOGY AND APPLICATIONS

Research on application of time-varying tune calculation algorithms on SSRF
.....YANG Xing LAI Longwei CHEN Fangzhou (120101)
The detection of synchronous radiation beam position based on position-sensitive semiconductor optoelectronic devices
.....MENG Nan ZENG Jianrong LI Zhongliang BIAN Fenggang (120102)

ACCELERATOR, RAY TECHNOLOGY AND APPLICATIONS

Design of beam homogenization for ground simulation of space electron environment
.....WANG Changqiang XIANG Yihuai LI Jinhai YANG Jinghe (120201)
Design simulation and magnetic field measurement of eddy-current type thin septum magnet for beam injection of diffraction limited storage ring
.....TONG Jin GU Ming LIU Bo LIU Yongfang (120202)

NUCLEAR CHEMISTRY, RADIOCHEMISTRY, RADIOPHARMACEUTICALS AND NUCLEAR MEDICINE

Preparation of sodium alginate-based super absorbent polymer by radiation grafting and crosslinking
.....YE Feng GU Yu HAN Fei XU Xiao HUANG Chen MA Lin DING Renhao MA Hongjuan LI Jingye (120301)

NUCLEAR ELECTRONICS AND INSTRUMENTATION

Simulation analysis and verification of energy response of space neutron detector
.....WEN Xuan AN Heng YANG Shengsheng WANG Yi CHANG Siyuan GAO Xin WANG Jun
ZHANG Chenguang FENG Zhanzu (120401)

NUCLEAR PHYSICS, INTERDISCIPLINARY RESEARCH

Helical gamma scanning technique for activity detection of radioactive waste drum
.....TANG Xinhai GU Weiguo YANG Hui WANG Dezhong (120501)
Experimental study on the total ionizing dose effects of nonvolatile RRAM
.....CHANG Siyuan YANG Shengsheng WEN Xuan AN Heng WANG Yi CAO Zhou YIN Hong (120502)

NUCLEAR ENERGY SCIENCE AND ENGINEERING

Neutronic performances of small modular thorium-based molten salt reactor starting with TRUs
.....ZOU Chunyan YU Chenggang ZHU Guifeng GUO Wei CAI Xiangzhou CHEN Jingen ZOU Yang (120601)
Optimization of critical extrapolation for the restart of China advanced research reactor
.....RAN Huaichang ZHEN Jianxiao LI Jianlong GE Yanyan WANG Yulin (120602)