

## 放射性核废料自埋过程中的热量阈值

陈志云, 陈文振, 宫淼

海军工程大学 核能科学与工程系, 湖北 武汉 430033

收稿日期 2006-5-31 修回日期 2006-7-15 网络版发布日期: 2006-10-25

**摘要** 针对恒释热率热源接触熔化, 提出了热量阈值的概念。分析计算了典型反应堆核废料自埋接触熔化过程中的热量阈值和达到阈值的时间以及相应的熔化深度, 并与相关文献结果进行比较, 指出了相关文献中的一些错误, 得出了一些有意义的结论。

**关键词** [接触熔化](#) [热量阈值](#) [恒释热率](#)

**分类号** [TL942](#)

## Heat Threshold During Self-Burial Process of Radioactive Waste

CHEN Zhi-yun, CHEN Wen-zhen, GONG Miao

Department of Nuclear Science and Engineering, Naval University of Engineering, Wuhan 430033, China

**Abstract** The concept of heat threshold is brought forward for the melting process of radioactive source with constant heat rate. The heat threshold and related approaching time for the nuclear waste self-burial melting process of typical nuclear reactor are analyzed and calculated, which are compared with the results in related published literature. The corresponding melting depth is also calculated. Some errors in the published literature are pointed out, and some significant conclusions are drawn.

**Key words** [contact](#) [melting](#) [heat](#) [threshold](#) [constant](#) [heat](#) [rate](#)

DOI

### 扩展功能

#### 本文信息

- ▶ [Supporting info](#)
- ▶ [\[PDF全文\]\(679KB\)](#)
- ▶ [\[HTML全文\]\(0KB\)](#)
- ▶ [参考文献](#)

#### 服务与反馈

- ▶ [把本文推荐给朋友](#)
- ▶ [文章反馈](#)
- ▶ [浏览反馈信息](#)

#### 相关信息

- ▶ [本刊中 包含“接触熔化”的 相关文章](#)
- ▶ 本文作者相关文章

- [陈志云](#)
- [陈文振](#)
- [宫淼](#)

通讯作者