



中国仿真学会会刊

A Journal of China Simulation Federation



系统仿真学报

Journal of System Simulation

1

2018 Vol. 30

中文核心期刊要目总览

中国科学引文数据库(CSCD)核心刊

中国科技期刊统计源核心刊

RCCSE中国核心学术期刊

全球文献检索数据库SCOPUS

英国科学文摘SA/INSPEC

美国Ulrich's Periodicals Directory

仿真建模理论与方法

基于二分网络的分布式服务组合系统建模研究.....	郝耀辉, 韩继红, 郭虹, 刘树新	(1)
基于 EM 算法的半监督局部加权 PLS 在线建模方法.....	熊伟丽, 薛明晨, 李妍君	(8)
基于状态观测器的历史数据建模方法研究.....	董泽, 尹二新	(18)
基于改进的字典学习与稀疏表示的人脸表情识别.....	黎明, 彭秀姣, 王艳	(28)
一种基于神经网络的仿真优化方法.....	吴诗辉, 刘晓东, 邵悦, 张发, 杨闽湘	(36)
密度场控制的四面体网格自适应生成算法.....	王继东, 范丽鹏, 庞明勇	(45)
面向微纳器件虚拟运行的包络体生成方法.....	徐伟, 赵新, 孙广毅	(53)
基于优化 Snake 模型的变形物体碰撞检测算法研究.....	李照, 靳雁霞, 秦志鹏, 任超	(62)
广义随机系统动力学相关性分析模型.....	黄光球, 陆秋琴	(69)
基于灵敏度分析的 Q-BTGSID 的优化 [英].....	贾书伟	(80)
二进制式电源阶调逆变器调压技术的仿真.....	刘喜梅, 李潇, 孙庆乐	(91)

仿真系统与技术

一种快速收敛的动态松弛协同优化方法.....	陈静, 吕玉超, 王利敏	(96)
蜂群粒子群混合算法在机械手参数优化中的应用研究.....	宫赤坤, 孙英慧, 袁立鹏	(105)
密封舱气体置换过程仿真与分析研究.....	关晓辉, 周林	(114)
基于增强现实的特种材料加工培训模拟系统.....	罗斌, 葛双全	(122)
特种车辆乘员座舱虚拟现实仿真系统研究.....	贾宇飞, 赵新俊, 赵俊严, 孔令杰, 黄克雷	(132)

仿真应用工程

基于改进和声搜索算法的多目标硫化车间调度.....	王艳, 吴龙成, 纪志成, 严大虎	(139)
柔性机器人多层启发式动态规划平衡认知研究.....	陈静	(147)
基于动态逆和动态滑模的双通道机动飞行控制.....	杨盛毅, 刘超, 唐胜景, 杨伟力	(156)
A320 飞机客舱热舒适性及 PM ₁₀ 浓度分布的数值模拟.....	林家泉, 王瑞婷	(164)
基于机织电极的电势检测系统建模与仿真.....	李龙飞, 丁永生	(171)
基于主成分分析与神经网络的多响应参数优化.....	禹建丽, 黄鸿琦, 苗满香	(176)

基于 DNPE-SVDD 的化工过程监控.....	韩晓春,薄翠梅,易辉	(184)
基于排队模型的网络性能仿真与安全评估技术.....	刘立芳,赵丽莎,齐小刚,熊伟	(191)
非理想反电动势下无刷直流电机转矩波动研究.....	夏鲲,董斌,卢晶	(197)
定子匝间故障下 DFIG 机组的模型与仿真.....	许伯强,孙丽玲,杜文娟	(205)
岩层错动下复杂构造岩体破坏发展研究及应用.....	崔铁军,李莎莎,马云东,王来贵	(216)
水压轴向柱塞泵柱塞腔空化的仿真及影响研究.....	孙泽刚,许明恒,肖世德,戴元龙	(221)
基于集中质量法的水下缆索破断动力学仿真.....	朱忠显,尹勇,神和龙	(228)
基于灵活性提升的电力系统储能装置定容方法.....	孙伟卿,李臻,谈一鸣,吕凤磊,邱文平,李宏仲	(235)
PHEV 模糊能量管理策略优化设计.....	武小兰,白志峰,史小辉,曹秉刚	(242)
采煤机截割部传动系统非线性特性研究.....	张东升,于海洋,徐健博,李岩	(249)
分销网络存储系统 RFID 使能的 CONWIP 策略的设计与实现.....	韩晓菊,汪定伟	(257)
基于 Apriori 的关联规则算法及其在电厂中的应用.....	黄文成,贾立,彭道刚,李望	(266)
基于 RVM 组合核优化的软测量模型研究.....	张亚男,杨慧中	(272)
客机货舱火灾时期污染物的非稳态扩散规律研究.....	杨东,刘振,杨士斌,孙晓哲	(278)
复合固体推进剂湿扩散数值模拟研究.....	王玉峰,李高春,张旭东,曲凯,李金飞	(285)
基于 PWA 模型的安全诊断方法在 CSTR 系统中的应用.....	王宇红,杨璞	(292)
符合 FT3 帧格式的电子式互感器的仿真研究.....	于飞,张海龙,孙庆乐	(298)
基于模型预测控制的汽车操纵逆问题研究.....	刘英杰,刘云,郭姗姗	(304)
四轮轮毂与单体电机电动汽车性能对比分析.....	汪锋,龚国庆,陈勇,马彬,李文海,侯秋梦	(311)
小波变换在舷外有源诱饵仿真模型验证中的应用.....	张鸿喜,张洁	(318)
基于模糊控制的扩展卡尔曼滤波 SOC 估计研究.....	方磊,陈勇,赵理,殷康胜,郑阳	(325)
数据驱动预整定自适应子空间模型预测控制.....	韩璞,刘淼,贾昊	(332)

