

中文核心期刊
CSCD核心期刊
中国科技核心期刊
RCCSE中国核心学术期刊

ISSN 2096-2304
CN 50-1213/TJ

兵器装备工程学报

Journal of Ordnance Equipment Engineering



ISSN 2096-2304



9 772096 230227 12>

2022

12

第43卷总第293期



目次

振动噪声控制技术专栏(专栏主编:汪国胜,中国北方车辆研究所研究员级高级工程师)

底部爆炸冲击下装甲车乘员下肢损伤行为与防护研究 牛坤,焦猛,莫富灏,李桂兵(1)

航天发射场典型振动试验与装备防护研究 潘晓,李东,张东云,徐跃(8)

基于曲柄移动导杆机构的高速履带车辆振动激励解耦装置设计 陈哲吾,向家佑,戴巨川,郭勇,胥小强(15)

装甲车防爆座椅抗爆指标合理性研究与建议(军用车辆乘载员防地雷爆炸减振抗爆座椅设计研究系列二) 汪国胜,曹宇,张伟杰,周少峰,刘亚青(22)

水动力与水弹道专栏(专栏主编:蒋运华,中山大学 副教授、博导)

通气协助航行体出水流动实验研究 杨茂,王涵瑞,邹志辉,沈乐,李洋,吴斌,蒋运华,刘红松(29)

不同头型旋成体入水初期流场特性数值分析 吕红庆,许磊,王振清(34)

基于响应面方法的 AUV 水动力外形优化 何隆,张亚,李世中,王芙蓉,袁泽慧,常慧珠(43)

基于 NSGA II 的七叶侧斜螺旋桨多目标优化设计 孙鸣远,刘昕瑶,张皓,严俊(51)

跨介质飞行器专栏(专栏主编:于勇,北京理工大学宇航学院 副教授、博导)

变形仿生飞翼跨介质无人机外形设计与航行仿真 吕达,苏浩秦,李筠,张子俊,龙浩,马宇,刘晓伟(59)

流体可压缩性对高速入水流体动力的影响 宁子炎,郭则庆(67)

尾翼直径对超空泡射弹小角度入水弹道特性影响研究 张云治,郭则庆,孙帅(74)

综述

动态武器目标分配问题的现状与进展 宋贵宝,强裕功,刘铁,刘镇毓(83)

吡啉环构建策略及其含能化合物合成研究进展 折巍青,翟连杰,霍欢,黄洁,王伯周(89)

破片战斗部轴向飞散控制技术研究进展 刘伟,梁争峰,曹磊(100)

硝基类含能材料热分解研究进展 何彬,卢先明,孟子晖,鄂秀天凤,刘宁(108)

装备理论与装备技术

基于运动方程的弹道导弹建模仿真方法 赵蒙,王明宇,王健,乔睿(118)

药型罩参数对多功能战斗部威力性能影响研究 石家政,王在成,毛亮,姜春兰,胡榕(125)

考虑多属性约束的战时装备维修任务动态调度 米巧丽,卢明章,李本威,王永生(132)

- 基于差分 BDS 的脉冲测量雷达标校设计与实现 郭健,许庆,刘洪林,姜晶莉(139)
- 基于键合空间理论的直线闭合弹带启动特性 邓致远,林圣业,姜铁牛,王茂森,管红根,戴劲松(145)
- 轻量化复合材料枪管振动特性分析 程振文,赵磊,吴志林(153)
- Comp B 炸药枪击数值仿真研究 郑英,黎坤海,赵铮,王威(158)
- 通电方式对多级同步感应线圈装置性能影响分析及优化方法 郑方正,黄垂兵,姜润翔,鲁梦昆,钱翰宁(165)
- 高空破片速度衰减规律试验研究 王满林,李法涛,于洪海,刘宗伟(172)
- 电磁轨道炮试验装置动态特性动力学分析 李四超,刘可可(177)
- 装药动态侵彻性能 张宾镇,赵太勇,陈智刚,景彤,王维占,田鹏,顾敏辉(182)

