

目 次

综述

炸药装药烤燃特性的尺寸及约束效应研究进展

董泽霖,屈可朋,胡雪垚,肖 玮(1)

时间敏感网络流量调度机制研究综述

宋小庆,王海生,赵梓旭,魏 健(11)

炸药爆热测量方法及应用的研究进展

王浩旭,昝继超,贾路川,王 翔,张建明,蒋治海,菅国梁,卢校军,高大元(20)

装备理论与装备技术

不同推力与射流类型的火箭发动机排气噪声仿真研究

孙得川,王园丁,黄欣寅,徐晶磊,朱洁莹(29)

发射车液压油缸应力分析与弱磁损伤探测技术研究

刘 涛,朱 遵,李志成,屈彩虹,王胜科(38)

舰艇嵌入式训练系统时空一致性研究

王永洁,吴金平,周佳玉,邵作浩(43)

分层式主动均衡方法研究

王 俊,尹志勇,王 勇,郭 鑫,任晓琨(48)

基于重叠网格的航行体水动力特性计算

韩守根,杨 岩,刘丙鑫,陶 钢(54)

基于 CFD 仿真的扑动模式对扑翼气动性能影响研究

李战东,龚昌全,王 巍,陶建国(59)

高超声速目标运动特性及其对预警系统的影响

郑建成,谭贤四,曲智国,喻晨龙(66)

破片战斗部有效破片数影响规律研究

谢 奕,尹建平,李旭东,杨 东,卢文杰,张兆杰(73)

基于 DoDAF 的弹药供应保障体系构建与效能评估

刘昊邦,史宪铭,华 斌,李 皎,朱 博,梁俊鹏(80)

基于 Lanchester 方程的编队舰空导弹作战能力评估模型

斗计华,钟志通,肖玉杰(86)

便携式无坐力炮作战效能综合评定

李 召,徐文旭,时景峰(90)

多功能战斗部药型罩结构参量研究

白 晶,张国伟,陈京生,李 岩,高燕婷,李琼芳(96)

基于田口法的感应点火系统中线圈参数优化分析

王永艳,解志坚,杨 璞,黎 强,刘双庆(102)

基础理论与应用研究

Meat Grinder 放电特性分析

向红军,曹根荣,吕庆教,雷 彬,梁春燕(109)

水射流冲击销毁简易爆炸装置仿真研究

任云燕,温 瑞,陈 放(116)

一种新型调平装置结构及抗冲击性能研究

李 琳,陈 放(121)

非圆截面弹体斜侵彻薄靶的动态载荷特性研究

王景琛,张晓伟,张庆明,马晓荷(127)

基于 DBN-TOPSIS 法的空中目标融合威胁评估

刘 芳,张 勇,宫 华,于晓野(136)

- 公里级背景数据采集及伪装特征提取方法 杨 鑫,许卫东,郝有斌,刘朝畅(144)
不确定条件下任务风险分析的贝叶斯网络方法 田文杰,徐吉辉,郝旭祥(152)
车用爪极发电机新型三维分段等效磁路法研究 杨宇哲,赵 博,孙金涛,张宗京,杨 鹏(159)

信息科学与控制工程

- 转台-陀螺飞轮标定系统误差灵敏度分析方法 赵显宇,李冠璁,崔家山,王雨潇(168)
基于光纤传感的装甲车滚动轴承故障诊断技术
魏 鹏,王泽林,尹 淦,陈娟丽,毕京红,宋 娜,武 盼(175)
基于单神经元自整定 PID 的稳定平台调平控制 赵芃沛,孟卫锋,史永杰,李联涛,刘明雍(183)
一种基于 CAE 的 HRRP 去噪重构与识别方法 吴 玲,何昊天,胡献君(188)
基于双基点模糊推理的智能系统评估方法 汪霜玲,李宇飞,黄凯鹏,易 倩,朱先强(196)
一种基于距离参数化 CKF 的单站无源定位方法 李 徽(204)
基于协方差矩阵重构的方向图保形算法 徐延杰,王春阳,宫 健,赵英健,周长霖(209)
基于 ResMLP 模型的遥感影像场景分类算法式实现 周浩楠,夏鲁瑞,李 森(215)

