

## 目 录

### 大会报告

Simulation-based study of wind–wave interactions under various sea conditions HAO Xuan-ting, LI Tian-yi, CAO Tao, SHEN Lian .....	(1)
梢涡空化起始预报及噪声特性研究	
Study on the prediction of tip vortex cavitation inception and the vortex cavitation noise 彭晓星, 徐良浩, 宋明太, 张凌新, 王本龙, 曹彦涛, 刘玉文, 洪方文, 颜开	
PENG Xiao-xing, XU Liang-hao, SONG Ming-tai, ZHANG ling-xin, WANG Ben-long CAO Yan-tao, LIU Yu-wen, HONG Fang-wen, YAN Kai.....	(11)
热对流的稳定性和数值模拟	
Stability and numerical simulation of thermal convection 孙德军, 万振华	
SUN De-jun, WAN Zhen-hua .....	(21)
Physics informed machine learning for turbulence modeling XIAO Heng.....	(22)
粗糙元的宽高比对Rayleigh–Bénard对流系统传热的影响	
The effect of rough element on heat transfer in Rayleigh–Bénard convection 董道良, 王伯福, 周全	
DONG Dao-liang, WANG Bo-fu, ZHOU Quan.....	(26)
Target to reduce friction drag by roughness elements: Doable or Not? XU Hui .....	(34)
高阶谱方法与 CFD 方法耦合的数值模拟技术	
Numerical simulation based on a coupled method with High-Order Spectral method and CFD method 庄园, 万德成	
ZHUANG Yuan,WAN De-cheng.....	(37)

### 分会场主题报告

仿飞鱼跨介质无人平台的探索研究 A preliminary study on aerial-aquatic unmanned vehicle mimicking flying fish 邓见, 王书虹, 路宽, 邵雪明	
DENG Jian, WANG Shu-hong, LU Kuan, SHAO Xue-ming .....	(50)
海洋飞沫及其相变与海–气边界层湍流输运特性的研究	

Study of sea spray and evaporation on turbulent transport in a marine atmospheric boundary layer 唐帅, 杨子轩, 潘明, 沈炼, 董宇红	(52)
TANG Shuai, YANG Zi-xuan, PAN Ming, SHEN Lian, DONG Yu-hong .....	(52)
涡旋式流体机械非稳态数值模拟及泄漏流动分析 Transient numerical simulation and leakage flow analysis of scroll fluid machinery 郭鹏程, 孙帅辉, 王贤文, 宋哲	
GUO Peng-cheng, SUN Shuai-hui, WANG Xian-wen, SONG Zhe .....	(54)
船舶螺旋桨流场及水动力数值分析 Numerical simulation on the flow fields and hydrodynamic performance of propeller 洪方文, 张志荣, 刘登成, 郑巢生	
HONG Fang-wen, ZHANG Zhi-rong, LIU Deng-cheng, ZHENG Chao-sheng .....	(61)
钝体尾迹区通气空泡流动特性研究 The characteristics of ventilated cavitating flow in the wake over a bluff body 王志英, 黄彪, 王国玉	
WANG Zhi-ying, HUANG Biao, WANG Guo-yu.....	(70)
船后非均匀进流条件下螺旋桨空化水动力性能的数值分析 Numeircal simulation of cavitating turbulent flow around a marine propeller operating with non-uniform inflow condition 龙云, 韩承灶, 季斌, 龙新平	
LONG Yun, HAN Cheng-zao, JI Bin, LONG Xin-ping .....	(76)
沟槽-超疏水复合壁面湍流边界层高效减阻机理的 TRPIV 实验研究 TRPIV experimental investigation of drag reduction mechanism by superhydrophobic-riblet surface in turbulent boundary layer 姜楠, 王鑫蔚, 范子椰	
JIANG Nan, WANG Xin-wei, FAN Zi-ye.....	(82)
双浮子波浪能发电装置的数值模拟与试验研究 A numerical simulation and an experimental investigation of a two-body wave energy converter 徐潜龙, 李晔	
XU Qian-long, LI Ye.....	(90)
基于光滑粒子动力学 (SPH) 方法的流固耦合问题模拟研究 Smoothed particle hydrodynamics (SPH) for modeling fluid-structure interactions 刘谋斌, 张智琅	
LIU Mou-bin, ZHANG Zhi-lang .....	(97)
射流泵式空化发生器流动机理及其杀菌应用研究 Research on flow mechanism and its sterilization application of jet pump cavitation reactors 王炯, 许霜杰, 左丹, 龙新平	
WANG Jiong, XU Shuang-jie, ZUO Dan, LONG Xin-ping.....	(99)
双气室振荡水柱波能装置水动力特性研究 Hydrodynamic investigation on the dual-chamber OWC wave energy converter	

