



ISSN 1000-1093

CN 11-2176/TJ

兵工学报

二〇二一年六月

第四十三卷 增刊一

中国兵工学会

兵工学报

ACTA ARMAMENTARII

中国兵工学会

2022
第 43 卷 增刊 1
Vol.43 Suppl.1

目次

- 基于系统工程的装甲车辆总体设计 杜志岐, 唐镜(1)
基于 MBSE 的综合传动装置需求分析 陈娟, 周广明, 李欣桐, 邹天刚, 侯威, 孙雪岩(11)
车辆通信设备集成化体系结构 赵继东, 盖振伟, 李晶, 杨志来, 王巍(21)
空降车辆着陆缓冲过程动态建模仿真 杨占华, 刘春生, 李军, 郭少鹏, 李建阳(26)
基于 Mooney-Rivlin 模型的车辆环形橡胶减震器径向刚度计算与参数优化 王雷, 李毅, 马智慧(35)
基于 Wayland 图形协议和光纤通道网络的车辆人机交互显示控制技术 王鑫强, 王博, 贾巍, 先毅, 杨宗睿, 韩京冶(46)
基于中位秩加权的车辆传动装置直驶模式传递效率性能评估 张金豹, 邹天刚, 高秀才, 黄瑞颜, 桂鹏, 柳泓蛰(54)
基于波像差法的物镜成像系统设计 田继文, 朴燕(60)
基于车载计算机的红外图像移动目标检测 李博, 王博, 韩京冶, 杨宗睿, 栗霖雲, 傅畅之(66)
国产化环境下基于强化学习的地空协同作战仿真 李理, 李旭光, 郭凯杰, 史超, 陈昭文(74)
某型火箭炮运弹车自动调平控制系统的设计与实现 王武, 付小强, 卢青山, 薛鹏, 岳小东(82)
基于 CAN 总线和大容量数据存储的舰炮远程监控系统设计 代普, 李永锋, 韩建刚, 刘攀玲(88)
基于模型的系统工程在导弹系统研制中的实践 宋羽, 邹汝平, 王军(97)
基于作战仿真推演的空-地制导弹药效能评估 魏武臣, 徐硕, 何晓夫, 王晓光, 岳通(107)
多束定向预制破片弹开舱距离研究 王歌, 张春, 林智伟, 王保华, 檀虎, 陈晨(115)
一种适用于系列化空地导弹的飞行控制器设计方法 邹汝平, 陈士超, 张琨, 李鹏, 黄超凡(121)
滑翔增程制导炮弹复合导引算法设计及仿真 冯昌林, 陈锋, 易文俊(128)
基于椎体空间的无人机毁伤元密度分析 薛少辉, 范继, 唐旭, 陈晓明, 王凤歌, 侯勇, 曾玉芸(133)
轻型无人机起落架设计与强度分析 王盼, 吴昊, 梁宇, 胡雪岑, 纪雪松, 王振宇(140)
基于国产嵌入式智能计算平台的无人机检测方法 崔令飞, 郭永红, 修全发, 史超, 张硕阳(146)
有人与无人联合作战模式下的装备体系结构建模与效能评估 刘遵飞, 邹波, 陈续麟, 张文娟, 叶双平, 盘江丽(155)
基于深度学习的光电系统智能目标识别 李良福, 陈卫东, 高强, 许开銮, 刘轩, 何曦, 钱钧(162)
防空反导光电组网探测概率仿真评估 马优恒, 姚林海, 段红建, 李维杰, 赵磊(169)
基于 OODA 环的合成部队光电装备作战效能评估 郭雷平, 段文博, 刘宇, 张魁甲, 石凯, 王亚伟(177)
基于任务级-交战级体系仿真平台的并行实验研究 王珣, 高亮, 魏永勇, 李广运, 张天赐(183)
基于故障物理的复杂机械系统可靠性设计分析技术 刘勤, 姬广振, 曹璞琳, 李娟, 刘英(189)
基于系统工程方法的装甲装备可靠性指标分配 赵健, 张亮, 李奋然, 冯宇, 张宇, 刘锐, 李毅, 李鑫勇, 朱振雷(196)
面向装备体系联合检验的指数分布定时截尾方案优化研究 郭志明, 王迪, 庞婷, 李娟, 赵丹, 杨建新(203)
基于虚拟现实技术的可靠性、测试性、维修性、安全性、保障性设计 刘琳, 龚晨, 李朦朦, 王然(208)
基于 YOLOv4 网络模型的金属表面划痕检测 张博尧, 冷雁冰(214)
装备体系建设现状分析 李娟, 郭雷平, 王宁, 焦雯, 胡冰甦(222)

ACTA ARMAMENTARII

(Monthly)