化学工程与材料科学

- Q235 钢与 304 不锈钢多层爆炸焊接的数值模拟研究 缪广红,胡 显,杨礼澳,艾九英,祁俊翔,马秋月,孙志皓,马宏昊,沈兆武(220)
Pr(NO₃)₃掺杂对 TC4 微弧氧化涂层组织及性能的影响 张红涛,王铁成,张云龙,张国庆,陈 杰(227)
喷雾干燥法制备 HMX 基含铝炸药的工艺优化 关云飞,吴鹏飞,李小东,刘文杰,马智刚,亢澎霖,赵子文(233)
海藻酸盐/HMX 复合含能材料的制备及性能研究 秦潇楠,李小东,赵 悅,刘慧敏,崔小娜,刘亚洁(241)

光学工程与电子技术

- 改进 YOLOv5 的高空航拍图像检测方法 谢晓竹,卢 罡(248)
基于博弈理论的认知星地网络抗干扰信道选择方法 王梦阳,贾录良,颜培杰,陈亚明(254)
基于 AHP 方法的战场目标三维伪装效果评估 吕成龙,李 凌,郑自强(263)
激光探测双胶合透镜校正光学像差方法 孟展鹏,陈荷娟,张祥金(269)

JOURNAL OF ORDNANCE EQUIPMENT ENGINEERING

Vol. 44 No. 1 (Sum. No. 294) Jan. 2023

CONTENTS

Research progress on size and constraint effect of cook-off characteristics of explosive charge	<i>DONG Zelin, QU Kepeng, HU Xueyao, et al(1)</i>
Survey on scheduling mechanisms of time-sensitive networking traffic	<i>SONG Xiaoqing, WANG Haisheng, ZHAO Zixu, et al(11)</i>
Research progress of the measurement method and its application of detonation heat of explosives	<i>WANG Haoxu, ZAN Jichao, JIA Luchuan, et al(20)</i>
Simulation study on exhaust noise of a rocket engine with different thrust and jet types	<i>SUN Dechuan, WANG Yuanding, HUANG Xinyin, et al(29)</i>
Research on stress analysis and weak magnetic damage detection technology of the hydraulic cylinder of a missile launching vehicle	<i>LIU Tao, ZHU Lin, LI Zhicheng, et al(38)</i>
Research on time and space consistency of the training system embedded in warships	<i>WANG Yongjie, WU Jingping, ZHOU Jiayu, et al(43)</i>
Research on layered active equalization method	<i>WANG Jun, YIN Zhiyong, WANG Yong, et al(48)</i>
Calculation of hydrodynamic characteristics of vehicles based on overlapping grids	<i>HAN Shougen, YANG Yan, LIU Bingxin, et al(54)</i>
Research on the influence of flapping mode on aerodynamic performance of flapping wings based on CFD simulation	<i>LI Zhandong, GONG Changquan, WANG Wei, et al(59)</i>
Kinematic performance and influence on early warning system of hypersonic targets	<i>ZHENG Jiancheng, TAN Xiansi, QU Zhiguo, et al(66)</i>
Research on the influence law of the effective fragment number of fragment warhead	<i>XIE Yi, YIN Jianping, LI Xudong, et al(73)</i>
Construction and effectiveness evaluation of the ammunition supply guarantee system based on DoDAF	<i>LIU Haobang, SHI Xianming, HUA Bin, et al(80)</i>
Evaluation model of combat capability of formation ship-to-air missiles based on Lanchester equation	<i>DOU Jihua, ZHONG Zhitong, XIAO Yujie(86)</i>
Comprehensive evaluation of operational effectiveness of portable recoilless guns	<i>LI Zhao, XU Wenxu, SHI Jingfeng(90)</i>
Research on the liner structural parameters of multi-functional warhead	<i>BAI Jing, ZHANG Guowei, CHEN Jingsheng, et al(96)</i>
Optimization analysis of coil parameters in the induction ignition system based on Taguchi method	<i>WANG Yongyan, XIE Zhijian, YANG Zhen, et al(102)</i>
Analysis of discharge characteristics of Meat Grinder	<i>XIANG Hongjun, CAO Genrong, LYU Qing'ao, et al(109)</i>
Numerical simulation of improvised explosive devices destroyed by water jet	<i>REN Yunyan, WEN Rui, CHEN Fang(116)</i>
Study on structure and impact resistance of a new leveling device	<i>LI Lin, CHEN Fang(121)</i>
Study on dynamic load characteristics of a non-circular cross-section projectile obliquely penetrating into thin targets	<i>WANG Jingchen, ZHANG Xiaowei, ZHANG Qingming, et al(127)</i>

