

目次

军事领域仿真

某车载多管火箭炮平顺性仿真研究	李永胜,李志刚,秦伟,张贵林(1)
航行器垂直入水空泡特性与流体动力研究	胡平超,张宇文,袁绪龙(5)
舰载反鱼雷鱼雷作战效率仿真研究	姜凯峰,周明,林宗祥(9)
履带式装甲车辆车体疲劳寿命预测仿真研究	尚其刚,王红岩,杨涛,马伟标(13)
鱼雷贮存可靠度预测模型	宋保维,赵志草,梁庆卫,毛昭勇(18)
关于目标跟踪定位的仿真方法研究	陈炜军,景占荣,朱安福,羊彦(22)
舰船尾流回波信号建模与仿真	李婷,刘纯武,黄芝平,郭熙业(26)
混沌二相调制雷达/干扰机共享信号优化设计	杨丹丹,刘以安,唐霜天,吴少鹏(30)
雷达辐射信号分类识别与特征提取	徐少博,刘以安,唐霜天,吴少鹏(34)
边缘处理在仿真迷彩设计中的研究与应用	喻钧,陈娜,胡志毅,陈宏书(38)
基于UKF的捷联惯导大失准角初始对准方法	张宁(41)

航空航天领域仿真

基于改进遗传蚁群算法的无人机航路规划	姚永杰,席庆彪,刘慧霞(44)
卫星网络骨干节点通信冲突算法研究	潘成胜,颜伟,刘海燕(48)
航空无线信道衰落混合应用模型分析及仿真	潘群华,赵雷鸣,徐明,贾长生(52)
雨衰环境下的自适应调制的应用	于佳,宗鹏,蒋文娟(56)
民用客机客舱布置应急撤离影响因素仿真分析	张玉刚,宋笔锋,薛红军,张晓燕(62)
弹性飞行器低阶鲁棒飞行控制律综合	张子健,刘女娟,刘斌,展全伟(66)
基于云粒子群小波网络的发动机起动机模型辨识	黄帅,李本威(71)
基于自抗扰技术的红外成像导引头控制器设计	栗金平,杨军,凡国龙(75)
柔性航天器动力学建模及模型降阶研究	余舜京,丰志伟,张青斌(80)
一种涡扇发动机加速过程仿真研究方法	李杰,樊丁,彭凯,李勇(84)
基于遗传算法的无人机航路规划优化研究	郑锐,冯振明,陆明泉(88)
基于图像的头盔瞄准系统虚拟仿真技术研究	闫龙(92)
直接侧向力/气动力复合控制系统稳定性分析	凡国龙,梁晓庚,杨军(96)
区域极点约束非脆弱鲁棒飞行控制器设计	谭茹,侯明善,李雅静,罗欢(101)
基于北斗二代/气压高度表的优化算法研究	刘瑞华,陈杨(105)

建模与验模

球面波在平面金属界面上的反射特性研究	吴志强,李斌(109)
CPN在FCM形式化建模与验证中的应用	郝莉莉,杨惠珍,谢攀(113)

网络与互连技术

神经网络在信息安全风险评估中应用研究	牛红惠,刘凌霞(117)
蚁群算法在无线传感器网络中的应用研究	王莹(121)
采用Torus映射与SVD变换的图像数字水印方法	李国明,李象霖(125)
基于二阶段噪声检测的滤波算法研究	赵国栋,袁益民(129)
基于压缩感知理论的超宽带信道估计	王开,刘郁林,张先玉(132)
一种基于特征的入侵检测模块的优化布置算法	王骐,王青萍(136)
基于锚同心圆的改进加权质心WSN定位算法	李尧尧,廖红云,曾孝平,吴小林(141)
一种基于离散小波域的脆弱水印算法	陈珂,牛丽,于复生(145)
无线传感器网络节能算法的优化研究	汪华斌,蔡昭权(149)
基于主成分分析的神经网络入侵检测仿真研究	单冬红,赵伟艇(153)
改进的降低信号峰均功率比算法研究	张春琴(157)
集成模型在网络入侵检测中的仿真研究	皮国强,刘韬(161)
GARBF在网络入侵检测中的应用研究	周敏(165)
局域网故障诊断的仿真研究	陈燕玲(169)
改进的遗传神经算法在网络安全检测中的应用	黄金国(173)
网络安全评估的仿真与应用研究	卓先德(177)
改进TCP拥塞控制算法的仿真及应用研究	李涛(181)
C均值算法的电信客户细分研究	张焕国,吕莎,李玮(185)