宁德志, 王荣泉, Mayon Robert NING De-zhi, WANG Rong-quan, MAYON Robert .....	(101)
裂隙中双分子反应性溶质运移实验与模拟 Experimental and simulation of bimolecular reactive solution transport in fractures	
刘雅静, 刘咏, 马雷, 钱家忠 LIU Ya-jing, LIU Yong, MA Lei, QIAN Jia-zhong .....	(107)
深水气井测试水合物沉积堵塞预测与防治技术 Prediction and prevention of hydrate deposition and blockage during deepwater gas well testing	
张剑波, 张伟国, 王志远, 童仕坤, 潘少伟, 付玮琪, 孙宝江 ZHANG Jian-bo, ZHANG Wei-guo, WANG Zhi-yuan, TONG Shi-kun, PAN Shao-wei,	
FU Wei-qi, SUN Bao-jiang.....	(109)
水下爆炸无网格 SPH 模型与计算方法研究 Study on meshless SPH model and numerical method for underwater explosion problems	
孙鹏楠, 明付仁, 王平平, 孟子飞, 张阿漫 SUN Peng-nan, MING Fu-ren, WANG Ping-ping, MENG Zi-fei, ZHANG A-man .....	(120)
渤海及辽河口湿地海域风暴潮过程的数值模拟研究 Numerical Simulation of Storm surge process in Bohai Sea and Liaohe Estuary Wetland	
冀永鹏, 张洪兴, 王旖旎, 徐天平, 张明亮 JI Yong-peng, ZHANG Hong-xing, WANG Yi-ni, XU Tian-ping, ZHANG Ming-liang(127)	
喷水推进泵模型数值模拟研究 Numerical simulation of waterjet pump model	
张伟, 李宁, 张志远, 陈建平, 陈刚 ZHANG Wei, LI Ning, ZHANG Zhi-yuan, CHEN Jian-ping, CHEN Gang.....	(136)
一种高保真超长黏性数值波浪水槽 High fidelity extra-long viscosity numerical wave tank	
赵西增, 聂隆锋 ZHAO Xi-zeng, Nie Long-feng .....	(147)

## 水动力学基础

颗粒在幂律流体剪切流中运动和分布研究 The migration and distribution of particles in power-law shear flow	
胡箫, 欧阳振宇, 林建忠 HU Xiao, OUYANG Zheng-yu, LIN Jian-zhong.....	(154)

倾斜圆柱体入水流体动力特性数值仿真研究

Numerical investigation on water entry hydrodynamics of inclined cylinder

夏维学, 王聪, 魏英杰, 杨柳

XIA Wei-xue, WANG Cong, WEI Ying-jie, YANG Liu.....(161)

表面闭合优先发生情况下入水动力学建模与分析

Numerical simulation of projectile water entry in cases of surface seal cavity

王宇飞, 叶秉晟, 王一伟, 黄晨光

WANG Yu-fei, YE Bing-sheng, WANG Yi-wei, HUANG Chen-guang.....(169)

基于欧拉—拉格朗日观点的圆管内纳米流体流动换热的数值研究

Numerical study on flow and heat transfer of nanofluids in a circular tube based on euler-lagrangian

张明建, 田茂诚, 张冠敏, 范凌灏

ZHANG Ming-jian, TIAN Mao-cheng, ZHANG Guan-min, FAN Ling-hao .....(175)

分层流体中运动振荡质量源激发内波尾迹研究

Internal wave patterns generated by a translating and pulsating mass source in a stratified fluid of finite depth

王欣隆, 魏岗, 杜辉, 王少东

WANG Xin-long, WEI Gang, DU Hui, WANG Shao-dong .....(182)

