

检索报告

一、检索要求

1. 委托人: 于浩
2. 委托单位: 青岛农业大学
3. 检索目的: 论文被收录情况

二、检索范围

Engineering Village (Database: Compendex)	1969-present	网络版
---	--------------	-----

三、检索结果

委托人提供的1 篇论文被EI收录, 论文收录详情见附件。

特此证明!

检索报告人: 孙丽影



2022 年 12 月 14 日

附件: EI收录情况**1. Isolation and identification of a high-efficient diesel degrading bacterial strain *Acinetobacter* sp. L7****Accession number:** 20180104608035**Authors:** Hu, Chun-Hui (1, 2); Yu, Hao (2); Zhao, Yang-Guo (1); Tian, Wei-Jun (1); Bai, Jie (1)**Author affiliation:** (1) Key laboratory of Marine Environmental Science and Ecology, Ministry of Education, Ocean University of China, Qingdao; 266100, China; (2) College of Life Science, Qingdao Agricultural University, Qingdao; 266109, China**Corresponding author:** Bai, Jie(baijie@ouc.edu.cn)**Source title:** ZhongguoHuanjingKexue/China Environmental Science**Abbreviated source title:** ZhongguoHuanjingKexue**Volume:** 37**Issue:** 11**Issue date:** November 20, 2017**Publication year:** 2017**Pages:** 4251-4258**Language:** Chinese**ISSN:** 10006923**CODEN:** ZHKEEI**Document type:** Journal article (JA)**Publisher:** Chinese Society for Environmental Sciences

Abstract: A high-efficient diesel degrading bacterial strain isolated from oil-contaminated soil in Liaohe oil field was identified as *Acinetobacter* sp. and named as L7. The strain could efficiently grow with diesel, n-tridecane, n-hexadecane, n-heptadecane, n-octadecane and n-nonadecane as its sole carbon and energy source. The cultivation conditions of the strain L7 in diesel basic salt medium were investigated. The suitable pH value for the growth of the strain ranged from 6.0~9.0 with the optimum value of 7.0. The optimum temperature and salinity for the cultivation of the strain was 30°C and 1%, respectively. The degradation efficiency of diesel oil was 61.5% under the optimum conditions. Based on the whole-genome DNA sequence analysis of the bacterial strain, an alkane hydroxylase gene, *alkB*, was identified. To study the function of the *alkB* gene in n-alkane utilization by the bacterial strain, the pME6032-*alkB* plasmid was constructed and electroporated into another bacterial strain *Pseudomonas* KT2440, which could not grow in diesel. The electroporated bacteria *Pseudomonas* KT2440 could grow in diesel basic salt medium. Through gas chromatography-mass spectrometric analysis, the degradation capacity of the bacterial strain L7 for n-alkanes and the roles of the *alkB* gene were determined. The results indicated that the n-alkanes were degraded by the strain L7 via the terminal oxidation and β -oxidation pathway. © 2017, Editorial Board of China Environmental Science. All right reserved.

Number of references: 16**Main heading:** Biodegradation**Controlled terms:** Genes - Paraffins - Degradation - Diesel fuels - Soil pollution - Cultivation - Oil fields - Bacteria - Mass spectrometry - Gas chromatography**Uncontrolled terms:** *Acinetobacters* - Alkane hydroxylase - Cultivation conditions - Degradation efficiency - Diesel - Isolation and identification - Mass spectrometric analysis - Oil contaminated soil**Classification code:** 461.2 Biological Materials and Tissue Engineering - 461.8 Biotechnology - 483.1 Soils and Soil Mechanics - 512.1.1 Oil Fields - 523 Liquid Fuels - 801 Chemistry - 801.2 Biochemistry - 802.2 Chemical Reactions - 802.3 Chemical Operations - 821.3 Agricultural Methods**Numerical data indexing:** Percentage 1.00e+00%, Percentage 6.15e+01%, Temperature 3.03e+02K**Compendex references:** YES**Database:** Compendex

Data Provider: Engineering Village

Compilation and indexing terms, Copyright 2022 Elsevier Inc.

— End —

