

爆炸与冲击

BAOZHA YU CHONGJI

1981年7月创刊
2021年11月
第41卷 第11期
(总第217期)

目次

· 特别约稿与研究综述 ·

CoCrFeNiAl_x系高熵合金的动态力学性能和本构关系 马胜国, 王志华 111101

· 爆炸物理 ·

中心点火火焰在药床中传播规律的试验研究 薛绍, 陶如意, 王浩, 程申申 112101

当量比对汽油燃料两相旋转爆轰发动机工作特性影响实验研究
..... 葛高杨, 马元, 侯世卓, 夏镇娟, 马虎, 邓利, 周长省 112102

复合圆柱壳冲击压缩数值模拟及稳定性研究 谢富佩, 徐绯, 曾卓, 周中玉, 谷卓伟 112201

· 冲击动力学 ·

基于高速3D-DIC技术的砂岩动力特性粒径效应研究 邢灏喆, 王明洋, 范鹏贤, 王德荣 113101

考虑高温影响的钢管混凝土柱抗爆性能研究 胡文伟, 王蕊, 赵晖, 张力 113102

薄板在冲击载荷下线弹性理想塑性响应的相似性研究 李肖成, 徐绯, 杨磊峰, 王帅, 刘小川, 惠旭龙, 刘继军 113103

轻型陶瓷/金属复合装甲抗垂直侵彻过程中陶瓷碎裂行为研究
..... 余毅磊, 蒋招绣, 王晓东, 杜成鑫, 杜忠华, 高光发 113301

弹体高速侵彻钢筋混凝土靶试验研究
..... 王可慧, 周刚, 李明, 邹慧辉, 吴海军, 耿宝刚, 段建, 戴湘晖, 沈子楷, 李鹏杰, 古仁红 113302

弹性楔形体入水砰击载荷及结构响应的理论计算与数值模拟研究 王一雯, 郑成, 吴卫国 113303

· 实验技术与数值方法 ·

Hopkinson 曲杆型双向拉伸加载设计探讨 赵思晗, 郭伟国, 王凡, 李馨馨, 陈龙洋, 李小龙, 王瑞丰 114101

爆炸加载下金属柱壳破片软回收技术研究 张世文, 李英雷, 陈艳, 但加坤, 郭昭亮, 刘明涛 114102

爆炸冲击波强间断问题的高阶伪弧长算法研究 马天宝, 王晨涛, 赵金庆, 宁建国 114201

· 应用爆炸力学 ·

浅埋小净距隧道爆破损伤探测及数值模拟分析 刘闯龙, 陈士海, 孙杰, 何方, 揭海荣 115201

不同分支坑道分布形式及分布位置对油气爆炸超压特性的影响 吴婧斯, 张培理, 王冬, 刘慧姝, 肖俊 115401

EXPLOSION AND SHOCK WAVES

Vol. 41, No. 11, 2021 (Sum No. 217)

CONTENTS

• Invited Article & General Review •

Dynamic mechanical properties and constitutive relations of CoCrFeNiAl_x high entropy alloys MA Shengguo, WANG Zhihua 111101

• Explosion Physics •

Experimental research on the law of flame spreading in the charge bed of a central ignition tube
..... XUE Shao, TAO Ruyi, WANG Hao, CHENG Shenshen 112101
Experimental study on the effect of equivalent ratio on working characteristics of gasoline fuel two-phase rotating detonation engine
..... GE Gaoyang, MA Yuan, HOU Shizhuo, XIA Zhenjuan, MA Hu, DENG Li, ZHOU Changsheng 112102
Numerical simulation on stability of composite cylindrical shell under impact compression
..... XIE Fupei, XU Fei, ZENG Zhuo, ZHOU Zhongyu, GU Zhuowei 112201

• Impact Dynamics •

Grain-size effect on dynamic behavior of sandstone based on high-speed 3D-DIC technique
..... XING Haozhe, WANG Mingyang, FAN Pengxian, WANG Derong 113101
Study on explosion-resistance performance of concrete-filled steel tubular columns considering the influence of elevated
temperatures HU Wenwei, WANG Rui, ZHAO Hui, ZHANG Li 113102
Study on the similarity of elasticity and ideal plasticity response of thin plate under impact loading
..... LI Xiaocheng, XU Fei, YANG Leifeng, WANG Shuai, LIU Xiaochuan, XI Xulong, LIU Jijun 113103
Research on ceramic fragmentation behavior of lightweight ceramic/metal composite armor during vertical penetration
..... YU Yilei, JIANG Zhaoxiu, WANG Xiaodong, DU Chengxin, DU Zhonghua, GAO Guangfa 113301
Experimental research on the mechanism of a high-velocity projectile penetrating into a reinforced concrete target ... WANG Kehui,
ZHOU Gang, LI Ming, ZOU Huihui, WU Haijun, GENG Baogang, DUAN Jian, DAI Xianghui, SHEN Zikai, LI Pengjie, GU Renhong 113302
On slamming load and structural response of a flexible wedge via analytical methods and numerical simulations
..... WANG Yiwen, ZHENG Cheng, WU Weiguo 113303

• Experimental Techniques & Numerical Methods •

On a bidirectional bending Hopkinson tension test method
..... ZHAO Sihan, GUO Weiguo, WANG Fan, LI Xinxin, CHEN Longyang, LI Xiaolong, WANG Ruifeng 114101
Investigation on the technology of soft recovery of fragment produced by metal cylindrical shell subjected to explosive loading
..... ZHANG Shiwen, LI Yinglei, CHEN yan, DAN Jiakun, GUO Zhaoliang, LIU Mingtao 114102
High order pseudo arc-length method for strong discontinuity of detonation wave
..... MA Tianbao, WANG Chentao, ZHAO Jinqing, NING Jianguo 114201

• Applied Explosion Mechanics •

Detection and numerical simulation of blasting-induced damage in shallow-buried twin tunnels with small spacing
..... LIU Minlong, CHEN Shihai, SUN Jie, HE Fang, JIE Hairong 115201
Effects of distribution form and location of different branch tunnels on overpressure characteristics of vented gasoline-air mixture
explosion in closed vessels WU Jingsi, ZHANG Peili, WANG Dong, LIU Huishu, XIAO Jun 115401