人工智能与专家系统

室内环境舒适度的神经网络建模与仿真	李婷,陈渊睿(189)
基于路径参数协同的多移动机器人编队控制	王银涛,黄越,李俊兵(193)

基于差分进化算法的支持向量回归机参数优化	陈 涛(198)
基于包衣机系统的喷枪堵塞预测与仿真	张香林,胡宏伟,李耐根(202)
带拖车移动机器人轨迹生成方法的研究与仿真	张 勤,李 艳,神谷好承(206)
炉温控制系统的仿真研究	刘慧英,李 斌,张丽红,江 豪(211)
混沌在 BP 神经网络中的应用	秦国兴(215)
基于粗糙集和 BP 神经网络的文本分类研究	唐 云,罗俊松(219)
基于二进制粒的用户概念空间构建方法	谭德坤(223)
移动机器人路径规划中的仿真研究	刘 毅(227)
蚁群算法在移动机器人路径规划中的仿真研究	张银玲,牛小梅(231)
人工神经网络在乳腺癌诊断中的应用	金 强,高普中(235)
改进神经网络在模拟电路故障诊断中的应用	于春霞(239)
人工神经网络在冠心病中的仿真研究	姜 燕,李 亢(243)
模糊 Smith 在温控系统中的仿真研究	王鹏英(247)
图书馆馆藏质量评价的仿真实现	郑金婷(251)
永磁同步电机控制系统的仿真研究	李培江,尤 婷(255)

优化仿真

求解约束优化问题的一种复合形遗传算法	李旻松,王惠平,章芬芬,钟若武(259)
--------------------------	----------------------

可视化仿真技术

关于图像分割算法的优化仿真研究	韩翠英,孔 娟(262)
基于二维 EMD 算法的多光谱全色图像融合	牛思先(266)
医学影像三维可视化系统的设计与实现	田和强,吴冬梅,杜志江,孙立宁(270)
基于 IFS 分形算法的树木形态分析与实现	肖海蓉(274)
模糊边缘检测在机器视觉图像系统仿真研究	任思璟,董金波(280)
一种小波域的自适应数字盲水印算法研究	邹 波(284)
基于混沌置乱离散余弦变换的图像水印研究	成年胜(288)
数字图像水印算法的仿真和应用研究	何宗林,常 郝(292)
自适应模糊阈值的图像去噪算法	王 欣(296)
图形引擎与物理引擎结合的研究与实现	牛红攀,高 勇,侯忠明(299)

能源领域仿真

计划孤岛方式下微电源控制系统的仿真研究	吕立召,刘觉民,刘忠仁,楚文斌(304)
兆瓦级永磁直驱无传感器风力发电系统仿真	浦清云,黄守道,黄科元(308)
神经网络对水电机组振动故障的应用研究	戴志超(312)
水轮发电机组控制系统的仿真研究	邝 涛,尚 游(316)

交通体系与工具仿真

考虑人体散热的轿车座舱内流场数值仿真研究	肖红林,李洪亮,王 远,王务林(320)
改进的人工鱼群混合算法在交通分配中的应用	姜 山,季业飞(326)
基于主动转向和差动制动的车辆防侧翻控制	徐耀耀,翁建生,金智林,冯 涛(330)
汽车半主动悬架系统模型降阶研究	顾正刚,汪洪波(335)
电动助力转向系统的模糊自适应 PID 控制	郭翰中,刘和平(339)
交通流检测自适应带宽的均值运动多目标跟踪	万智萍,叶仕通(343)

制造业仿真

基于 Petri 网仿真的电梯导轨精矫流程优化	卫凯华,唐劲松,肖田元(347)
-------------------------------	------------------

社会科学领域仿真

混合模型在经济时间序列预测中的应用研究	章 伟(354)
K 均值聚类算法在商业银行客户分类中的应用	瞿小宁(357)
石油价格预测算法的仿真研究	朱小梅,郭志钢(361)
林区经济与环境系统动力学模型仿真与调控	赵 岩,薛惠锋(365)

