

目 次

等离子体物理学

- 对称性自发破缺所诱发的种子平行雷诺肋强 章扬忠 (193)
- 消融等离子体对金属丝阵 Z 箍缩内爆动力学的影响 章征伟, 丁宁, 黄俊 (197)
- 最大似然法在 HL-2A 汤姆逊散射中的初步应用 姚可, 黄渊, 冯震,
刘春华, 聂林, 李恩平 (203)
- EAST 远红外激光干涉仪与密度爬升实验研究 王二辉, 高翔, 揭银先, 杨曜,
史楠, 刘子奚, 明廷凤 (208)
- EAST 等离子体爬升段伏秒消耗的优化 刘成岳, 陈美霞, 吴斌, 胡亚敏 (213)
- Compton 散射下等离子体中电子相轨道的演化 郝晓飞, 尹刚, 郝东山 (217)
- 磁化冷等离子体球的瑞利散射 李应乐, 李瑾, 王明军, 唐高峰 (220)
- 基于法拉第效应磁化等离子体光子晶体 FDTD 分析 刘崧, 刘少斌 (225)

核聚变工程技术

- 基于 PLC 的 HL-2A 装置电子回旋共振加热系统控制与保护 赵磊, 李立, 卜英南,
冯鲲, 李波, 饶军 (230)
- HL-2A 装置 ECRH 系统传输效率的测量研究 王贺, 陆志鸿, 周俊, 饶军, 王超 (236)
- 大功率四极管调制器的嵌入式控制设计 涂瑞, 姚列英, 宣伟民 (241)
- EAST 装置第一壁热沉冷却结构关键工艺的研究 许铁军, 黄生洪, 宋云涛,
谢韩, 张平, 高大明 (245)
- EAST 装置离子回旋加热天线电流带热结构分析 王成昊, 宋云涛, 杨庆喜, 王忠伟, 康钦兰 (250)
- ITER 纵场磁体支撑变更设计的螺栓问题探讨 侯炳林, 李鹏远, 潘传杰, 韩石磊 (255)
- 垂直位移事故中 ITER 屏蔽包层的电磁场分析 康伟山, 谌继明, 吴继红, 王明旭 (261)
- ITER 屏蔽包层屏蔽块热工水力分析 张秀杰, 谌继明, 康伟山, 袁涛, 吴继红 (267)
- ITER 轴向绝缘子结构设计与分析 杨长春, 潘皖江 (272)
- SUNIST 装置中磁探针出气率测量 张璐, 曾龙, 谭熠, 谢丽风, 高喆, 王文浩 (277)

等离子体应用

- 极区夏季中层顶区域尘埃粒子参数的研究 李海龙, 牛军, 吴健, 车海琴 (281)
- 实验研究射频辉光放电改善苎麻织物毛细效应的时效性 王志文, 韦卫星, 何燕和, 赵元庆,
潘李宜基, 李雪梅, 施绍队, 黎广新 (285)

编辑部成员: 张利 肖成馨 李爽 孙晓芳

期刊基本参数: CN51-1151/TL * 1980 * q * 16 * 96 * zh * P * ¥8.00 * 1000 * 20 * 2010-03

编辑部电话: 028-82850364; E-mail: bjb@swip.ac.cn

期刊网址: <http://www.hjby.org/>

Contents

Plasma Physics

- Seed parallel Reynolds stress induced by spontaneous symmetry breaking ZHANG Yang-zhong (193)
- Effect of ablated-plasma on the implosion dynamics of wire array Z pinches
 ZHANG Zheng-wei, DING Ning, HUANG Jun (197)
- Preliminary application of maximum likelihood method in HL-2A Thomson scattering system
 YAO Ke, HUANG Yuan, FENG Zhen, LIU Chun-hua, NIE Lin, LI En-ping (203)
- Experimental study of FIR laser interferometer and density ramping on EAST tokamak
 WANG Er-hui, GAO Xiang, JIE Yin-xian, YANG Yao, SHI Nan, LIU Zi-xi, MING Ting-feng (208)
- Flux consumption optimization during plasma ramp of EAST LIU Cheng-yue, CHEN Mei-xia, WU Bin, HU Ya-min (213)
- Evolution of the electron phase orbits in the multi-photon nonlinear Compton scattering in plasma
 HAO Xiao-fei, YIN Gang, HAO Dong-shan (217)
- Rayleigh scattering for a magnetized cold plasma sphere LI Ying-le, LI Jin, WANG Ming-jun, TANG Gao-feng (220)
- Analysis of magnetized plasma photonic crystals on the basis of the Faraday effect by finite-difference time-domain method ...
 LIU Song, LIU Shao-bin (225)

Nuclear Fusion Engineering and Technology

- Control and protection system based PLC for the ECRH system at the HL-2A tokamak ZHAO Lei, LI Li, BU Ying-nan,
 FENG Kun, LI Bo, RAO Jun (230)
- Transmission efficiency of the ECRH system on HL-2A tokamak WANG He, LU Zhi-hong,
 ZHOU Jun, RAO Jun, WANG Chao (236)
- Design of embedded control system for high-power tetrode modulator TU Rui, YAO Lie-ying, XUAN Wei-min (241)
- Key technology research on EAST PFCs heat-sink cooling structure XU Tie-jun, HUANG Sheng-hong,
 SONG Yun-tao, XIE Han, ZHANG Ping, GAO Da-ming (245)
- Thermal-structure analysis of the straps on ICRH antenna for EAST tokamak WANG Cheng-hao, SONG Yun-tao,
 YANG Qing-xi, WANG Zhong-wei, KANG Qin-lan (250)
- Discussion of bolts in alternative design of ITER TF magnet gravity supports HOU Bing-lin, LI Peng-yuan,
 PAN Chuan-jie, HAN Shi-lei (255)
- Electromagnetic analysis of ITER shield blanket under VDE KANG Wei-shan, CHEN Ji-ming,
 WU Ji-hong, WANG Ming-xu (261)
- Thermal-hydraulic analysis for ITER shield block ZHANG Xiu-jie, CHEN ji-ming, KANG Wei-shan,
 YUAN Tao, WU Ji-hong (267)
- Design and analysis on ITER axial insulation breaks YANG Chang-chun, PAN Wan-jiang (272)
- Measurement of outgassing rate of magnetic probe in the SUNIST spherical tokamak ZHANG Lu, ZENG Long,
 TAN Yi, XIE Li-feng, GAO Zhe, WANG Wen-hao (277)

Non-Fusion Plasma Applications

- Study on parameter of dust particles in polar summer mesopause LI Hai-long, NIU Jun, WU Jian, CHE Hai-qin (281)
- Time effectiveness of capillary effect improvement of ramie fabrics processed by RF glow discharging WANG Zhi-wen,
 WEI Wei-xing, HE Yan-he, ZHAO Yuan-qin, PANLI Yi-ji, LI Xue-mei, SHI Shao-dui, LI Guang-xin (285)