

目次

基础理论与应用研究

- 不同温度下 RDX 基熔铸炸药的力学性能研究 李媛媛,赵雪,仇斯琪,丁文远(1)
- 微光栅加速度计温度控制研究 周陆强,杨波(9)
- 高原环境对车辆动力舱温度场及红外特性影响研究 李耀宗,任登凤,韩玉阁(17)
- 斜盘式轴向柱塞泵空化特性分析 王慧,岳星岐,赵国超,张一鸣,王思瀚,林枫,王超(26)
- 层叠型缓冲靶板对弹载测试仪的保护作用研究 高原,马淋涛,王宇,孙传猛,裴东兴,余贇渥(34)
- 圆形降落伞最快下降系统设计 徐乐乐,张国军,张文栋,王宇通,柳燕,陈佳钰(42)
- 轴向移动内压力梁动力学的动网格法 郑伶俐,华洪良,吴小锋,蔡宪逸,廖振强(50)
- 三维表面裂纹扩展轨迹与数值仿真研究 赵慧,王瀚阳(57)

装备理论与装备技术

- 含攻角动能块撞击带壳 B 炸药冲击起爆阈值研究 孙乔溪,陈利,郭香华,张庆明(68)
- 装药密度和约束效应对冲击起爆特性规律研究 韩甲旭,王健,刘通有(76)
- 基于 BN-AHP 的装甲车辆动力系统故障状态评估 王文顺,崔俊杰,刘勇,张江,夏添,武一博(86)
- 重心布置及漂角对空投气垫艇纵稳性影响分析 张龙,陈海斌,南栩,洪亮(94)
- 基于变密度法的飞机襟翼拓扑优化设计 牛西茜,李昕莹,李佩泽(101)
- 一种新型组合翼地面效应气动特性数值研究 元晓晨,张春元,王培毅(107)
- 静爆冲击波数据处理评判方法研究 胡滨,胡钟铃,李冈,刘伟巍(114)
- 面向惯性装填的输弹运动研究 郭威,张鹏军,吕云飞,张泽健,刘中跃(121)
- 药型罩结构对线型聚能装药侵彻性能影响的仿真研究 王晓东,徐永杰,郑娜娜,王昊(128)
- 舰船摇荡作用下可调发射基座调高过程的刚柔耦合建模与仿真 胡秉伦,彭雪明(135)
- 圆柱-双锥结合药型罩结构参数对侵彻性能的影响规律 庞春阳,任凯,刘洋,袁浩,李文越,付建平,陈智刚(144)

综 述

- 爆炸冲击波作用下板架结构响应研究综述 王琰,蒋海燕,韩璐,苏健军,杨峰(151)
- 水下航行器自主导航定位技术前沿进展 张淋,谭良成(161)
- 特种车辆非充气轮胎研究综述 高山铁,钱江宁,李占龙,宋勇,张正,郝鹏祥(172)

化学工程与材料科学

微胶囊型自修复碳纤维增强复合材料性能研究 闫帅印,陈常发,邢柏阳,周连成,郭锐,周昊(181)

基于率相关改进桥联模型的 CFRP 材料动态力学性能研究
周佳伦,刘柳,吴闻酉,侯许佳,胡衍东,皮爱国(190)

顺序凝固工艺对大长径比装药缩松的影响研究
刘恒著,刘鹏飞,王兆国,曹红松,黄求安,牛凯博,沈冠军(200)

基于不同形貌硫化钴材料的吸波性能研究 刘慧,史圣兵,祝民鹏(210)

机械制造与检测技术

316L 不锈钢/CK22 碳钢爆炸焊接管的数值模拟
缪广红,孙志皓,周大鹏,胡昱,马秋月,刘自伟,马宏昊,沈兆武(217)

基于神经网络的螺丝表面缺陷检测 朱敏玲,任玉琢(224)

焊缝缺陷三维成像及亚像素定量方法研究 刘文婧,李艳楠,王建国,王少锋(232)