仿真体系结构与仿真软件平台

组合模型在软件可靠性预测中的建模与仿真	程跃华,崔 艳(371)
---------------------------	--------------

仿真应用研究

E-PHEMT 射频功率放大器的设计与仿真	徐 琪(375)
旋转约束的船舶装配拆卸路径规划算法	彭 飞,赵 耀,闵少松(379)
在计算机仿真竞赛中培养学员能力和素质	李聪颖,韩 蕾,徐庆九,王土星(384)
一种 L 波段低噪声放大器的设计与仿真	陈爱萍,赵 明,文 斌(389)
基于改进 KPCA 的语音特征提取方法	张君昌,陈媛媛(393)
奇异时滞系统的全阶规范观测器的设计	卢丽华,吴保卫(397)
连续退火过程加热炉带钢张力的仿真研究	尹伦海,白 锐,袁 斌(401)
基于有效度和维修成本的预防性维修方法	董博超,宋保维,梁庆卫,毛昭勇(405)
基于大涡仿真的 V 锥流量计三维流场分析	朱维斌,孟金龙(409)

CONTENTS

Simulation and Analysis of Wheeled Multiple Rocket Launcher Ride Comfort	LI Yong - sheng, LI Zhi - gang, et, al (1)
Research on Cavitation and Hydrodynamic of Vertical Water - Entry for Supercavitating Vehicles	HU Ping - chao, ZHANG Yu - wen, et, al (5)
Operational Efficiency Based on Simulation of Shipboard Anti - torpedo Torpedo ...	JIANG Kai - feng, ZHOU Ming, et, al (9)
Research on Simulation of Predicting Fatigue Life of Tracked Armored Vehicles Hull	SHANG Qi - gang, WANG Hong - yan, et, al (13)
Models of Storage Reliability Prediction Based for Torpedo	SONG Bao - wei, ZHAO Zhi - cao, et, al (18)
Study on Simulation Method of Target Tracking and Locating	CHEN Wei - jun, JING Zhan - rong, et, al (22)
Modeling and Simulating of Ship Wake Echo Signal	LI Ting, LIU Chun - wu, et, al (26)
Optimization Design of Radar/Jammer Share Signal Modulated by Binary Phase Encoding Signal of Chaos	YANG Dan - dan, LIU Yi - an, et, al (30)
Radar Radiating Signal Feature Extraction and Recognition	XU Shao - bo, LIU Yi - an, et, al (34)
Research and Application of Edge Processing on Simulating Camouflage Design	YU Jun, CHEN Na, et, al (38)
Initial Alignment of SINS with Large Misalignment Errors Using Unscented Kalman Filter	ZHANG Ning (41)
Path Planning for UAVs Based on Improved GA Algorithm	YAO Yong - jie, XI Qing - biao, et, al (44)
Research on Backbone Nodes Communication Collision Algorithm in Satellite Network	PAN Cheng - sheng, YAN Wei, et, al (48)
Analysis and Simulation of a Composite Aeronautical Fading Channel	PAN Qun - hua, ZHAO Lei - ming, et, al (52)
Application of Adaptive Modulation for Rain Attenuation	YU Jia, ZONG Peng, et, al (56)
Simulation Analysis of Civil Aircraft Emergency Evacuation Impact Factor	ZHANG Yu - gang, SONG Bi - feng, et, al (62)
Low - order Robust Flight Control Law Integrate for Elastic Vehicle	ZHANG Zi - jian, LIU Juan, et, al (66)
A Dynamic Identification of Aero - engine Starting Model Based on Cloud Adaptive Particle Swarm Optimization Wavelet Neural Network	HUANG Shuai, LI Ben - wei (71)
Design for Infrared Imaging Seeker Controller Based on Auto Disturbance Rejection Control	LI Jin - pin, YANG Jun, et, al (75)
Research on Dynamics Modeling and Model Reduction of Flexible Spacecraft	YU Shun - jing, FENG Zhi - wei, et, al (80)
A Simulation Method of Turbofan Engine Acceleration Process	LI Jie, FAN Ding, et, al (84)
Application of Particle Genetic Algorithm to Path Planning of Unmanned Aerial Vehicle	ZHENG Rui, FENG Zhen - ming, et, al (88)