超声激励下刚性边界附近双空化气泡耦合运动特性研究

On the interaction between two cavitation bubbles above a solid boundary in ultrasonic field

黄潇, 胡海豹, 杜鹏

HUANG Xiao, HU Hai-bao, DU Peng .....(189)

密度分层情况下气泡浮射流结构数值研究

Numerical study on the structure of bubble plume in stratified environments

张添豪, 牛小静

ZHANG Tian-hao, NIU Xiao-jing .....(198)

基于双层Boussinesq模型的波浪演化

Numerical simulation of wave evolution by a two-layer Boussinesq-type model

刘忠波, 房克照, 孙家文

LIU Zhong-bo, FANG Ke-zhao, SUN Jia-wen .....(206)

孤立波与水平板相互作用过程涡演化的研究

Study on the vortex evolution in the interaction between solitary waves and submerged plates

刚傲, 马玉祥, 牛旭阳, 张少华, 董国海

GANG Ao, MA Yu-xiang , NIU Xu-yang, ZHANG Shao-hua, DONG Guo-hai .....(212)

水平振动斜齿平板上的液滴运动

The motion of droplet on a lateral vibrated plate with skewed texture pattern

李海龙, 朱曦, 丁航

LI Hai-long, ZHU Xi, DING Hang .....(220)

不可混溶液滴正面碰撞的数值模拟研究

Numerical simulation of head-on collision of immiscible droplets

张建涛, 刘浩然, 丁航

ZHANG Jian-tao, LIU Hao-ran, DING Hang .....	(229)
高速物体入水过程的数值模拟研究	
Numerical study on the water entry of high-speed objects	
褚学森, 韩文骥, 张凌新	
CHU Xue-sen, HAN Wen-ji, ZHANG Ling-xin .....	(238)
含相变过程的激光诱导空化泡在固体壁面附近反弹现象的数值模拟研究	
Numerical simulation of the rebound of the laser generated bubble near the solid wall considering phase change	
尹建勇, 张永学, 张宇宁, 吕良	
YIN Jian-yong, ZHANG Yong-xue, ZHANG Yu-ning, LYN Liang .....	(244)
基于突扩明渠水流数值模拟的鱼类游泳行为研究	
Swimming behavior of fish based on numerical simulation of open channel flow with sudden-expansion	
查伟, 曾玉红, 黄明海	
ZHA Wei, ZENG Yu-hong, HUANG Ming-hai .....	(250)
双点涡生成界面内波的非线性相互作用	
Nonlinear interaction of internal waves in a double point vortices	
刘迪, 王振	
LIU Di, WANG Zhen .....	(257)
基于多流体域匹配求解方法的港口内波浪共振特性研究	
Wave evolution in an arbitrary harbour based on domain decomposition method	
石玉云, 李志富	
SHI Yu-yun, LI Zhi-fu .....	(263)
Effect of turbulence modelization in Hull-Rudder interaction simulation	
DENG G, LEROYER A., GUILMINEAU E., QUEUTEY P., VISONNEAU M., WACKERS J. (269)	
Algorithms on time-domain Green function integrated on a cylindrical surface	
LI Rui-peng, CHOI Y.M, CHEN Xiao-bo, DUAN Wen-yang .....	(275)
固体颗粒物运动对磨蚀的影响研究	
Influence of solid particle motion on material removal caused by cavitation and abrasion	
苏昆鹏, 吴建华, 夏定康, 丁志屿	
SU Kun-peng, WU Jian-hua, XIA Ding-kang, DING Zhi-yu .....	(284)
理解流动的相似性理论, 一个模型实验解读	
Understand the similarity theory of flow - interpretation of a model experiments	
周晓泉, 胡新启, Ng How Yong, 陈日东	
ZHOU Xiao-quan, HU Xin-qi, NG How Yong, CHEN Ri-dong .....	(292)
近壁面柱体涡激振动触发的临界速度	
Critical velocity for onset of vortex-induced vibration of a near-wall cylinder	
刘俊, 刘艳, 高福平	
LIU Jun, LIU Yan, GAO Fu-ping .....	(303)
厄缶常数的统计热力学涵义	
Statistical thermodynamic interpretation of the Eötvös constant	
谢明亮, 黄琳	
XIE Ming-liang, HUANG Lin .....	(312)

