

中文核心期刊
中国科技核心期刊
RCCSE中国核心学术期刊

ISSN 1673-064X
CN 61-1435/TE



西安石油大学学报

JOURNAL OF XI'AN SHIYOU UNIVERSITY

自然科学版
Natural Science Edition



VOL.29
2014

1



(国内外公开发行)

西安石油大学学报 (自然科学版) · 双月刊

XI'AN SHIYOU DAXUE XUEBAO (ZIRAN KEXUE BAN)

2014年1月25日出版 第29卷第1期(总第144期)

目次

【地质与勘探】

- 美国页岩油分布规律及成藏特点 边瑞康,武晓玲,包书景,聂海宽(1)
- 斜井井间地震高斯射线束正演方法 魏峥嵘,李辉峰,范廷恩,李文洁(10)
- 陕北斜坡东部上古生界现今应力场特征 王永炜,万永平,归榕,张仙伟(15)
- 合水地区长7致密油储层伊利石成因分析 杨圣方,喻建,高永利(21)
- 冀中坳陷霸县凹陷古近纪断裂活动特征 张艺,戴俊生,王珂,邹娟,张丹丹(27)
- 曲率法在库车坳陷克深气田储层裂缝预测中的应用 王珂,戴俊生,商琳,李际(34)
- 鄂尔多斯盆地西部上古生界山西组成岩作用 李得路,赵卫卫,伊伟,杨印华,王宝萍,郭斌,薛涛(40)

【石油工程】

- 注CO₂井井筒温度压力分布主控因素分析 陈林,孙雷,苏静,肖庆华,张赞,王明(46)
- 基于约束优化方法的水力压裂起裂压力计算模型 王六鹏,李琪,张绍云,章东哲,宋晓梅(49)
- 鄂尔多斯长7致密砂岩储层体积压裂可行性评价 石道涵,张兵,何举涛,蒋廷学,蒲春生(52)
- 利用密度迭代法计算气井的井底流压 张玄奇,陈薇,李剑鹏(56)
- 切面积法在致密气藏多段压裂水平井中的应用 刘雄,田昌炳,高小翠,姜龙燕,荀小全,陆程(60)
- 预测管道蜡沉积速率的BP神经网络模型研究 田震,靳文博,周磊,安云朋,伍鸿飞(66)
- 体积压裂缝网系统模拟及缝网形态优化研究 李宪文,樊凤玲,李晓慧,王文东,徐晨,苏玉亮(71)
- 超声波解除岩心钻井液堵塞实验研究 谷潇雨,蒲春生,王蓓,李天太,许洪星,胡晓龙(76)

【化学与化工】

- 耐高温压裂液配方优选与评价 肖博,张士诚,肖青香,刘佰龙,柳明(80)
- 负载Ni的MCM-41催化剂及其乙烯齐聚反应研究 张新年,张君涛,陈旭春,凌荣佳,傅子真(85)
- 钻井液润滑剂RH-B的制备与性能评价 刘娜娜,王菲,张宇,孙霄伟,张群正(89)

【计算机及其应用】

- 面向网络舆情分析系统的本体应用 李勇,刘战东(94)
- 采用Karatsuba算法在FPGA上实现双精度浮点乘法 康磊,徐英卓(98)
- 基于ZigBee技术的石油开采过程的远程监控系统 肖广荣,姚家胜,刘惠(101)
- 基于模糊PID的兰炭焦炉气体比例控制系统的研究 张乃禄,张毅,田炳,胡俊,吴大猛(106)

JOURNAL OF XI'AN SHIYOU UNIVERSITY

(Natural Science Edition) · Bimonthly

Published on Jan. 25. 2014 Vol. 29 No. (Sum No. 144)

CONTENTS

· Geology and Exploration ·

- Distribution law and reservoir forming characteristics of shale oil in America
BIAN Rui-kang, WU Xiao-ling, BAO Shu-jing, NIE Hai-kuan (1)
- Forward simulation method for crosswell seismic Gaussian beam of declined well
WEI Zheng-rong, LI Hui-feng, FAN Ting-en, LI Wen-jie (10)
- Present stress field characteristics of Upper Paleozoic in the east of North Shaanxi Slope
WANG Yong-wei, WAN Yong-ping, GUI Rong, ZHANG Xian-wei (15)
- Origin analysis of illite in Chang 7 tight oil reservoir in Heshui area
YANG Sheng-fang, YU Jian, GAO Yong-li (21)
- Fault activity features of Baxian Sag in Paleogene in Jizhong Depression
ZHANG Yi, DAI Jun-sheng, WANG Ke, ZOU Juan, ZHANG Dan-dan (27)
- Reservoir fracture prediction of Keshen gasfield in Kuqa Depression using principal curvature method
WANG Ke, DAI Jun-sheng, SHANG Lin, LI Ji (34)
- Diagenesis of Shanxi Formation of the Upper Paleozoic in the west of Ordos Basin
LI De-lu, ZHAO Wei-wei, YI Wei, YANG Yin-hua, WANG Bao-ping, GUO Bin, XUE Tao (40)

