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物理

EAST上快波电流驱动的数值模拟

姚琨;张新军;赵燕平

中国科学院 等离子体物理研究所，安徽 合肥230031

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摘要 针对EAST全超导托卡马克的参数，利用射线追踪法在离子回旋共振频段（ICRF）发射机的工作频段内进行快波电流驱动的数值模拟，找到了一组适合于快波电流驱动的参数。模拟结果表明，发射频率只要避开基频吸收和二次谐频吸收，电流驱动的效果就很明显。

关键词 快波 电流驱动 频率 EAST

分类号

Simulation of Fast Wave Current Drive on EAST

YAO Kun;ZHANG Xin-jun;ZHAO Yan-ping

Institute of Plasma Physics, Chinese Academy of Sciences, Hefei 230031, China

Abstract By using ray-tracing method and EAST parameters, fast wave current drive was simulated in the frequency regime of ICRF transmitter, and a set of parameters suitable for fast wave current drive was found. The results show that as long as the transmission frequency is chosen to avoid the absorption on the first and second harmonics, the current drive efficiency will be improved.

Key words fast wave current drive frequency EAST

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通讯作者