基础理论与应用研究

- 基于 PD 控制算法与 Isight 系数优化的无人机轨迹跟踪 柳文林,潘子双,崔凯凯(188)
- 基于 ProCAST 的熔铸装药顺序凝固工艺边界建模方法研究 黄求安,刘恒著,史慧芳,曹红松,王兆国,牛凯博,杨阳(194)
- 薄膜铂电阻温度传感器多股线束渐次屈服与断裂失效分析 钱诚,胡彩霞,孟津霄,李文娟(201)
- 浅埋爆炸近场荷载特征研究 梁茜,王仲琦,刘廷军,缙宇超(207)
- 基于动态流变学研究 Al/AP/GAP 悬浮液粘弹特性 王亚娜,王毅,宋小兰,安崇伟(215)
- 工艺节点流驱动的装配工艺孪生模型构建 成彬,罗富文(221)
- 基于动态优化的膜法富氧发动机高原工况节能特性研究 安强,姜梦炜,叶敏(230)
- 爆炸地震动下箱体贮液结构隔震试验与分析 王琼婷,宋春明,龙志林,张浩天,邢文政(236)
- 基于超声波渡越时间的非稳态温度场数值计算与实验研究 田雨生,刘东尧(244)
- 石油醚/水的微乳液体系对 HTPB 推进剂的溶胀特性的影响 张力,赵然,马会娟,陈丽(249)
- 工艺参数对高温钛合金 Ti65 扩散连接性能的影响 杨震,张晓巍,张鑫,王钰,李虹霖,赵天章(254)
- 爆炸冲击波对模拟电台靶标毁伤效应分析 崔国龙,姚文进,郑宇(259)

信息科学与控制工程

- 智能车辆局部避障轨迹规划研究 姚芳,郑帅,吴正斌(265)
- 基于改进 NSGA II 算法的舰载机保障作业调度 张勇(272)
- 基于改进变分模态分解与残差网络的空调外机故障检测方法 龙畅,余成波,王浩(278)
- 跨监控探头数据集构建和轨迹预测方法研究 袁首,乔勇军,苏航,陈青华,刘星(283)
- 基于 UML 与着色 Petri 网的预警情报智能推荐的建模与验证 牛犇,黄志良,吴俊杰,张福群,李子墨(291)
- 改进多邻域候鸟优化算法的柔性作业车间调度研究 杜凌浩,向凤红(299)
- 基于加权核范数最小化的高速目标检测优化算法 王阳,张小宽,马前阔,宋海燕,郑舒予,徐嘉华(307)

JOURNAL OF ORDNANCE EQUIPMENT ENGINEERING

Vol. 43 No. 12 (Sum. No. 293) Dec. 2022

CONTENTS

- Research on injury behaviors and protection of armored vehicle occupant lower limbs in under-body blast impacts**
..... NIU Kun, JIAO Meng, MO Fuhao, et al(1)
- Research on typical vibration tests and equipment protection on space launch sites**
..... PAN Xiao, LI Dong, ZHANG Dongyun, et al(8)
- Design of vibration excitation decoupling device for high-speed tracked vehicle based on crank-moving guide rod mechanism**
..... CHEN Zhewu, XIANG Jiayou, DAI Juchuan, et al(15)
- Research and suggestion on rationality of anti-explosion index of armored vehicle anti-explosion seats**
(Research on design technology of shock absorbing and anti-explosion for military vehicle seats (Series II))
..... WANG Guosheng, CAO Yu, ZHANG Weijie, et al. (22)
- Experimental investigation on ventilated cavity flow characteristics of the vehicle water exit**
..... YANG Mao, WANG Hanrui, ZOU Zhihui, et al(29)
- Numerical research on flow field characteristics of axisymmetric bodies with different head shapes during initial water entry**
..... LYU Hongqing, XU Lei, WANG Zhenqing(34)
- Hydrodynamic profile optimization of AUV based on response surface method** HE Long, ZHANG Ya, LI Shizhong, et al(43)
- Multi-objective optimization design of seven-blade oblique propellers based on NSGA II**
..... SUN Mingyuan, LIU Xinyao, ZHANG Hao, et al(51)
- Configuration design and navigation simulation of deformable bionic flying-wing aerial-aquatic unmanned vehicles**
..... LYU Da, SU Haoqin, LI Yun, et al(59)
- Effect of compressibility on hydrodynamic force of high-speed fluid entering water** NING Ziyang, GUO Zeqing(67)
- Influence of tail diameter on ballistic characteristics of supercavitating projectiles entering water at small angles**
..... ZHANG Yunzhi, GUO Zeqing, SUN Shuai(74)
- The present situation and progress of dynamic weapon target assignment** SONG Guibao, QIANG Yugong, LIU Tie, et al(83)
- Research progress on construction strategy of a furazan ring and synthesis of its energetic compounds**
..... SHE Weiqing, ZHAI Lianjie, HUO Huan, et al(89)
- Research progress on axial scattering control technology of fragmentation warhead**
..... LIU Wei, LIANG Zhengfeng, CAO Lei(100)
- Research progress in thermal decomposition of Nitro energetic materials** HE Bin, LU Xianming, MENG Zihui, et al(108)
- Modeling and simulation of ballistic missiles based on motion equation** ZHAO Meng, WANG Mingyu, WANG Jian, et al(118)
- Study on the influence of liner parameters on the destruction of multifunctional warhead**
..... SHI Jiazheng, WANG Zaicheng, MAO Liang, et al(125)
- Dynamic scheduling of wartime equipment maintenance tasks considering multi-attribute constraints**
..... MI Qiaoli, LU Mingzhang, LI Benwei, et al(132)
- Design and implementation of radar calibration for pulse instrumentation based on differential BDS techniques**
..... GUO Jian, XU Qing, LIU Honglin, et al(139)
- Starting characteristics of a linear closed shell chain based on bond space theory** DENG Zhiyuan, LIN Shengye, JIANG Tieniu, et al(145)
- Analysis of vibration characteristics of lightweight composite barrels** CHENG Zhenwen, ZHAO Lei, WU Zhilin(153)
- Numerical simulation of gunshot values of Comp B** ZHENG Ying, LI Kunhai, ZHAO Zheng, et al(158)
- Analysis and optimization method of the influence of power mode on the performance of a multi-stage synchronous induction coil**
..... ZHENG Fangzheng, HUANG Chuibing, JIANG Runxiang, et al(165)
- Experimental study on velocity attenuation law of fragments at a high altitude** WANG Manlin, LI Fatao, YU Honghai, et al(172)

