

化学

长寿命裂变产物核素核数据测量进展

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摘要 文章对与高放废物深地层处置以及分离嬗变相关的半衰期大于10 a、裂变产额高于0.01%的13种长寿命裂变产物核素的半衰期、裂变产额和热中子反应截面的测量研究、数据现状及其进展进行概要评述。就长寿命核素的分离纯化、原子数测定及放射性活度测量方法和技术进行了分析和论述。

关键词 [长寿命裂变产物核素](#); [核数据](#); [测量进展](#)

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Progress in Nuclear Data Measurement of Long-Lived Fission Products

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Abstract The long-lived fission products(LLFPs) are critical nuclides for geological disposal and partitioning transmutation of high level waste. The paper reviews the measurement, present status and the progress of fission products nuclear data, such as half-life, fission yield and thermal neutron cross section for 13 long lived fission products with the half-life of more than 10 a and fission yields of more than 0.01%. The radiochemical separation and purification, measurements of atom number and radioactivity of the long-lived nuclides in the field of measurement of fission products nuclear data are discussed and some interesting ideas are pointed out.

Key words [long-lived fission products](#); [nuclear data](#); [measurement progress](#)

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