《强激光与粒子束》

"国家关键基础设施电磁安全(Electromagnetic Security of Critical Infrastructure)"专辑征稿通知

近年来,电力系统、油气管道、高速铁路、电信设施、互联网、金融系统等国家关键基础设施广泛使用电力电子器件和自动化、网络化、智能化等现代技术,技术水平突飞猛进。与此同时,电磁兼容和电磁安全问题也日益得到重视,特别是强电磁脉冲环境下(高空电磁脉冲、高功率微波、雷电、极端地磁暴等)关键基础设施的电磁安全问题已经成为国内外的关注热点。

为了促进强电磁脉冲技术和国家关键基础设施电磁安全领域的学术交流,集中展示国内外的最新研究进展,《强激光与粒子束》编辑部特别邀请本刊编委、西安交通大学电气工程学院谢彦召教授作为客座主编,策划组织一期"国家关键基础设施电磁安全"专辑,面向国内外公开征集高水平研究论文及综述。

1 征稿范围

- (1) 强电磁脉冲环境产生、分布规律以及与目标相互作用的共性基础技术:
- (2) 基础设施强电磁脉冲试验模拟、测试和关键节点、设备防护加固技术;
- (3) 强电磁脉冲对广域基础设施及其关键设备作用的威胁评估方法和技术;
- (4)基础设施及其关键设备抗强电磁脉冲的容灾抗灾、加固、防护、回避和恢复力提升技术:
 - (5) 电网等关键基础设施电磁恢复力的内涵与外延。

2 重要日期

- ●征文截止日期: 2018年12月31日。
- ●专辑出版日期: 2019年6月15日。

3 投稿要求

(1) 投稿可选择网上投稿(www.hplpb.com.cn)(投稿时文章题名前加"电磁安全"专辑)。也可以电子邮件投稿,邮件主题注明"电磁安全专辑"字样。投稿信箱:wdyou@caep.cn。

- (2)中英文均可,分邀请论文和常规论文。论文体例格式和投稿要求请参照《强》刊网站"投稿指南"。
- (3) 未尽事宜和解释请联系编辑部联系人: 汪道友(电话: 0816-2485753/18011110248, 通信地址: 四川省绵阳市 919 信箱 805 分箱, 邮编 621900) 或特邀客座编辑。

特约客座主编简介

谢彦召,西安交通大学电气工程学院教授、博士生导师。EMP Fellow。瞬态电磁环境与应用国家级国际联合研究中心主任。兼任电磁环境与电磁兼容领域多家重点实验室学术委员会委员等。2019 年亚洲电磁学国际会议(ASIAEM 2019)大会主席。主要研究领域包括高功率电磁环境与电磁脉冲、基础设施电磁安全、紧凑型脉冲功率源与辐射物理应用、电磁兼容理论与试验技术、光纤传感测试技术等。公开发表学术论文 100 余篇。

通信地址: 西安交通大学电气工程学院, 西安市碑林区咸宁西路 28 号, 邮编 710049

E-mail: yzxie@mail.xjtu.edu.cn.

《强激光与粒子束》编辑部 2018 年 8 月 15 日

Call for paper for special issue "Electromagnetic Security of Critical

Infrastructure" by High Power Laser and Particle Beams journal

In recent years, critical infrastructures, such as power grid, oil and gas pipelines, high-speed trains, telecommunications facilities, Internet and financial systems, etc. have developed rapidly and played more and more important roles in the modern society. Meanwhile, the issue of electromagnetic compatibility and electromagnetic security have attracted more attentions, especially for the cases of transient electromagnetic environments, e.g. High-altitude Electromagnetic Pulse (HEMP), Intentional Electromagnetic Interference (IEMI), Lightning, Geomagnetic Storm, etc.

In order to promote the academic exchanges in the fields of the extreme transient electromagnetic environments and the electromagnetic security of critical infrastructure, and share the latest research results around the world, a special issue of "Electromagnetic Security of Critical Infrastructure" is now calling for research papers and reviews. Prof. Yanzhao Xie, from the School of Electrical Engineering of Xi'an Jiaotong University, is kindly invited by the editorial board of "High power Laser and Particle Beams" to be guest editor of this special issue.

1. Scope

- (1) The common basic theories and techniques of transient electromagnetic environment generation, distribution law and interaction with objects, etc;
- (2) The experimental approaches for the environment simulation, measurement and test as well as the effect mechanism of crucial equipment of Infrastructure under extreme transient electromagnetic environments.
 - (3) Assessment methods and techniques for large-scale infrastructure and equipment, etc.
- (4) Protection, avoidance, hardening and resilience-enhancing techniques for critical infrastructure and equipment, etc.
 - (5) Electromagnetic resilience of power grid and the related issues.

2. Important dates

•Deadline for submission: December 31, 2018

•Date for publication: June 15, 2019

3. Submission information

- (1) Manuscripts can be submitted online: http://www.hplpb.com.cn with "Electromagnetic Security Special Issue" in the title or by e-mail(http://www.hplpb.com.cn with "Electromagnetic Security Special Issue".
- (2) The language could be Chinese or English. The submissions will include invite papers and regular papers. Please refer to the "Guidelines for Submission" of the "High Power Laser and Particle Beam" website for the format and other requirements of the papers.
- (3) For other matters or explanations, please contact the editorial department, Daoyou WANG, wdyou@caep.cn. Tel: +86-816-2485753/+8618011110248. or the guest editor, Prof. Yanzhao XIE, yzxie@mail.xjtu.edu.cn.