基于相变复合材料的新型液压油箱设计及研究 张列,李良,冯永保,何祯鑫,韩小霞(238)

基于直线扫描的引信钢球分层成像检测算法 吉泓洁,陈平,赵耀霞,张永伟,朱勋(247)

采用模块化阵列的涡流探伤检测 王旭升,何敏(253)

飞机载荷校准试验主动约束技术 李文龙,吴波,何乐儒,张海涛(259)

高速冲击下金属橡胶动态力学特性研究 李昕龙,原霞,王玉帅,樊文欣,陈燕,尹飞(265)

信息科学与控制工程

基于神经网络的椭圆扩展目标形态估计 陈训成,戚国庆,亓俊杰,李银伢,盛安冬(274)

基于 PPO 的球形机器人目标跟随研究 靳一聪,应展烽,刘春政,葛昊,陈志华(280)

基于分数阶 S 面模型的四旋翼轨迹跟踪控制 李佳成,陈鹏云,常哲(286)

基于 ST-YOLOv7 的无人机视角下行人及车辆识别 郝博,谷继明,刘力维(293)

基于改进 EfficientNetV2 算法的三相串联故障电弧检测 余琼芳,张宇海,赵亮(299)

基于注意力与通道重排的无人机对地目标检测算法 李佳一,闫振纲,闫克丁,赵英然,檀蕊莲,梁超(306)

融合视觉图像处理的目标识别技术在移动机器人中的应用 潘萍(314)

基于改进 YOLOv5s 轻量化模型的红外场景目标检测方法研究
刘芷汐,周春桂,崔俊杰,段捷,岳凯杰(323)

JOURNAL OF ORDNANCE EQUIPMENT ENGINEERING

Vol. 45 No. 3 (Sum. No. 308) Mar. 2024

CONTENTS

Study on the mechanical properties of RDX based melt-cast explosives at different temperatures	LI Yuanyuan, ZHAO Xue, QIU Siqi, et al(1)
Research on temperature control of micro-grating accelerometer	ZHOU Luqiang, YANG Bo(9)
Research on the influence of plateau environment on the temperature field and infrared characteristics of vehicle power cabin	LI Yaozong, REN Dengfeng, HAN Yuge(17)
Analysis of cavitation characteristics of swash plate axial piston pump	WANG Hui, YUE Xingqi, ZHAO Guochao, et al(26)
Study on the protective effects of laminated buffering target plate on bomb borne testers	GAO Yuan, MA Lintao, WANG Yu, et al(34)
Design of fastest descent system for circular parachute	XU Lele, ZHANG Guojun, ZHANG Wendong, et al(42)
The moving mesh method for the dynamics of an axially moving beam subject to inner pressure	ZHENG Lingli, HUA Hongliang, WU Xiaofeng, et al(50)
Study on the propagation path and numerical simulation of surface cracks in three-dimensional structures	ZHAO Hui, WANG Hanyang(57)
Impact detonation threshold study of kinetic energy blocks with angle of attack impacting cased B explosives	SUN Qiaoxi, CHEN Li, GUO Xianghua, et al(68)
Study on the law of charge density and constraint effect on impact initiation characteristics	HAN Jiaxu, WANG Jian, LIU Tongyou(76)
Fault state evaluation of armored vehicle power system based on BN-AHP	WANG Wenshun, CUI Junjie, LIU Yong, et al(86)
Analysis on the influence of center of gravity layout and drift angle on the longitudinal stability of airdrop hovercraft	ZHANG Long, CHEN Haibin, NAN Xu, et al(94)
Topology optimization design of aircraft flap based on variable density method	NIU Xixi, LI Xinying, LI Peize(101)
Numerical study on aerodynamic characteristics of a new type of compound wing with ground effect	QI Xiaochen, ZHANG Chunyuan, WANG Peiyi(107)
Research on evaluation method of static blast shock wave data processing	HU Bin, HU Zhongling, LI Gang, et al(114)
Research on ammunition ramming motion for inertial loading	GUO Wei, ZHANG Pengjun, LYU Yunfei, et al(121)
Simulation research on the effect of the liner structure onpenetration capability of linear shaped charge	WANG Xiaodong, XU Yongjie, ZHENG Nana, et al(128)
Rigid flexible coupling modeling and simulation of height adjustment process of adjustable launch base under ship sway	HU Binglun, PENG Xueming(135)
The influence of structural parameters on penetration performance of cylindrical biconical combined	PANG Chunyang, REN Kai, LIU Yang, et al(144)
A review of structural response of plate frame under explosive shock wave	WANG Yan, JIANG Haiyan, HAN Lu, et al(151)

