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技术及应用

中子活化分析跑兔装置的建立

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摘要 介绍了某研究堆跑兔辐照装置的原理和结构组成，对该装置的气动传输系统、自动控制系统的功能及安全性设计进行研究。本装置样品传输速度可达7.0 m/s，具有传输稳定、自动化程度高、操作简单、维护方便等特点，可满足短半衰期核素的中子活化分析要求。

关键词 跑兔装置 中子活化分析 气动传输 自动控制

分类号

Establishment of Rabbit Radiation Facility for Neutron Activation Analysis

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Abstract The transfer principle and the composition of a rabbit radiation facility for neutron activation analysis in a reactor were introduced. The functions and security designs of the pneumatic transfer system and automatic control system in the irradiation device were studied. By the testing, the transfer speed of the facility is 7.0 m/s. The facility has advantages of steady transmission, simple operation, easy maintenance, etc. The facility satisfies the demand of the neutron activation analysis for short half-life nuclides.

Key words rabbit radiation facility neutron activation analysis pneumatic transfer system automatic control system

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