

加速器

RIBLL传输效率研究

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收稿日期 修回日期 网络版发布日期 接受日期

摘要

利用实验测量和Monte Carlo模拟的方法,研究了RIBLL的传输效率.分析了影响传输效率的主要因素,发现碎片的动量分布形式对传输效率的模拟结果有重要的影响.另外通过比较,发现大部分碎片传输效率的模拟结果稍大于实验测量结果,两者最大相差约几十倍,这可以帮助估算次级束流强度,指导实验设计.

The transmission of RIBLL has been studied by experimental measurement and Monte Carlo simulation methods. The analysis of influence factors of the simulated transmission has been accomplished, and it was found that the momentum distribution of fragments is one of the most important factors influencing the simulation results. Furthermore, through comparing the measured and simulated results, it is found that the simulated result is larger than the measured transmission for most fragments and the maximal difference between them is about several tens of times. This simulation is a good theory tools for estimating the intensity of the secondary beam and designing the experiment in the future.

关键词 [RIBLL](#) [传输效率](#) [MOCADI](#) [LISE++](#)

分类号

DOI:

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