



Scopus、JSTChina、CA、EBSCO收录期刊，物理学类核心期刊
中国物理学会高压物理专业委员会、四川省物理学会主办

ISSN 1000-5773
CN 51-1147/O4

高压物理学报

CHINESE JOURNAL OF HIGH PRESSURE PHYSICS



锺在高压下的往复相变行为

袁琴，李帅锜，周礼，贺端威

2022年10月

第36卷 第5期

弹簧质量系统在动量球
撞击下的响应特性
莫晓磊，林玉亮，李钰钢

变速增压法制备的聚丙烯
晶体结构与热性能
徐明锬，林嘉翔，张效琳，等

煤岩组合体巴西劈裂
动态力学特征数值分析
马泗洲，刘科伟，郭腾飞，等

目次

· 高压物性与结构 ·

- 7 大晶系的力学稳定性判据及其应用：以 SiO₂ 为例 高娟, 刘其军, 蒋城露, 樊代和, 张森, 刘福生, 唐斌 051101
- hcp 金属的高压拉曼散射光谱研究 刘静仪, 陶雨, 范春梅, 吴彬彬, 雷力 051102
- 变速增压法制备的聚丙烯晶体结构与热性能 徐明锐, 林嘉翔, 张效琳, 李贞印, 邵春光 051103
- 锺在高压下的往复相变行为 袁琴, 李帅琦, 周礼, 贺端威 051104

· 高压理论与计算 ·

- 摩擦界面波动效应的数值模拟 刘永贵, 惠蒙蒙, 沈玲燕 052301

· 高压下物质的动态响应 ·

- 弹簧质量系统在动量球撞击下的响应特性 莫晓磊, 林玉亮, 李钰钢 054101
- 时效温度对 TB8 钛合金动态力学性能的影响 陈稳, 郭保桥, 郭岩松, 栾可迪, 冉春, 陈鹏万 054102
- TC4 钛合金空心结构风扇叶片的鸟撞动力学响应及损伤失效 张永强, 贾林 054103
- 冲击载荷下周期性多孔夹芯结构拓扑优化及动力响应 廖芳, 李世强, 吴桂英 054201
- 空爆载荷作用下固支弹塑性圆板的动力学模型 吴迪, 米国, 郭香华, 张庆明 054202
- 冲击载荷下平板玻璃裂纹扩展和破坏形态的数值模拟 王木飞, 李志强 054203
- 煤岩组合体巴西劈裂动态力学特征数值分析 马泗洲, 刘科伟, 郭腾飞, 黄晓辉, 周占星 054204
- 木贼属植物仿生薄壁结构的耐撞性优化 刘飞明, 雷建银, 乔力, 刘志芳 054205

· 高压科学应用 ·

- 聚能装药宏观偏差耦合对射流横向偏移的影响 聂源, 梁斌, 袁小雅, 刘闯, 李毅 055101
- 火焰特征量对快速烤燃的影响 肖游, 智小琦, 王琦, 于永利, 范兴华 055201
- HMX 基含 AP 浇注炸药烤燃实验与数值模拟 刘润泽, 王昕捷, 刘瑞峰, 段卓平, 黄风雷 055202
- 城市地铁联络通道下穿爆破地表振动空洞效应 董合贵, 朱斌, 蒋楠, 杨玉民 055301
- 基于 IAHP-Fuzzy 的岩溶隧道突水风险预测 李录, 秦本东, 郭佳奇, 黄鑫, 田永超 055302

CHINESE JOURNAL OF HIGH PRESSURE PHYSICS

Vol. 36, No. 5, 2022 (Sum No. 169)

CONTENTS

• Physical Property and Structure •

- Criteria of Mechanical Stability of Seven Crystal Systems and Its Application: Taking Silica as an Example GAO Juan, LIU Qijun, JIANG Chenglu, FAN Daihe, ZHANG Miao, LIU Fusheng, TANG Bin 051101
- High-Pressure Raman Spectroscopy of hcp Metals LIU Jingyi, TAO Yu, FAN Chunmei, WU Binbin, LEI Li 051102
- Crystal Structure and Thermal Properties of Polypropylene Prepared by Variable Speed Pressurization XU Mingkun, LIN Jiayang, ZHANG Xiaolin, LI Zhenyin, SHAO Chunguang 051103
- Reciprocating Phase Transitions Behavior of Germanium under High Pressure YUAN Qin, LI Shuaiqi, ZHOU Li, HE Duanwei 051104

• Theory and Calculation •

- Numerical Study on Wave Effect of the Frictional Interface LIU Yonggui, HUI Mengmeng, SHEN Lingyan 052301

• Dynamic Response of Matter •

- Response Characteristics of Spring-Mass System under Impact of Momentum Ball MO Xiaolei, LIN Yuliang, LI Yugang 054101
- Effect of Aging Temperature on Dynamic Mechanical Properties of TB8 Titanium Alloy CHEN Wen, GUO Baoqiao, GUO Yansong, LUAN Kedi, RAN Chun, CHEN Pengwan 054102
- Dynamic Response and Damage Failure Behavior of TC4 Titanium Alloy Hollow Fan Blade ZHANG Yongqiang, JIA Lin 054103
- Topological Optimization and Dynamic Response of Periodic Porous Sandwich Structure under Impact Load LIAO Fang, LI Shiqiang, WU Guiying 054201
- Dynamic Model of Clamped Elastoplastic Circular Plate under Air Blast Loading WU Di, MI Guo, GUO Xianghua, ZHANG Qingming 054202
- Numerical Simulation of Crack Propagation and Damage Behavior of Glass Plates under Impact Loading WANG Mufei, LI Zhiqiang 054203
- Numerical Analysis of Dynamic Mechanical Characteristics of Brazilian Splitting of Coal-Rock Combination Bodies MA Sizhou, LIU Kewei, GUO Tengfei, HUANG Xiaohui, ZHOU Zhanxing 054204
- Crashworthiness Optimization of Horsetail-Bionic Thin-Walled Structures LIU Feiming, LEI Jianyin, QIAO Li, LIU Zhifang 054205

• High Pressure Applications •

- Influence of Coupled Macroscopic Deviation of Shaped Charge on Lateral Displacement of Jet NIE Yuan, LIANG Bin, YUAN Xiaoya, LIU Chuang, LI Yi 055101
- Influence of Flame Characteristics on Fast Cook-off XIAO You, ZHI Xiaoqi, WANG Qi, YU Yongli, FAN Xinghua 055201
- Cook-off Test and Numerical Simulation of HMX-Based Cast Explosive Containing AP LIU Runze, WANG Xinjie, LIU Ruifeng, DUAN Zhuoping, HUANG Fenglei 055202
- Surface Vibration Cavity Effect of Underpass Blasting in Urban Metro Liaison Channel DONG Hefei, ZHU Bin, JIANG Nan, YANG Yumin 055301
- Water Inrush Risk Prediction of Karst Tunnel Based on IAHP-Fuzzy Method LI Lu, QIN Bendong, GUO Jiaqi, HUANG Xin, TIAN Yongchao 055302