JOURNAL OF ORDNANCE EQUIPMENT ENGINEERING

Vol. 44 No. 1 (Sum. No. 294) Jan. 2023

Threat assessment of air target fusion based on DBN-TOPSIS	LIU Fang, ZHANG Yong, GONG Hua, et al(136)
Kilometer-level background data acquisition and camouflage feature extraction method	YANG Xin, XU Weidong, HAO Youbin, et al(144)
Bayesian network method for mission risk analysis under uncertain conditions	TIAN Wenjie, XU Jihui, HAO Xuxiang(152)
Research on a new three-dimensional segmented equivalent magnetic circuit method for vehicle claw pole generators	YANG Yuzhe, ZHAO Bo, SUN Jintao, et al(159)
Error sensitivity analysis of the turntable-gyro flywheel calibration system	ZHAO Yuyu, LI Guancong, CUI Jiashan, et al(168)
Fault diagnosis technology of the rolling bearing in an armored vehicle based on optical fiber sensors	WEI Peng, WANG Zelin, YIN Yu, et al(175)
Leveling control of an inertial platform based on single neuron self-tuning PID	ZHAO Pengpei, MENG Weifeng, SHI Yongjie, et al(183)
A method of HRRP denoising and recognition Based on CAE	WU Ling, HE Haotian, HU Xianjun(188)
TOPSIS fuzzy inference-based method for evaluating the level of intelligence	WANG Shuangling, LI Yufei, HUANG Kaipeng, et al(196)
A single-station passive location method based on range-parameterised Cubature Kalman Filter	LI Hui(204)
Conformal algorithm of a directional graph based on covariance matrix reconstruction	XU Yanjie, WANG Chunyang, GONG Jian, et al(209)
Remote sensing image scene classification algorithm based on the ResMLP model	ZHOU Haonan, XIA Lurui, LI Sen(215)
Numerical simulation of multi-layer explosive welding of Q235 steel and 304 stainless steel	MIAO Guanghong, HU Yu, YANG Liao, et al(220)
Effect of Pr(NO ₃) ₃ doping on the organization and performance of TC4 micro-arc oxidation coatings	ZHANG Hongtao, WANG Tiecheng, ZHANG Yunlong, et al(227)
Process optimization of preparation of HMX-based aluminized explosives through the spray-drying method	GUAN Yunfei, WU Pengfei, LI Xiaodong, et al(233)
Preparation and properties of alginate/HMX composite energetic materials	QIN Xiaonan, LI Xiaodong, ZHAO Yue, et al(241)
Improved detection of high-altitude aerial images based on YOLOv5	XIE Xiaozhu, LU Gang(248)
An anti-jamming channel selection approach for cognitive satellite-terrestrial networks based on game theory	WANG Mengyang, JIA Luliang, YAN Peijie, et al(254)
Evaluation of three-dimensional camouflage effect of battlefield targets based on AHP method	LYU Chenglong, LI Ling, ZHENG Ziqiang(263)
Optical aberration correction method by double glued lens for laser detection	MENG Zhanpeng, CHEN Hejuan, ZHANG Xiangjin(269)