

石油地球物理勘探

SHIYOU DIQIU WULI KANTAN

2026 年 10 月 第 61 卷 第 5 期

目 次

· 智能地球物理 ·

基于改进 U-Net 的煤层断层识别方法

..... 黄亚平, 祁雪梅, 吴海波, 程彦, 焉磊, 卜帕太姆·艾散, 董守华(1089)

基于 DWT-AU-Net 的叠前规则噪声压制方法

..... 万永平, 韩利, 王振川, 袁书龙, 赵全波, 王喜平, 张敏(1102)

深度特征融合的双卷积自编码器 VSP 波场分离方法

..... 张振, 王骁钧, 方兵, 麦尔旦·马合木提, 胡光岷(1113)

基于 ADASYN-IAO 算法的改进 Stacking 集成模型在测井岩性识别中的应用

..... 董欣玥, 姬战怀, 符鑫(1124)

融合通道—空间注意力与组合损失函数的改进 U-Net 遥感地物分割方法

——以中国四川盆地为例..... 黎书琴, 胡善政, 李明翼, 王轶, 任聪, 罗仕迁(1142)

应用部分卷积网络的频率域地震数据插值..... 毕健, 杨昊(1152)

基于二次神经网络的波场智能压制方法..... 保定君, 陈双全, 文一华, 钱忠平, 邹振(1164)

· 处理技术 ·

相位驱动全波形反演及其在塔里木油田地震勘探中的应用

..... 徐凯驰, 黄溢, 段文胜, 张宇, 吴天麒, 吴建鲁(1177)

一种对二维全波形反演半积分效应的修正方法..... 吴博, 何兵红, 廖俊, 颜兰兰(1190)

· 建模成像 ·

气云区纵、横波成像分析..... 钱俐杉, 杨芳, 邹振, 丁在宇, 王秀松, 郑云鹏(1203)

基于 Wasserstein-2 目标泛函的反射波波形反演

..... 富禹鑫, 张少华, 陈汉明, 王玲谦, 孙鹏远, 周辉(1213)

实用化波动方程走时层析近地表速度建模技术..... 罗飞, 颜兰兰(1224)

改进的程函方程物理约束智能速度层析反演方法..... 杜宝强, 王守东, 李莹, 刘纯惠, 宋宪新(1235)

• 测井技术 •

利用测井信息判识煤体结构..... 鄂海新,张小波,王娟(1246)

• 综合研究 •

基于孔隙结构因子与 CNN-LSTM 神经网络的低渗砂岩储层渗透率预测方法

..... 刘徐敏,徐乐意,陈兆明,朱焱辉,柳琼瑶,董国辉(1256)

南乍得盆地 Doseo 坳陷 D 区白垩纪伸展—挤压构造体制转换及沉积响应

..... 周国锋,王林,董建雄,苏栋,王迎晓,Hakro Ahmed Suhail(1267)

沿井视曲率属性的计算方法及应用 张宏伟,杨鑫,陈志刚,庞雄奇,耿玮,王霞(1288)

致密砂岩储层物性参数叠前反演方法

——以新和北地区为例 吴思,李弘,杨尚锋,吕慧,朱博华(1298)

• 地震地质 •

多期构造叠加背景下页岩储层多尺度裂缝识别技术及应用——以贵州安场向斜为例

..... 刘洪林,何新兵,梁峰,刘兆龙(1312)

• 非地震 •

伪磁梯度张量混合方向 tilt-Euler 法及其应用

——以辽东硼矿为例..... 王彦国,杨文奇,林昭翰(1326)

基于卷积神经网络的含背景场重力异常密度界面反演

..... 郭升,冯旭亮,李进,马少辉,王静茹(1340)

• 软件技术与应用 •

数据资产化:勘探行业数据整合及 Web 化实践 郑剑锋,王向辉,侯红军,林茂春,易彤,蔡剑锋(1352)

• 消息 •

广告索引..... (1163)

2027 年《石油地球物理勘探》征订单 (1360)

OIL GEOPHYSICAL PROSPECTING

Vol. 61 No.5 Oct., 2026

CONTENTS

INTELLIGENT GEOPHYSICAL TECHNIQUE

Coal seam fault identification based on improved U-Net

..... *Huang Yaping, Qi Xuemei, Wu Haibo, Cheng Yan, Yan Lei, Aisan Bupataimu, Dong Shouhua*(1089)

