

爆炸与冲击

BAOZHA YU CHONGJI

1981年7月创刊
2020年12月
第40卷 第12期
(总第206期)

目次

· 专题：混凝土结构抗爆性能 ·

混凝土高压状态方程实验与数值模拟研究	孙玉祥, 王杰, 武海军, 周婕群, 李金柱, 皮爱国, 黄风雷	121401
POZD 涂层方形钢筋混凝土板抗接触爆炸试验研究	汪维, 杨建超, 汪剑辉, 高伟亮, 王幸	121402
单钢板混凝土剪力墙抗爆性能研究	赵春风, 卢欣, 何凯城, 张增德, 王静峰, 李晓杰	121403
接触爆炸荷载对钢筋混凝土梁的局部毁伤效应	王辉明, 刘飞, 晏麓晖, 汪剑辉, 尚伟, 吕林梅	121404
钢筋混凝土排架结构的抗爆破坏等级	张帝, 杨军, 曾丹, 陈泰年, 高金明, 汤宇	121405

· 爆炸物理 ·

Ti-6Al-4V 弹体破坏模式对冲击反应的影响研究	何丽灵, 张方举, 颜怡霞, 谢若泽, 徐艾民, 周燕良	122301
升温速率与流变特性对 B 炸药慢烤响应的影响	周捷, 智小琦, 王帅, 范兴华	122302

· 冲击动力学 ·

引入 Sierpinski 层级特性的新型薄壁多胞管轴向冲击吸能特性	何强, 王勇辉, 史肖娜, 顾航, 陈宇	123101
高韦伯数条件下黏性对液滴变形过程的影响	申帅, 李建玲, 刘金宏, 范玮	123201
回转体高速倾斜入水的流场特性及结构响应	高英杰, 孙铁志, 张桂勇, 尤天庆, 殷志宏, 宗智	123301

· 实验技术与数值方法 ·

一种散体材料 SHPB 被动围压试验体应力修正方法	魏久淇, 张春晓, 曹少华, 王世合, 李磊	124201
---------------------------------	------------------------	--------

· 应用爆炸力学 ·

乙烯储罐气体泄漏诱发蒸气云爆炸的数值模拟	王秋红, 孙艺林, 李鑫, 蒋军成, 张明广, 王刘兵	125401
----------------------------	-----------------------------	--------

EXPLOSION AND SHOCK WAVES

Vol. 40, No. 12, 2020 (Sum No. 206)

CONTENTS

• Special: Anti-Explosion Performance of Concrete Structures •

Experiment and simulation on high-pressure equation of state for concrete	
..... SUN Yuxiang, WANG Jie, WU Haijun, ZHOU Jiequn, LI Jinzhu, PI Aiguo, HUANG Fenglei	121401
Experimental research on anti-contact explosion of POZD coated square reinforced concrete slab	
..... WANG Wei, YANG Jianchao, WANG Jianhui, GAO Weiliang, WANG Xing	121402
Blast resistance property of concrete shear wall with single-side steel plate	
..... ZHAO Chunfeng, LU Xin, HE Kaicheng, ZHANG Zengde, WANG Jingfeng, LI Xiaojie	121403
Local damage effects of reinforced concrete beams under contact explosions	
..... WANG Huiming, LIU Fei, YAN Luhui, WANG Jianhui, SHANG Wei, LYU Linmei	121404
Damage grades of reinforced concrete bent structures against blast	
..... ZHANG Di, YANG Jun, ZENG Dan, CHEN Tainian, GAO Jinming, TANG Yu	121405

• Explosion Physics •

Study on the impact initiated reaction of Ti-6Al-4V projectiles by the fracture modes	
..... HE Liling, ZHANG Fangju, YAN Yixia, XIE Ruoze, XU Aimin, ZHOU Yanliang	122301
Influences of the heating rate and rheological properties on slow cook-off response of composition B	
..... ZHOU Jie, ZHI Xiaoqi, WANG Shuai, FAN Xinghua	122302

• Impact Dynamics •

Energy absorption of new thin-walled, multi-cellular, tubular structures with Sierpinski hierarchical characteristics under axial impact	
..... HE Qiang, WANG Yonghui, SHI Xiaona, GU Hang, CHEN Yu	123101
Viscous effect on the droplet deformation process under high Weber number conditions	
..... SHEN Shuai, LI Jianling, LIU Jinhong, FAN Wei	123201
Flow characteristics and structure response of high-speed oblique water-entry for a revolution body	
..... GAO Yingjie, SUN Tiezhi, ZHANG Guiyong, YOU Tianqing, YIN Zhihong, ZONG Zhi	123301

• Experimental Techniques & Numerical Methods •

A volume stress correction method for SHPB passive confined pressure of granular materials	
..... WEI Jiuqi, ZHANG Chunxiao, CAO Shaohua, WANG Shihe, LI Lei	124201

• Applied Explosion Mechanics •

Numerical simulation on gas dispersions and vapor cloud explosions induced by gas released from an ethylene storage tank	
..... WANG Qihong, SUN Yilin, LI Xin, JIANG Juncheng, ZHANG Mingguang, WANG Liubing	125401