短文	
跳频信号的迭代随机共振解调算法.....	李海霞,任勇峰,杨玉华,张白莉,田竹梅 (341)

动态与信息	
《系统仿真学报》获奖证书.....	封 2
2018 年中国仿真大会征文通知.....	后插 1
《系统仿真学报》中国科技核心期刊收录证书.....	封 3
《系统仿真学报》2018 年版权页.....	封底

Modeling of Distributed Service Composition System Based on Bipartite Network.....	
.....Hao Yaohui, Han Jihong, Guo Hong, Liu Shuxin	(1)
Online Modeling with Semi-Supervised Locally Weighted Partial Least Squares Based on Expectation Maximization Algorithm.....	Xiong Weili, Xue Mingchen, Li Yanjun (8)
Historical Data Modeling Based on State Observation.....	Dong Ze, Yin Erxin (18)
Facial Expression Recognition Based on Improved Dictionary Learning and Sparse Representation.....	
.....Li Ming, Peng Xiujiao, Wang Yan	(28)
Optimization via Simulation Based on Neural Network.....	
.....Wu Shihui, Liu Xiaodong, Shao Yue, Zhang Fa, Yang Minxiang	(36)
Adaptive Generation Algorithm of Tetrahedral Meshes Based on Density Field.....	
.....Wang Jidong, Fan Lipeng, Pang Mingyong	(45)
Swept Volume Generation for Virtual Operation of Micro and Nano-Devices.....	
.....Xu Wei, Zhao Xin, Sun Guangyi	(53)
Collision Detection Algorithm of Deformable Object Based on Snake Model Optimization.....	
.....Li Zhao, Jin Yanxia, Qin Zhipeng, Ren Chao	(62)
Correlation Analysis Model of Generalized Stochastic System Dynamics.....	Huang Guangqiu, Lu Qiuqin (69)
Optimization of Q-BTGSID based Based on Sensitivity Analysis [Eng.].....	Jia Shuwei (80)
Simulation on Step-Mode Inverter Voltage Regulator Technology of Independent DC.....	
.....Liu Ximei, Li Xiao, Sun Qingle	(91)
Dynamic Relaxation Cooperative Optimization Method with Fast Convergence.....	
.....Chen Jing, Lü YuChao, Wang Limin	(96)
Study on Application of Hybrid Optimization Algorithm in Parameters optimization of the Manipulator...	
.....Gong Chikun, Sun Yinghui, Yuan Lipeng	(105)
Simulation and Analysis of Gas Replacement in Sealed Capsule.....	Guan Xiaohui, Zhou Lin (114)
Simulation System for Special Material Processing Training Based on Augmented Reality Technology.....	
.....Luo Bin, Ge Shuangquan	(122)
Research on Virtual Reality Simulation System for Crew Cabin of Special Vehicle.....	
.....Jia Yufei, Zhao Xinjun, Zhao Junyan, Kun Lingjie, Huang Kelei	(132)
Multi-Objective Vulcanization Workshop Scheduling Based on Improved Harmony Search Algorithm.....	
.....Wang Yan, Wu Longcheng, Ji Zhicheng, Yan Dahu	(139)
Research on Balance Cognition Based on Multi-level Heuristic Dynamic Programming of Flexible Robot	
.....Chen Jing	(147)
Dual Channel Maneuver Flight Control Based on Dynamic Inverse and Dynamic Sliding Mode.....	
.....Yang Shengyi, Liu Chao, Tang Shengjing, Yang Weili	(156)
Numerical Simulation of Thermal Comfort and PM ₁₀ Concentration Distribution in A320 Aircraft Cabin	
.....Lin Jiaquan, Wang Ruiting	(164)
Modeling and Simulation of Potential Detection System Based on Woven Electrode.....	
.....Li Longfei, Ding Yongsheng	(171)
Multi-Response Parameters Optimization Based on PCA and Neural Network.....	
.....Yu Jianli, Huang Hongqi, Miao Manxiang	(176)