· Petroleum Engineering ·

- Analysis of main influence factors of wellbore temperature and pressure fields in injecting CO₂ process
CHEN Lin, SUN Lei, SU Jing, XIAO Qing-hua, ZHANG YUN, WANG Ming (46)
- Calculation model for hydraulic fracture initiation pressure based on constraint optimization method
WANG Liu-peng, LI Qi, ZHANG Shao-yun, ZHANG Dong-zhe, SONG Xiao-mei (49)
- Feasibility evaluation of volume fracturing of Chang-7 tight sandstone reservoir in Ordos Basin
SHI Dao-han, ZHANG Bing, HE Ju-tao, JIANG Ting-xue, PU Chun-sheng (52)
- Calculation of bottom-hole flowing pressure of gas well using density iteration method
ZHANG Xuan-qi, CHEN Wei, LI Jian-peng (56)
-



Application of area reducing method in multi-segment fracturing horizontal wells in tight gas reservoirs

LIU Xiong, TIAN Chang-bing, GAO Xiao-cui, JIANG Long-yan, XUN Xiao-quan, LU Cheng (60)

Prediction of wax deposition rate in pipeline by BP neural network

TIAN Zhen, JIN Wen-bo, ZHOU Lei, AN Yun-peng, WU Hong-fei (66)

Simulation and pattern optimization of volume fracturing fracture network

LI Xian-wen, FAN Feng-ling, LI Xiao-hui, WANG Wen-dong, XU Chen, SU Yu-liang (71)

Experimental study on removing drilling fluid damage of cores by ultrasonic

GU Xiao-yu, PU Chun-sheng, WANG Bei, LI Tian-tai, XU Hong-xing, HU Xiao-long (76)

· Chemistry and Chemical Engineering ·

Optimization and evaluation of a high-temperature resistance fracturing fluid formula

XIAO Bo, ZHANG Shi-cheng, XIAO Qing-xiang, LIU Bai-long, LIU Ming (80)

Study on MCM-41 supporting Ni catalyst and its ethylene oligomerization

ZHANG Xin-nian, ZHANG Jun-tao, CHEN Xu-chun, LING Rong-jia, FU Zi-zhen (85)

Preparation and performance evaluation of drilling fluid lubricant RH-B

LIU Na-na, WANG Fei, ZHANG Yu, SUN Xiao-wei, ZHANG Qun-zheng (89)

· Computer and Its Applications ·

Study on application of ontology in online public opinion analysis system

LI Yong, LIU Zhan-dong (94)

Implement of double-precision floating-point multiplier based on FPGA using Karatsuba algorithm

KANG Lei, XU Ying-zhuo (98)

Remote monitoring system of oil production process based on ZigBee technique

XIAO Guang-rong, YAO Jia-sheng, LIU Hui (101)

Research in coal gas to air mixing ratio control system for semi-coke oven based on fuzzy-PID

ZHANG Nai-lu, ZHANG Yi, TIAN Bing, HU Jun, WU Da-meng (106)

- 美国《化学文摘》(CA)源期刊
- 美国《石油文摘》(PA)源期刊
- 荷兰Scopus二次文献数据库源期刊
- 2000年荣获首届《CAJ-CD 规范》执行优秀奖
- 2000年荣获“陕西省优秀科技期刊一等奖”
- 2002年荣获“陕西省科学技术类优秀期刊”
- 2004/2005年获陕西省科技期刊学术类优秀奖
- 2005/2006年获陕西省科技期刊学术类优秀奖
- 2008/2009年获陕西省科技期刊学术类优秀奖
- 2009年获“中国科技论文在线优秀期刊”
- 2010年获“中国科技论文在线优秀期刊”

西安石油大学学报 (自然科学版)

Xi'an Shiyou Daxue Xuebao
(Ziran Kexue Ban)

双月刊 (1986年创刊)

第29卷 第1期 2014年1月25日出版

Journal of Xi'an Shiyou University

(Natural Science Edition)

Bimonthly(Started in 1986)

Vo1.29 No.1 Published on January 25,2014

主管单位：陕西省教育厅
 主办单位：西安石油大学
 编辑出版：《西安石油大学学报》编辑部
 主 编：屈 展
 副 主 编：田美娥 张新宝
 编 辑：贺元旦 王 辉 董 瑾
 英文编辑：田美娥
 地 址：西安市南郊电子二路18号 710065
 电 话：(029)88382326
 传 真：(029)88216407
 E-mail：xbzr@xsyu.edu.cn
 网 址：http://www.xsdxzbk.com
 国内发行：《西安石油大学学报》编辑部
 国内定价：¥15.00
 国外发行：中国国际图书贸易总公司(北京399信箱)
 国外定价：\$15.00
 印刷单位：长安大学雁塔印刷厂

Competent Authorities: the Education Department of Shaanxi Province
 Sponsor: Xi'an Shiyou University
 Edited and Published by: the Editorial Board of Journal of Xi'an Shiyou University
 Editor-in-chief: QU Zhan
 Deputy Editor-in-chief: TIAN Mei-e, ZHANG Xin-bao
 Editor: HE Yuan-dan, WANG Hui, DONG Jin
 English Editor: TIAN Mei-e
 Address: No.18 Second Dianzi Road, Xi'an, Shaanxi, China 710065
 Tel: (029)88382326
 Fax: (029)88216407
 E-mail: xbzr@xsyu.edu.cn
 URL: <http://www.xsdxzbk.com>
 Distributed at home by: the Editorial Board of Journal of Xi'an Shiyou University
 Price: ¥15.00 per Copy
 Distributed abroad by: China International Trading Corporation (Box 399, Beijing)
 Price: \$15.00 per Copy
 Printed by: Yanta Print House of Chang'an University

ISSN 1673-064X
CN 61-1435/TE

ISSN 1673-064X



9 771673 064057