DWT-AU-Net based suppression of regular noise in prestack seismic data

..... *Wan Yongping, Han Li, Wang Zhenchuan, Yuan Shulong, Zhao Quanbo, Wang Xiping, Zhang Min*(1102)

VSP wavefield separation method using dual convolutional autoencoder with deep feature fusion

..... *Zhang Zhen, Wang Yaojun, Fang Bing, Mahemuti Maierdan, Hu Guangmin*(1113)

Lithology identification of sedimentary strata in well logging via an improved stacking model

with ADASYN-IAO algorithm *Dong Xinyue, Ji Zhanhuai, Fu Xin*(1124)

Improved U-Net for remote-sensing ground object segmentation with channel-spatial attention and combined loss in Sichuan Basin of China

..... *Li Shuqin, Hu Shanzheng, Li Mingyi, Wang Yi, Ren Cong, Luo Shiqian*(1142)

Seismic data interpolation in frequency-domain with partial convolution network *Bi Jian, Yang Hao*(1152)

Intelligent surface wave suppression method based on quadratic neural network

..... *Bao Dingjun, Chen Shuangquan, Wen Yihua, Qian Zhongping, Zou Zhen*(1164)

PROCESSING TECHNIQUE

Phase driven full waveform inversion and its applications to seismic exploration in Tarim Oilfield

..... *Xu Kaichi, Huang Yi, Duan Wensheng, Zhang Yu, Wu Tianqi, Wu Jianlu*(1177)

A correction method for half-order integral effect in two-dimensional full waveform inversion

..... *Wu Bo, He Binghong, Liao Jun, Yan Lanlan*(1190)

MODELING AND IMAGING

Analysis of P-and S-wave imaging in gas cloud zones

..... *Qian Lishan, Yang Fang, Zou Zhen, Ding Zaiyu, Wang Xiusong, Zheng Yunpeng*(1203)

Reflection waveform inversion based on Wasserstein-2 objective function

..... *Fu Yuxin, Zhang Shaohua, Chen Hanming, Wang Lingqian, Sun Pengyuan, Zhou Hui*(1213)

Practical wave-equation travelttime tomography technique for near-surface velocity modeling

..... *Luo Fei, Yan Lanlan*(1224)

Improved physics-constrained intelligent velocity tomographic inversion method based on eikonal equation

..... *Du Baoqiang, Wang Shoudong, Li Ying, Liu Chunhui, Song Xianxin*(1235)

LOGGING METHOD

Identifying coal body structure using logging information *E Haixin, Zhang Xiaobo, Wang Juan*(1246)

COMPREHENSIVE RESEARCH

Permeability prediction method for low-permeability sandstone reservoirs

based on pore-structure factors and a CNN-LSTM model

..... *Liu Xumin, Xu Leyi, Chen Zhaoming, Zhu Yanhui, Liu Qiongyao, Dong Guohui*(1256)

Cretaceous tectonic regime transition from extension to compression and its sedimentary response

in block D, Doseo Depression, Southern Chad Basin

..... *Zhou Guofeng, Wang Lin, Dong Jianxiong, Su Dong, Wang Yingxiao, Hakro Ahmed Suhail*(1267)

Method for calculating apparent curvature attribute along wellbore and its application
..... *Zhang Hongwei, Yang Xin, Chen Zhigang, Pang Xiongqi, Geng Wei, Wang Xia*(1288)

Pre-stack inversion method for physical parameters of tight sandstone reservoirs: a case study of the
Northern Xinhe area..... *Wu Si, Li Hong, Yang Shangfeng, Lü Hui, Zhu Bohua*(1298)

SEISMIC GEOLOGY

Technology for multi-scale fracture identification in shale reservoirs under the background of
multi-stage structural superposition and its application: a case study of Anchang syncline, Guizhou
..... *Liu Honglin, He Xinbing, Liang Feng, Liu Zhaolong*(1312)

NON-SEISMIC

Mixed directional tilt-Euler method based on pseudo magnetic gradient tensor and its application:
A case study of Liaodong boron deposit *Wang Yanguo, Yang Wenqi, Lin Zhaohan*(1326)

Density interface inversion from gravity anomalies with background field
based on convolutional neural network
..... *Guo Sheng, Feng Xuliang, Li Jin, Ma Shaohui, Wang Jingru*(1340)

GEO-SOFTWARE TECHNIQUE

Data assetization: data integration and Web-based practices in the exploration industry
..... *Zheng Jianfeng, Wang Xianghui, Hou Hongjun, Lin Maochun, Yi Tong, Cai Jianfeng*(1352)