Simulation Technology Research on HMS Based OpenGL	YAN Long (92)
Stability Analysis of Reaction - Lateral - Jet / Aerodynamic Complex Control System	FAN Guo - long, LIANG Xiao - geng, et, al (96)
Non - fragile and Robust Flight Control with Regional Pole Constraint	TAN Ru, HOU Ming - shan, et, al (101)
Research of Optimization Algorithm Based on Compass/Baro - Altimeter	LIU Rui - hua, CHEN Yang (105)
Reflection Properties of Spherical Electromagnetic Waves in Presence of a Conducting Half - space	WU Zhi - qiang, LI Bin (109)
Application on CPN for Formal Modeling and Validation of FCM	HAO Li - li, YANG Hui - zhen, et, al (113)
Research on Risk Assessment of Information Security Based on Improved Neural Network	NIU Hong - hui, LIU Ling - xia (117)
Ant Algorithm and Its Application Research on Wireless Sensor Network	WANG Ying (121)
An Image Watermarking Scheme Based on Toral Automorphism and SVD	LI Guo - ming, LI Xiang - lin (125)
Application of Filtering Algorithm Based on Two - stage Noise Detection	ZHAO Guo - dong, YUAN Yi - min (129)
Channel Estimation Based on Compressed Sensing in UWB Systems	WANG Kai, LIU Yu - lin, et, al (132)
An Optimal Placement Algorithm of Signature - based Intrusion Detection Modules in Wireless Sensor Networks	WANG Qi, WANG Qing - ping (136)
An Improved Weighted Centroid Localization Algorithm Based on Concentric Anchor - Beacons for Wireless Sensor Networks	LI Yao - yao, LIAO Hong - yun, et, al (141)
A Fragile Watermarking Algorithm Based on Discrete Wavelet Domain	CHEN Ke, NIU Li, et, al (145)
Research on Improvement Wireless Sensor Network S - MAC Protocol	WANG Hua - bin, CAI Zhao - quan (149)
Research on Intrusion Detection System Neural Networks and Principal Component Analysis	SHAN Dong - hong, ZHAO Wei - ting (153)
Research of the improved algorithm of Reducing the signal peak to average power ratio(PAPR)	ZHANG Chun - qin (157)
Integrated Network Intrusion Detection Model in Simulation	PI Guo - qiang, LIU Tao (161)
Application of Intrusion Detection Based on RBFNN and Genetic Algorithm	ZHOU Min (165)
Simulation Research on Local Network Fault Diagnose	CHEN Yan - ling (169)
Application of Intrusion Detection Based on RBFNN and Genetic Algorithm	HUANG Jin - guo (173)
Application and Simulation Research on Computer Network Security	ZHUO Xian - de (177)
Simulation and Application of Wireless Network Congestion Control	LI Tao (181)
Application of Telecom Customer Segmentation Base on Improved C - means Algorithm	ZHANG Huan - guo, LV Sha, et, al (185)
Indoor Thermal Comfort Modeling and Simulation with Neural Network	LI Ting, CHEN Yuan - rui (189)
Formation Control of Mobile Robots Based on Path Variables Coordinate	WANG Yin - tao, HUANG Yue, et, al (193)
Parameters Optimization of Support Vector Regression Based on Differential Evolution	CHEN Tao (198)