基于不同多相流模型的气浮接触区流动的模拟研究

Numerical simulation of contact zone of dissolved air flotation tank based on different multiphase models

伏雨, 龙云, 龙新平

FU Yu, LONG Yun, LONG Xin-ping ..... (315)

近壁空泡溃灭及能量传输机制

The collapse of a bubble near a wall and the mechanism of energy conversion

张靖, 邵雪明, 张凌新

ZHANG Jing, SHAO Xue-ming, ZHANG Ling-xin ..... (321)

不同排列方式的双柔性圆柱流激振动阻力系数特性研究

Varying drag coefficients of two flexible cylinders with tandem and staggered arrangement

徐万海, 吴昊凯, 张书海, 李宇寒

XU Wan-hai, WU Hao-kai, ZHANG Shu-hai, LI Yu-han ..... (326)

基于圆柱入水的孤立波生成新方法及其数值模拟检验

A new approach for solitary wave generation through water entry of a circular cylinder and its numerical validation

贺铭, 高喜峰, 徐万海, 任冰

HE Ming, GAO Xi-feng, XU Wan-hai, REN Bing ..... (334)

均匀流中顶张力立管涡激振动数值模拟研究

Numerical simulation of vortex-induced vibration of a top-tensioned riser in uniform flow

王恩浩, 徐万海, 高喜峰, 吴昊恺

WANG En-hao, XU Wan-hai, GAO Xi-feng, WU Hao-kai ..... (344)

湍流模型在低温流体空化数值模拟中的影响及适用性研究

The influence and applicability of turbulence model in numerical simulation of cavitation in cryogenic fluid

冯健, 张德胜, 施卫东, 高雄发, 沈熙, 金永鑫

FENG Jian, ZHANG De-sheng, SHI Wei-dong, GAO Xiong-fa, SHEN Xi, JIN Yong-xin (354)

## 水动力学试验与测试技术

瞬态高斯波包在船舶耐波性模型试验中的应用研究

Study on the application of transient Gaussian wave packets in model testing of ships

刘震, 范余明, 王海波, 陈禧

LIU Zhen, FAN She-ming, WANG Hai-bo, CHEN Xi ..... (364)

螺旋桨水动力性能预报自动化程序开发及试验验证

Development and experimental validation of automatic processes for propeller hydrodynamic performance prediction

李亮, 刘登成, 郑巢生, 周斌

LI Liang, LIU Deng-cheng, ZHENG Chao-sheng, ZHOU Bin ..... (375)

自由自航模全浪向波浪增阻试验研究

Study on the wave added resistance test in all wave directions based on free running model

封培元, 王大建, 沈兴荣, 范余明, 王金宝

FENG Pei-yuan, WANG Da-jian, SHEN Xing-rong, FAN She-ming, WANG Jin-bao ..... (383)

线性复合激励下弹性侧壁液舱内低液深液体晃荡冲击荷载特性试验研究

Experimental study on impact load characteristic of sloshing in elastic bulkhead tank with low and partial filling under linear rolling coupled pitching

甄长文, 吴文锋, 张建伟, 涂娇阳, 张家阔, 高加林

ZHEN Chang-wen, WU Wen-feng, ZHANG Jian-wei, TU Jiao-yang, ZHANG Jia-kuo, GAO Jia-lin ..... (393)

某三艉豪华旅游船线型开发与模型试验验证研究

Lines development and model tests verification for a three-skeg luxury cruiser

冯松波, 魏锦芳, 赵强

FENG Song-bo, WEI Jin-fang, ZHAO Qiang .....(399)

石蜡蓄放热过程中响应特征的实验研究

Experimental study on response characteristics in the process of phase change of paraffin

李亚鹏, 冷学礼, 田茂诚, 王效嘉, 周慧琳

LI Ya-peng, LENG Xue-li, TIAN Mao-cheng, WANG Xiao-jia, ZHOU Hui-lin .....(407)

非对称头型对航行器入水空泡及弹道特性影响的实验研究

Experimental study on the influence of aircraft with asymmetric head shape on the air bubble and ballistic characteristics

华扬, 施瑶, 潘光, 黄桥高

HUA Yang, SHI Yao, PAN Guang, HUANG Qiao-gao .....(413)