Chemical Process Monitoring Based on DNPE-SVDD.....	<i>Han Xiaochun, Bo Cuimei, Yi Hui</i>	(184)
Security Evaluation Techniques and Network Performance Simulation Based on Queue Model.....	<i>Liu Lifang, Zhao Lisha, Qi Xiaogang, Xiong Wei</i>	(191)
Research on the Torque Ripple of Brushless DC Motor under Non-ideal EMF....	<i>Xia Kun, Dong Bin, Lu Jing</i>	(197)
Modeling and Simulation of DFIG Unit with Stator Inter-Turn Fault....	<i>Xu Boqiang, Sun Liling, Du Wenjuan</i>	(205)
Research and Application of Damage Development of Rock Mass with Complex Structure Under Horizontal Offset.....	<i>Cui Tiejun, Li Shasha, Ma Yundong, Wang Laigui</i>	(216)
Study of Simulation and Influence of Plunger Cavity Cavitation Water Axial Piston Pump.....	<i>Sun Zegang, Xu Mingheng, Xiao Shide, Dai Yuanlong</i>	(221)
Dynamics Simulation of Breaking Underwater Cable Based on Lumped Mass Method.....	<i>Zhu Zhongxian, Yin Yong, Shen Helong</i>	(228)
Method of Power System Energy Storage Configuration Based on Flexibility Promotion.....	<i>Sun Weiqing, Li Zhen, Tan Yiming, Lv Fenglei, Qiu Wenping, Li Hongzhong</i>	(235)
Optimization Design of Fuzzy Energy Management for Plug-in Hybrid Electric Vehicles.....	<i>Wu Xiaolan, Bai Zhifeng, Shi Xiaohui, Cao Binggang</i>	(242)
Nonlinear Characteristics of Transmission System of Shearer Cutting Unit.....	<i>Zhang Dongsheng, Yu Haiyang, Xu Jianbo, Li Yan</i>	(249)
Design and Realization of RFID-Enabled CONWIP Strategy for Multi-Echelon Inventory of Distribution Network.....	<i>Han Xiaojun, Wang Dingwei</i>	(257)
Apriori-Based Association Rule Algorithm and Its Application in Power Plant.....	<i>Huang Wencheng, Jia Li, Peng Daogang, Li Wang</i>	(266)
RVM Soft Sensing Model Based on Optimized Combined Kernel Function....	<i>Zhang Yanan, Yang Huizhong</i>	(272)
Unsteady State Diffusion of Pollutants During Cargo Compartment Fire.....	<i>Yang Dong, Liu Zhen, Yang Shibin, Sun Xiaozhe</i>	(278)
Numerical Simulation of Moisture Diffusion of Composite Solid Propellant.....	<i>Wang Yufeng, Li Gaochun, Zhang Xudong, Qu Kai, Li Jinfei</i>	(285)
Application of PWA-Based Safety Diagnosis Method in CSTR System.....	<i>Wang Yuhong, Yang Pu</i>	(292)
Simulation of Electronic Transformer in Line with FT3 Frame Format....	<i>Yu Fei, Zhang Hailong, Sun Qingle</i>	(298)
Study on Vehicle Handling Inverse Dynamics Based on Model Predictive Control Theory.....	<i>Liu Yingjie, Liu Yun, Guo Shanshan</i>	(304)
Performance Comparison and Analysis Between Four In-Wheel-Motor Driving Electric Vehicle and Monomer-Motor Driving Electric Vehicle.....	<i>Wang Feng, Gong Guoqing, Chen Yong, Ma Bin, Li Wenhai, Hou Qiumeng</i>	(311)
Application of Wavelet Transform in Simulation Model Validation of Outboard Active Decoy.....	<i>Zhang Hongxi, Zhang Jie</i>	(318)
SOC Estimation with Extended Kalman Filter Based on Fuzzy Control.....	<i>Fang Lei, Chen Yong, Zhao Li, Yin Kangsheng, Zheng Yang</i>	(325)
Data Driven Pre Tuning Adaptive Subspace Model Predictive Control.....	<i>[Han Pu], Liu Miao, Jia Hao</i>	(332)
Iterative Stochastic Resonance Demodulation Algorithm of Frequency-Hopping Signal.....	<i>Li Haixia, Ren Yongfeng, Yang Yuhua, Zhang Baili, Tian Zhumei</i>	(341)

