

## 微型反应堆照射座内热中子通量谱的测定

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**摘要** <正> 一、基本原理 用一组展开函数 $\varphi_i(E)$ 来表示所测的真实谱 $\varphi(E)$ ,典型的展开函数是一组 $N-1$ 项的多项式, $N$ 是探测箱种类数。

**关键词** [微型反应堆](#) [热中子通量谱](#) [参考谱](#) [相对测量](#) [Ge\(Li\)探测器](#)

分类号

## DETERMINATION OF THERMAL NEUTRON FLUX SPECTRUM AT THE IRRADIATION SITES OF MNSR

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**Abstract** It is very important to determine the thermal neutron flux spectrum at theirradiation sites of the MNSR. Five activation detectors  $^{164}\text{Dy}$ ,  $^{151}\text{Eu}$ ,  $^{176}\text{Lu}$ ,  $^{151}\text{In}$ ,  $^{197}\text{Au}$  are used in this work, and thermal neutron flux spectrum in the thermalcolumn of SPR reactor is used as a reference spectrum. The ratio of the detectedactivities in MNSR and the detected activities in SPR are determined, the developed spectrum in MNSR is obtained. The parameters of the spectrum are calculated andcompared with experimental data. The results are satisfactory.

**Key words** [MNSR-miniature neutron source reactor](#) [Thermal neutron flux spectrum](#) [Reference spectrum](#) [Relative measurement](#) [Ge \(Li\) detector](#)

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通讯作者

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