不同横摇幅值下的强迫横摇水动力测试及参数分析研究

The study of forced roll tests and roll parameters regarding to roll angles

刘小健, 陈禧, 聂军, 王志南, 范余明

LIU Xiao-jian, CHEN Xi, NIE Jun, WANG Zhi-nan, FAN She-ming .....(421)

内倾船波浪中复原力试验和计算研究

Experimental and numerical study on restoring force of a tumblehome hull in waves

王田华, 顾民, 曾柯, 鲁江, 祁江涛

WANG Tian-hua, GU Min, ZENG Ke , LU Jiang, QI Jiang-tao.....(428)

海上风电导管架塔架转接段波浪冲击试验及冲击荷载概率模型

Wave impact experiment and probability model of impact loads on transition piece (Deck) of offshore wind turbines (OWT) supported by Jackets

沈忠辉, 魏凯, 邓鹏

SHEN Zhong-hui, WEI Kai, DENG Peng .....(434)

双层刚性植被水流水动力学特性试验研究

Experimental study on the hydrodynamic characteristics in open channel flow with double-layer rigid vegetation

喻晋芳, 张潇然, 陈甜甜, 张颖, 赵明登

YU Jin-fang, ZHANG Xiao-ran, CHEN Tian-tian, ZHANG Ying, ZHAO Ming-deng.....(441)

花岗岩网络裂隙水流及热量分配实验研究

Study on flow and heat distribution in granite fracture network

高峰钧, 钱家忠, 王沐, 王德建, 马雷

GAO Feng-jun, QIAN Jia-zhong, WANG Mu, WANG De-jian, MA Lei .....(447)

绕前缘粗糙水翼非定常流动实验研究

Experiment study on unsteady cavitating flow around hydrofoil with the leading edge roughness

陈倩, 吴钦, 黄彪, 张汉哲, 王国玉, 刘韵晴

CHEN Qian, WU Qin, HUANG Biao, ZHANG Han-zhe, WANG Guo-yu, LIU Yun-qing (454)

不同材料水翼水动力特性实验研究

Experiment investigate on hydrodynamic characteristics of hydrofoils with different materials

刘韵晴, 吴钦, 陈倩, 黄彪, 张汉哲, 王国玉

LIU Yun-qing, WU Qin, CHEN Qian, HUANG Biao, ZHANG Han-zhe, WANG Guo-yu (463)

梯形河道护岸糙率及水流紊乱特性实验研究

Experimental study on roughness coefficient and turbulence structure of open channel flow with

trapezoidal revetment	
李仟, 曾玉红, 晏成明	
LI Qian, ZENG Yu-hong, YAN Cheng-ming .....	(469)
对岸丁坝不同位置对固定距离双丁坝水流特性的影响试验	
Experiment on the influence of different positions of the opposite shore spur dike on the flow characteristics of fixed distance double spur dike	
董伟, 顾杰, 戚福清	
DONG Wei, GU Jie, QI Fu-qing.....	(476)
阶梯式丁坝群水流结构的试验研究	
Experimental study on water flow structure around stepped spur dikes	
戚福清, 顾杰, 董伟	
QI Fu-qing, GU Jie, DONG Wei .....	(486)
低温气液分离器水击振动实验研究	
Experimental study on water hammer in cryogenic gas-liquid separator	
刘海飞, 刘照智, 张雷杰, 黄福友	
LIU Hai-fei, LIU Zhao-zhi, ZHANG Lei-jie, HUANG Fu-you.....	(496)
基于肥皂膜直立水洞的典型钝体绕流实验研究	
An experimental study of flow past typical bluff bodies in vertical soap film tunnel	
潘松, 王怀成, 李欣, 田新亮	
PAN Song, WANG Huai-cheng, LI Xin, TIAN Xin-liang .....	(503)
IMO 二代完整稳定性模型试验技术综述	
An overview on model test technology of the second generation intact stability criteria in IMO	
师超, 兰波, 韩阳, 刘长德	
SHI Chao, LAN Bo, HAN Yang, LIU Chang-de .....	(509)
高航速 KCS 船舶破浪数值模拟和实验研究	
Numerical and experimental study of the bow wave breaking of high-speed KCS model	
王建华, 万德成	
WANG Jian-hua, WAN De-cheng.....	(514)
超临界 CO <sub>2</sub> 在并联通道内流量偏差规律试验研究	
Experimental investigation of flow distribution of supercritical carbon dioxide in parallel channels	
白晨光, 颜建国, 郭鹏程	
BAI Chen-guang, YAN Jian-guo, GUO Peng-cheng.....	(520)
混流泵启动过程瞬态空化特性的数值模拟和实验研究	
Numerical simulation and experimental study on transient cavitation characteristics of mixed-flow pump startup process	
张德胜, 顾琦, 陈宗贺, 施卫东	
ZHANG De-sheng , GU QI , CHEN Zong-he , SHI Wei-dong.....	(526)