Vol. 43 Suppl. 1

Jun. 2022

CONTENTS

Overall Design of Armored Vehicles Based on System Engineering	DU Zhiqi, TANG Jing(1)
MBSE-based Requirement Analysis of Transmission System	CHEN Juan, ZHOU Guangming, LI Xintong, ZOU Tiangang, HOU Wei, SUN Xueyan(11)
Integrated Structure of Communication Equipment for Military Vehicle	ZHAO Jidong, GAI Zhenwei, LI Jing, YANG Zhilai, WANG Wei(21)
Dynamic Modeling and Simulation of Airborne Vehicle's Landing Buffer Process	YANG Zhanhua, LIU Chunsheng, LI Jun, GUO Shaopeng, LI Jianyang(26)
The Radial Stiffness Calculation and Parameter Optimization of the Annular Rubber Shock Absorber Based on Mooney-Rivlin Model	WANG Lei, LI Yi, MA Zhihui(35)
Vehicle Human-Computer Interaction Display and Control Technology Based on Wayland Graphics Protocol and Fibre Channel Network	WANG Xinqiang, WANG Bo, JIA Wei, XIAN Yi, YANG Zongrui, HAN Jingye(46)
Straight Driving Efficiency Assessment of Vehicle Transmission Device Based on the Median-rank Weighting	ZHANG Jinbao, ZOU Tiangang, GAO Xiucui, HUANG Ruiyan, GUI Peng, LIU Hongzhe(54)
Design of Object Lens Imaging System Based on Wave Aberration Method	TIAN Jiwen, PIAO Yan(60)
Infrared Image Moving Object Detection Technology Based on Onboard Computer	LI Bo, WANG Bo, HAN Jingye, YANG Zongrui, LI Linyun, FU Changzhi(66)
Simulation of Ground-air Cooperative Combat Based on Reinforcement Learning in Localization Environment	LI Li, LI Xuguang, GUO Kaijie, SHI Chao, CHEN Zhaowen(74)
Design and Implementation of Automatic Leveling Control System for a Rocket Launcher Ammunition Supply Vehicle	WANG Wu, FU Xiaoqiang, LU Qingshan, XUE Peng, YUE Xiaodong(82)
Design of Naval Gun Remote Monitoring System Based on CAN Bus and Large Capacity Data Storage	DAI Pu, LI Yongfeng, HAN Jiangang, LIU Panling(88)
On the Practice of Model-based System Engineering in Missile Development	SONG Yu, ZOU Ruping, WANG Jun(97)
Effectiveness Evaluation of Air-ground Guided Ammunition Based on Combat Simulation	WEI Wuchen, XU Shuo, HE Xiaofu, WANG Xiaoguang, YUE Tong(107)
Research on's Opening Distance of AHEAD Ammunition	WANG Ge, ZHANG Chun, LIN Zhiwei, WANG Baohua, TAN Hu, CHEN Chen(115)
A Design Method of Flight Controller for Serialized Air-to-ground Missiles	ZOU Ruping, CHEN Shichao, ZHANG Kun, LI Peng, HUANG Chaofan(121)
Combined Guidance Law Design and Simulation for Gliding Extended Range Projectile	FENG Changlin, CHEN Feng, YI Wenjun(128)
Density Analysis of UAV Damage Element Based on Vertebral Space	XUE Shaohui, FAN Ji, TANG Xu, CHEN Xiaoming, WANG Fengge, HOU Yong, ZENG Yuyun(133)
Design and Strength Analysis of Light UAV Landing Gear	WANG Pan, WU Hao, LIANG Yu, HU Xuecen, JI Xuesong, WANG Zhenyu(140)
UAV Detection Method Based on Domestic Embedded Intelligent Computing Platform	CUI Lingfei, GUO Yonghong, XIU Quanfa, SHI Chao, ZHANG Shuoyang(146)
Architecture Modeling and Effectiveness Evaluation of Equipment System under Manned and Unmanned Joint Operation Mode	LIU Zunfei, ZOU Bo, CHEN Xulin, ZHANG Wenjuan, YE Shuangping, PAN Jiangli(155)
Deep Learning-based Intelligent Target Recognition Technology for Electro-optical System	LI Liangfu, CHEN Weidong, GAO Qiang, XU Kailuan, LIU Xuan, HE Xi, QIAN Jun(162)
Simulation Evaluation of Detection Probability of Air Defense and Antimissile Electro-optical Network	MA Youheng, YAO Linhai, DUAN Hongjian, LI Weijie, ZHAO Lei(169)
Operational Effectiveness Evaluation of Optoelectronic Equipment for Combined Arms Based on OODA Loop	GUO Leiping, DUAN Wenbo, LIU Yu, ZHANG Kuijia, SHI Kai, WANG Yawei(177)
Research on Parallel Experiment Based on the Simulation Platform of Mission-engagement Level System	WANG Xun, GAO Liang, WEI Yongyong, LI Guangyun, ZHANG Tianci(183)
Reliability Design and Analysis Methodfor Complex Mechanical System Based on Physics of Failure	LIU Qin, JI Guangzhen, CAO Pulin, LI Juan, LIU Ying(189)
Reliability Index Distribution of Armored Equipment Based on System Engineering Method	ZHAO Jian, ZHANG Liang, LI Aoran, FENG Yu, ZHANG Yu, LIU Rui, LI Yi, LI Xinyong, ZHU Zhenlei(196)
Research on Optimization of Exponential Distribution Timing Truncation Scheme for Joint Inspection of Equipment System of Systems	GUO Zhiming, WANG Di, PANG Ting, LI Juan, ZHAO Dan, YANG Jianxin(203)
RMSST Design Based on Virtual Reality	LIU Lin, GONG Chen, LI Mengmeng, WANG Ran(208)
Detection of Metal Surface Scratch Based on YOLOv4 Network Model	ZHANG Boyao, LENG Yanbing(214)
Analysis of Current Situation of Equipment System Construction	LI Juan, GUO Leiping, WANG Ning, JIAO Wen, HU Bingsu(222)