Forecast and Simulation of Blockage in Spray Gun Based on System of Coating Machine	ZHANG Xiang - lin, HU Bin - wei, et, al (202)
Research and Simulation of Trajectory Generation Method for Tractor - trailer Mobile Robot	ZHANG Qin, LI Yan, et, al (206)
Simulation Research of Furnace Temperature Control System	LIU Hui - ying, LI Bin, et, al (211)
Application of Chaos in BP Algorithm	QIN Guo - xing (215)
A Hybrid Classifier Based on the Rough Sets and BP Neural Networks	TANG Yun, LUO Jun - song (219)
A Method for Building User Concept Space Based on Binary Granules	TAN De - kun (223)
Simulation Research on Path Planning of Mobile Robot	LIU Yi (227)
Simulation Research on Mobile Robot Path Planning Based on Ant Colony Optimization	ZHANG Yin - ling, NIU Xiao - mei (231)
Study on Breast Cancer Diagnosis Based on Artificial Neural Network	JIN Qiang, GAO Pu - zhong (235)
Application on Fault Diagnosis of Analog Circuits Based on Improved Neural Network	YU Chun - xia (239)
Simulation on Coronary Heart Disease Based on Neural Network	JIANG Yan, LI Kang (243)
Simulation on Temperature Control System Based on Fuzzy Smith	WANG Peng - ying (247)
Simulation of Evaluation of the University Library Collection Quality	ZHENG Jin - ting (251)
Simulation on Permanent Magnet Synchronous Motor Control System	LI Pei - jiang, YOU Ting (255)
A Complex - genetic Algorithm for Solving Constrained Optimization Problems	LI Min - song, WANG Hui - ping, et, al (259)
An Improved Image Segmentation Algorithm Based on Otsu Method	HAN Cui - ying, KONG Juan (262)
Panchromatic and Multi - spectral Image Fusion Based on 2D EMD Algorithm	NIU Si - xian (266)
Design and Realization of a Medical Images Three - dimensional Visualization System	TIAN He - qiang, WU Dong - mei, et, al (270)
Analysis and Realization about Tree Forms Based on IFS Fractal Algorithm	XIAO Hai - rong (274)
Simulation Research on Fuzzy Edge Detection Method in Machine Vision Imaging System	REN Si - jing, DONG Jin - bo (280)
An Adaptive Blind Digital Watermarking Algorithm Based on Wavelet Domain	ZOU Qiang (284)
Study on Image Watermarking Algorithm Based on Chaotic Scrambling DCT	CHENG Nian - sheng (288)
Simulation and Study on Image Digital Watermark Algorithm	HE Zong - lin, CHANG Hao (292)
Image Denoising Based on Adaptive Fuzzy Thresholding Approach	WANG Xin (296)
Research and Implementation on Bonding of Graphic Engine and Physics Engine	NIU Hong - pan, GAO Yong, et, al (299)
Research of Microsources Control Systems' Simulation in Intentionally Islanded Operation	LV Li - zhao, LIU Jue - min, et, al (304)
Simulation on MW Level permanent Magnet Direct Drive Sensorless Wind Power System	PU Qing - yun, HUANG Shou - dao, et, al (308)
Fault Diagnosis Method for Hydroelectric Units Based on PCA and RBF Network	DAI Zhi - chao (312)
Study on Simulation of Water Turbine Generator Set Controller System	KUANG Tao, SHANG You (316)
Investigation on Numerical Simulation of Flow Field in Car Cabin with Demic Heat Dissipation	XIAO Hong - lin, LI Hong - liang, et, al (320)
Artificial Fish Swarm Algorithm for Solving Road Network Equilibrium Traffic Assignment Problem	JIANG Shan, JI Ye - fei (326)
Rollover Prevention Control Based on Active - steering and Differential - Braking	XU Yao - yao, WENG Jian - sheng, et, al (330)
Study on Model Reduction for Half - Vehicle Active Suspension System	GU Zheng - gang, WANG Hong - bo (335)
Fuzzy Self - adaptive PID Control of Electrical Power Steering System	GUO Han - zhong, LIU He - ping (339)
Mean Shift Multi - target Tracking Algorithm with Adaptive Bandwidth in Traffic Flow Detection	WAN Zhi - ping, YE Shi - tong (343)
Process Optimizing for High - speed Elevator's Guide Rail Correcting System	WEI Kai - hua, TANG Jin - song, et, al (347)
Study on Hybrid Model of Economic Time Series Forecasting	ZHANG Wei (354)
Application of K - means Based on Commercial Bank Customer Subdivision	QU Xiao - ning (357)
Simulation Study on Forecasting Method of Oil Price Forecasting	ZHU Xiao - mei, GUO Zhi - gang (361)
Simulation of Economic and Environment System of Forestry Region Based on System Dynamics	ZHAO Yan, XUE Hui - feng (365)
Study on Moleding and Simulation of Software Reliability Prediction Based on Combination Model	CHENG Yue - hua, CUI Yan (371)
Design and Simulation of E - PHEMT RF Power Amplifier	XU Qi (375)
A Method for Assembly/Disassembly Path Planning of Ship with Rotation Constraints	PENG Fei, ZHAO Yao, et, al (379)
The Practice of Ability and Quality Cultivating in National Computer Simulation Grand Prize	LI Cong - ying, HAN Lei, et, al (384)
Design and Simulation of an L - band Low Noise Amplifier	CHEN Ai - ping, ZHAO Ming, et, al (389)
Speech Feature Extraction Method based on Improved KPCA	ZHANG Jun - chang, CHEN Yuan - yuan (393)
Design of Full - order Normal Observer for Singular Time - delay System	LU Li - hua, WU Bao - wei (397)
Simulation Research of Strip Tension in Heater Furnace of the Continuous Annealing Process	YIN Lun - hai, BAI Rui, et, al (401)
Method of Preventive Maintenance Based on Availability and Maintenance Cost	DONG Bo - chao, SONG Bao - wei, et, al (405)
3 - D Numerical Simulation and Analysis on V - cone Flowmeter Based on LES Method	ZHU Wei - bin, MENG Jin - long (409)