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附件建國科技大學機械工程系暨製造科技研究所

科技英文

期末報告

報告內容評分：
口頭報告評分：
總分：

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1.文章標題之翻譯:

Reduction of phorbol ester content in jatropha cake using high energy gamma radiation

減少在痲瘋樹餅佛波酯含量 採用高能量伽馬射線

2.摘要內容翻譯:

In this paper, an attempt has been made to remove phorbol ester present in jatropha cake by exposing it to gamma radiation. A sensitizer was also used to accelerate the degradation of phorbol esters. The phorbol ester content in the cake was estimated by high performance liquid chromatography (HPLC). It was observed that gamma irradiation of the jatropha seed cake was effective in reducing the phorbol ester content. Originally, the phorbol ester content in the cake was found as 0.29 mg/g, which on exposure to radiation was reduced by 33.4% and 96% with radiation dose of 30 and 125 kGy respectively. The presence of a sensitizer was found to enhances the susceptibility of phorbol esters degradation by oxidative degradation on exposure to ionizing radiation. Copyright [a] 2014, The Egyptian Society of Radiation Sciences and Applications. Production and hosting by Elsevier B.V. All rights reserved

翻譯: 在本文中，嘗試已經取得了其暴露於γ輻射以除去佛波醇酯存在於痲瘋樹餅。在蛋糕的佛波酯含量估計通過高效液相色譜（HPLC）。據觀察，痲瘋樹種子餅的γ射線照射，有效地降低了佛波酯含量。最初，在蛋糕的佛波酯含量被發現是 0.29 毫克/克，它在暴露於輻射中分別降低了 33.4%和 96%，其中 30 和 125 kGy 的輻照劑量。敏化劑的存在下，發現提高了佛波醇酯降解的易感性通過氧化降解在暴露於電離輻射。版權所有[a]2014 年，輻射科學與應用埃及社會。生產和託管由 Elsevier BV 保留所有權利

3.相關單字提示與說明:

1.輻射	Radiation
2.佛波醇酯	Phorbol ester
3.痲瘋樹餅	Jatropha cake
4.高效液相色譜	HPLC
5.γ射線	γ-ray
6.敏化劑	Sensitizer
7.易感性	Susceptibility
8.氧化	Oxidation
9.電離輻射	Ionizing radiation
10.輻射科學	Radiation Science

4.句型分析

1. A sensitizer was also used to accelerate the degradation of phorbol esters.
主詞+動詞+受詞補語+名詞

2. It was observed that gamma irradiation of the jatropha seed cake was effective in reducing the phorbol ester content.

動詞+名詞+形容詞+名詞

3. The presence of a sensitizer was found to enhances the susceptibility of phorbol esters degradation by oxidative degradation on exposure to ionizing radiation.
動詞+形容詞+動詞補語

2013.xx.xx

附件建國科技大學機械工程系暨製造科技研究所

科技英文

期末報告

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1. 文章標題之翻譯: Concept for production of chemicals and power using geothermal energy

概念生產使用地熱的化學物質和權力能源

2.摘要內容翻譯:

This paper presents a concept for conducting commercial chemical reactions and production of power using geothermal heat. The high pressures (Ps) and temperatures (Ts) that fluids attain in deep reservoirs can be used to manufacture chemicals or decontaminate wastes. High P reactions which can be expensive and/or unsafe to conduct above ground can be conducted in geothermal reservoirs using closed designs. We present examples of reactions that could benefit from Enhanced Geothermal Systems (EGS) including production of ammonia (NH3), supercritical oxidation of wastewater contaminants, production of hydrogen (H2) by steam reforming of methanol (CH3OH) and partial oxidation of methane (CH4) to produce CH3OH.

翻譯:

本文提出了進行商業化學反應和生產電力的使用地熱的概念。高壓力（PS）和溫度（Ts）的流體達到深部儲層可用於製造化學品或去污染的廢物。在高磷反應上，這可能是昂貴的或不安全的進行地面以上的封閉式設計在地熱庫。 我們目前從反應增強地熱系統（EGS），包括生產氨（NH3），廢水污染物的超臨界氧化，產生氫氣（H2）由蒸汽甲醇（CH3OH）和甲烷部分氧化（甲烷重整可能受益的例子）至 生產甲醇。

3.相關單字提示與說明:

1. 商業化學反應	Commercial chemical reaction
2. 生產電力	Production of electricity
3. 地熱	Terrestrial heat
4. 深部儲層	Deep reservoirs
5. 高磷反應	High phosphorus reaction
6. 設計熱儲	Design of thermal storage
7. 地熱系統	Geothermal system
8. 蒸汽甲醇	Methanol steam
9. 高壓力	High pressure
10. 甲烷	Methane

4.句型分析

1. This paper presents a concept for conducting commercial chemical reactions and production of power using geothermal heat.

名詞+副詞+動詞

2. High P reactions which can be expensive and/or unsafe to conduct above ground can be conducted in geothermal reservoirs using closed designs.

   名詞+形容詞+動詞

3. We present examples of reactions that could benefit from Enhanced Geothermal Systems (EGS) including production of ammonia (NH3)

   動詞+形容詞+動詞補語

2013.05.26

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