Journal of System Simulation, a publication of China Simulation Federation

Chief Editors: *LI Bo-hu, ZHAO Qin-ping*; Managing Editor: *ZHAO Jing-ying*

P. O. Box 142-13, Beijing 100854, China; e-mail: simu-xb@vip.sina.com; [http://: www.china-simulation.com](http://www.china-simulation.com)

Journal of System Simulation—a journal of China Simulation Federation

Editors-in-chief: LI Bohu ZHAO Qinping

The Editorial Board of Journal of System Simulation

《系统仿真学报》编辑委员会 (以姓氏笔画为序)

顾问 Consultants:

文传源 Wen Chuanyuan	王子才 Wang Zicai	王正中 Wang Zhengzhong	王精业 Wang Jingye
吴启迪 Wu Qidi	汪成为 Wang Chengwei	陈宗基 Chen Zongji	陈定昌 Chen Dingchang
黄先祥 Huang Xianxiang	黄柯棣 Huang Kedi	曹建国 Cao Jianguo	康凤举 Kang Fengju
彭晓源 Peng Xiaoyuan	熊光楞 Xiong Guangleng		

主编 Editors-in-chief:

李伯虎 Li Bohu	赵沁平 Zhao Qinping
-------------	------------------

副主编 Associate Editors-in-chief:

李国雄 Li Guoxiong	杨明 Yang Ming	邱晓刚 Qiu Xiaogang	张霖 Zhang Lin
范文慧 Fan Wenhui	胡晓峰 Hu Xiaofeng	费敏锐 Fei Minrui	熊新平 Xiong Xinping

委员 Members:

Axel Lehmann [DE]	Yun Bae Kim [KR]	Kang Sun Lee [KR]	Gary Tan [SG]
Yahaya Md. Sam [MY]	Koji Koyamada [JP]	Satoshi Tanaka [JP]	丁国富 Ding Guofu
王玮 Wang Wei	王雨时 Wang Yushi	王俊峰 Wang Junfeng	方胜良 Fang Shengliang
史小平 Shi Xiaoping	李果 Li Guo	尹勇 Yin Yong	李革 Li Ge
李仁发 Li Renfa	李康顺 Li Kangshun	李中华 Li Zhonghua	朱一凡 Zhu Yifan
任卫群 Ren Weiqun	纪志成 Ji Zhicheng	刘金 Liu Jin	刘世光 Liu Shiguang
刘晓平 Liu Xiaoping	汤铭端 Tang Mingduan	吴云洁 Wu Yunjie	何明 He Ming
何秋茹 He Qiuru	邹湘军 Zou Xiangjun	张存泉 Zhang Cunquan	张亚崇 Zhang Yachong
张林鎭 Zhang Linxuan	张捍东 Zhang Handong	陈岭 Chen Ling	陈勇 Chen Yong
陈小惠 Chen Xiaohui	陈宗海 Chen Zonghai	陈建华 Chen Jianhua	陈德运 Chen Deyun
邵晨曦 Shao Chenxi	金炜东 Jin Weidong	周坚刚 Zhou Jiangang	周前祥 Zhou Qianxiang
庞国锋 Pang Guofeng	郑新奇 Zheng Xinqi	孟秀云 Meng Xiuyun	赵志刚 Zhao Zhigang
胡明伟 Hu Mingwei	胡绍林 Hu Shaolin	战晓苏 Zhan Xiaosu	段海滨 Duan Haibin
姚益平 Yao Yiping	郭晨 Guo Chen	聂生东 Nie Shengdong	柴旭东 Chai Xudong
徐凌宇 Xu Lingyu	高慧敏 Gao Huimin	唐勇 Tang Yong	唐贻发 Tang Yifa
黄安祥 Huang Anxiang	龚光红 Gong Guanghong	崔建江 Cui Jianjiang	廖瑛 Liao Ying

主管单位：中国航天科工集团有限公司
主办单位：北京仿真中心 中国仿真学会
协办单位：航天系统仿真重点实验室
主编：李伯虎 赵沁平
本期责任副主编：李国雄
终审编委：何秋茹
编辑部主任：赵京颖
编辑：杨跃军 王娜 张凌霏 沈蓉晖
英文编辑：高红彪
http://www.china-simulation.com
e-mail: simu-xb@vip.sina.com
Address: P. O. Box 142-13, Beijing 100039, China

联系电话：010-88527147 / 010-68388709
编辑部地址：北京市海淀区永定路 50 号院
通讯地址：北京市 142 信箱 13 分箱系统仿真学报编辑部
邮政编码：100039
印刷装订：北京科信印刷有限公司 (邮编 102208)
印厂地址：北京市昌平区回龙观七北路马连店甲 6 号
国际刊号：ISSN 1004-731X
国内刊号：CN11-3092/V
邮发代号：82-9
ISSN 1004-731X
出版时间：每月 8 日
全年定价：600 元
每期定价：50 元

