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用HDEHP萃淋树脂回收纯化~(252)Cf

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摘要 <正> 一、前言 ~(252)Cf是目前应用较广泛的超钚元素之一。~(252)Cf通常可以从堆照镅、铜或钚靶中提取,也可以从过期~(252)Cf自发裂变中子源中用离子交换法,HDEHP溶剂萃取法,或萃取色层法回收。自1974年关于HDEHP萃淋树脂的研究报告发表以来,已经开展

关键词 Cf Cm TTHA HDEHP-萃淋树脂

分类号

RECOVERY AND PURIFICATION Of ~(252)Cf BY HDEHP-LEVEXTREL CHROMATATOGRAPHY

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Abstract The distribution coefficients of Cf (III), Cm (III) and Eu(III) in differentkinds of nitric acid and TTHA solutions are determined. A HDEHP-Levextrelchromatography method is proposed for the recovery and purification of Cf fromCm, Fe, Tb etc. Cf(III) is separated from Tb (III) with the TTHA eluate(pH3.8). The pH value of the eluate containing Cf and Cm is adjusted to 1.5.Then Cf as well as Cm is absorbed quantitatively from this solution. Finally, Cmand Cf are eluted with 0.50 and 2.0 mol/l HNO_3 respectively. Fe can be deco-ntaminated well by this method. The microgram amount of 252 Cf is recoveredand purified. The recovery of Cf reaches 95%.

Key words Cf Cm TTHA HDEHP-Levextrel

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