JOURNAL OF ORDNANCE EQUIPMENT ENGINEERING

Vol. 43 No. 12 (Sum. No. 293) Dec. 2022

- Dynamic characteristics analysis of electromagnetic railgun experimental equipment** *LI Sichao, LIU Keke*(177)
- Simulation of dynamic penetration performance of shaped charge based on SPH**
..... *ZHANG Binzhen, ZHAO Taiyong, CHEN Zhigang, et al*(182)
- UAV trajectory tracking based on PD control algorithm and Isight coefficient optimization**
..... *LIU Wenlin, PAN Zishuang, CUI Kaikai*(188)
- Study on boundary modeling of the sequential solidification process for melt-cast charging using ProCAST**
..... *HUANG Qiu'an, LIU Hengzhu, SHI Huiyang, et al*(194)
- Progressive yield and fracture failure analysis of the multi-strand wire in a platinum thin film resistance temperature detector**
..... *QIAN Cheng, HU Caixia, MENG Jinxiao, et al*(201)
- Study on near-field load characteristics of shallow buried explosion** *LIANG Xi, WANG Zhongqi, LIU Tingjun, et al*(207)
- Research on viscoelasticity of Al/AP/GAP suspensions based on dynamic rheology**
..... *WANG Yana, WANG Yi, SONG Xiaolan, et al*(215)
- Construction of assembly process twin model driven by process node flow** *CHENG Bin, LUO Fuwen*(221)
- Energy saving on the membrane-based oxygen-enriched engines based on dynamic programming under high altitude conditions** *AN Qiang, JIANG Mengwei, YE Min*(230)
- Vibration isolation test and analysis of box liquid storage structure under ground motion of explosion locations**
..... *WANG Qiongtong, SONG Chunming, LONG Zhilin, et al*(236)
- Calculation and experimental research of unsteady temperature field based on ultrasonic transit time**
..... *TIAN Yusheng, LIU Dongyao*(244)
- Influence of petroleum ether/water microemulsion system on swelling characteristics of HTPB propellant**
..... *ZHANG Li, ZHAO Ran, MA Huijuan, et al*(249)
- Effect of process parameters on diffusion bonding properties of high temperature titanium alloy Ti65**
..... *YANG Zhen, ZHANG Xiaowei, ZHANG Xin, et al*(254)
- Analysis of damage effect of explosion shock waves on analog radio targets** *CUI Guolong, YAO Wenjin, ZHENG Yu*(259)
- Research on local obstacle avoidance trajectory planning of intelligent vehicles**
..... *YAO Fang, ZHENG Shuai, WU Zhengbin*(265)
- Carrier-based aircraft support scheduling based on improved NSGA II** *ZHANG Yong*(272)
- Fault detection method of air conditioner external unit based on improved variational modal decomposition and residual network** *LONG Chang, YU Chengbo, WANG Hao*(278)
- Research on dataset construction and trajectory prediction method of cross-monitoring vidicons**
..... *YUAN Shou, QIAO Yongjun, SU Hang, et al*(283)
- Modeling and verification of intelligent recommendation of early warnings based on UML and colored Petri nets**
..... *NIU Ben, HUANG Zhiliang, WU Junjie, et al*(291)
- Research on flexible job shop scheduling based on improved multi-neighborhood migratory bird optimization algorithm**
..... *DU Linghao, XIANG Fenghong*(299)
- High-speed target detection optimization algorithm based on weighted nuclear norm minimization**
..... *WANG Yang, ZHANG Xiaokuan, MA Qiankuo, et al*(307)