目 次 Contents

《船舶工程》2019年 第41卷 第3期



专题:智能船舶

海洋科学考察船智能化体系的规划分析方法
The Intelligence System Planning and Analyzing Methods for
Marine Research Ships
周志凤,赵凡琪,周云山,沈小波,胡绪昌,龚瑞良(1)

"雪龙2"号科考破冰船柴油机健康管理与辅助决策系统 Health Management and Auxiliary Decision System of Icebreaker Diesel Engine of "XUE LONG II" 黄 嵘, 李文明, 王 峰(6)

面向远海作业的智能船舶辅机
The Application and Forecast of Intelligent Marine Auxiliary
Machinery Worked in Deep Sea
田艳丽,余德泉,丁海建(10)

未来智能船舶推进系统的选型 Selection on the Propulsion System of Future Intelligent Ship 胡以怀,柯 赞,蒋佳炜,方云虎,张 陈,芮晓松 (14)

融合智能匹配与信息化管理的船舶主推进设备 Marine Main Propulsion Equipments with Amalgamation of Intelligent Matching and Information Management 洪术华,李 健,汪 华 (22)

船舶设计、船舶结构和性能

"穷举法"在油船货油舱分舱优化设计中的应用
Application of Exhaustive Method into Subdivision Optimization of VLCC Cargo Tanks
顾柳婷,夏利娟,刘奕谦(27)

超大型集装箱船艏艉砰击强度直接计算方法
Direct Calculation Method for Bow Slamming Intensity of ULCS
陆明锋,杨 源(31)

弹振对超大型集装箱船疲劳强度的影响 The Influence of Springing on Fatigue Strength of Ultra Large Container Ship 王伟飞,彭亚康,李丹丹,邱伟强,张志康(37)

单轴压缩下多开口甲板板架稳定性试验及数值仿真
Stability Experiment and Numerical Simulation of Deck Grillage with
Multiple Openings under Single Axial Compression
周红昌,孔祥韶,吴卫国,袁 天 (43)

船舶动力、推进装置和辅机设备

基于模型的船用柴油机多目标优化

Model-based Multi-objective Optimization of Marine Diesel Engine
赵国锋,巩如波,宋恩哲,姚 崇,董 全(49)

汽力装置回汽制动工况下螺旋桨变工况工作过程分析 Working Process Analysis of the Variable Conditions of Propellers in Back-steam Braking Conditions for Steam-powered Device 朱 泳(55) 水润滑螺旋阶梯腔艉轴承的振动特性 Vibration Characteristics of Water Lubricated Spiral Ladder Recesses Stern Bearing 龙慎文,王优强,周亚博,魏 聪(59)

汽轮发电机组半频振动的原因分析和处理
Cause Analysis and Treatment of Whirl Frequency Vibration of
Turbine-generator Unit
郭大泉,岑黎明,余 磊,姚 叶(64)

耙吸挖泥船的动力装置选型及综合评估
Selection and Comprehensive Evaluation of Power Plants for
Suction Hopper Dredger
李 凯,胡以怀,赵 野,陈彦臻(67)

耙吸式挖泥船耙头冲水系统喷嘴布局的优化研究 Research on Nozzle Layout Optimization of the Rake Head Flushing System on Trailing Suction Hoper Dredger 刘昊阳,伍 骏,孟治金,崔 显,陈熙宇,方珍龙(76)

船舶电气、通信设备及自动控制

行星滚柱丝杠 90 kN 电动缸整机模态与轴向静刚度分析 Modal and Axial Static Stiffness Analysis of the Planetary Roller Screw 90 kN Electric Cylinder 夏 占,白韬光,袁 航 (82)

气力推进艇航迹跟踪控制建模及仿真分析
Modeling and Simulation Analysis of Trajectory Tracking Control of Airboat

詹长书,李宏刚,李洪亮,储江伟(87)

舰艇抗沉实时决策算法及监控仿真平台
Real-time Decision-making Algorithm and Supervisor Simulation
Platform for Counter-flooding of Warship
王康勃,侯 岳,浦金云(92)

基于支持向量回归机的船舶操纵运动在线辨识建模
Online Identification Modeling of Ship Manoeuvring Motion Using
Support Vector Regression
张心光(98)

海洋工程

深海载人平台密闭舱室气流组织数值模拟
Numerical Simulation of Air Distribution of Hermetic Cabin in
Deep Sea Manned Platform
周鑫涛,王 博,申高展,吴 宪 (104)

基于动态故障树的半潜式钻井平台钻井系统失效风险分析 Failure Risk Analysis of Drilling System of Semi-submersible Drilling Platform Based on Dynamic Fault Tree 罗小芳,孙 宇,白 旭,马 刚(107)

一种隧洞探测型自主式水下机器人及其图像拼接方法 A Tunnel Detection AUV and Its Image Mosaic Algorithms 陈 舟,唐松奇,石 磊,孙玉山,盛明伟(115)