JOURNAL OF ORDNANCE EQUIPMENT ENGINEERING

Vol. 45 No. 3 (Sum. No. 308) Mar. 2024

Advances in autonomous navigation and positioning technologies for underwater vehicles	ZHANG Lin, TAN Liangcheng(161)
Review of research on non-pneumatic tyres for special vehicles	GAO Shantie, QIAN Jiangning, LI Zhanlong, et al(172)
Study on properties of microencapsulated self-healing carbon fiber reinforced composites	YAN Shuaiyin, CHEN Changfa, XING Boyang, et al(181)
Research on dynamic mechanical properties of CFRP materials based on rate dependent improved bridging model	ZHOU Jialun, LIU Liu, WU Wenyong, et al(190)
A study on the effect of sequential solidification process on microporosity in large aspect ratio charge	LIU Hengzhu, LIU Pengfei, WANG Zhaoguo, et al(200)
Research on electromagnetic wave absorbing performance of cobalt sulfide materials with different morphologies	LIU Hui, SHI Shengbing, ZHU Minpeng(210)
Numerical simulation of 316L stainless steel/CK22 carbon steel explosive welding pipe	MIAO Guanghong, SUN Zhihao, ZHOU Dapeng, et al(217)
Screw surface defect detection based on neural network	ZHU Minling, REN Yuzhuo(224)
Research on 3D imaging and sub-pixel quantitative method of weld defects	LIU Wenjing, LI Yannan, WANG Jianguo, et al(232)
New hydraulic tank design based on phase change composites	ZHANG Lie, LI Liang, FENG Yongbao, et al(238)
Layered imaging detection algorithm for fuze steel balls based on linear scanning	JI Hongjie, CHEN Ping, ZHAO Yaoxia, et al(247)
Eddy current detection system with modular array	WANG Xusheng, HE Min(253)
Active constraint technology on aircraft load calibration test	LI Wenlong, WU Bo, HE Leru, et al(259)
Research on dynamic mechanical properties of metal rubber under high-speed impact	LI Xinlong, YUAN Xia, WANG Yushuai, et al(265)
Shape estimation for elliptic extended target based on neural network	CHEN Xuncheng, QI Guoqing, QI Junjie, et al(274)
Research on target following of spherical robot based on PPO	JIN Yicong, YING Zhanfeng, LIU Chunzheng, et al(280)
Trajectory tracking control of quadrotor based on fractional order S-plane model	LI Jiacheng, CHEN Pengyun, CHANG Zhe(286)
Pedestrian and vehicle identification from the perspective of unmanned aerial vehicles based on ST-YOLOv7	HAO Bo, GU Jiming, LIU Liwei(293)
Three-phase series arc fault detection based on improved EfficientNetV2 algorithm	YU Qiongfang, ZHANG Yuhai, ZHAO Liang(299)
Detection algorithm of ground target based on attention and channel rearrangement for UAV	LI Jiayi, YAN Zhengang, YAN Keding, et al(306)
Application of target recognition technology based on visual image processing in mobile robot	PAN Ping(314)
Research on infrared scene target detection method based on improved YOLOv5s lightweight model	LIU Zhixi, ZHOU Chungui, CUI Junjie, et al(323)