## 计算流体力学

基于自适应网格的三维数值波浪水池	
3D numerical wave tank based on adaptive mesh refinement grid	
张运兴, 段文洋, 廖康平, 马山	
ZHANG Yun-xing, DUAN Wen-yang, LIAO Kang-ping, MA Shan .....	(539)

基于 harmonic polynomial cell(HPC)方法的聚焦波非线性模拟 Nonlinear simulation of focused waves using harmonic polynomial cell (HPC) method	
孙小童, 张崇伟, 宁德志 SUN Xiao-tong, ZHANG Chong-wei, NING De-zhi .....	(545)
基于有限元法的波-流与多柱结构物二阶非线性相互作用数值模拟 Time domain analysis of second-order wave interactions with multiple cylinders in a steady current	
杨毅锋, 吕恒, 王赤忠 YANG Yi-feng, LYU Heng, WANG Chi-zhong.....	(551)
基于 MEL 方法的水下滑坡数值分析 Numerical analysis of subaqueous landslides based on MEL method	
杨思文, 汪淳 YANG Si-wen, WANG Chun .....	(557)
飞机在波浪中着水的砰击载荷数值模拟 Numerical simulation of the impact load of aircraft ditching in waves	
宋志杰, 杨晓彬, 许国冬 SONG Zhi-jie, YANG Xiao-bin, XU Guo-dong .....	(565)
分层流体中圆球激发尾流效应内波数值模拟 Numerical simulation of the Wake-generated internal waves by a moving sphere in stratified fluids	
周根水, 洪方文, 姚志崇 ZHOU Gen-shui, HONG Fang-wen, YAO Zhi-chong .....	(573)
基于位移法浅水波理论波浪破碎数值模拟 Numerical simulation of wave breaking based on displacement method Shallow Water Wave Theory	
黄东威, 吴锋, 钟万勰, 张洪武 HUANG Dong-wei, WU Feng , ZHONG Wan-xie, ZHANG Hong-wu .....	(581)
基于 SST-DES 方法的离心泵叶轮内流场涡结构特性研究 Study on flow field vortex characteristics of centrifugal pump impeller Based on SST-DES Method	
袁志懿, 张永学 YUAN Zhi-yi, ZHANG Yong-xue .....	(588)
基于 INSEAN E779A 螺旋桨的水动力及流动噪声数值仿真预报 Numerical simulation and prediction of hydrodynamics and flow noise based on INSEAN E779A propeller	
贾力平, 隋俊友 JIA Li-ping, SUI Jun-you.....	(594)
多海况下 Barge 运动响应的数值模拟 Numerical simulation of Barge motion response under different wave conditions	
荆茺霖, 何广华, 赵传凯, 谢滨阳 JING Peng-lin, HE Guang-hua, ZHAO Chuan-kai, XIE bin-yang.....	(603)
滑坡涌浪问题的 Kurganov-ODE 耦合算法 Coupled Kurganov-ODE solver for landslide induced wave problems	
王晓亮, 刘青泉, 安翼, 程鹏达 WANG Xiao-liang, LIU Qing-quan, AN Yi, CHENG Peng-da .....	(609)

基于多目标遗传算法的双向贯流式水轮机正反工况联合优化设计

Joint optimization design of bidirectional tubular turbine positive and negative condition based on multi-objective genetic algorithm

郑小波，魏雅静，郭鹏程，王兆波

ZHENG Xiao-bo, WEI Ya-jing, GUO Peng-cheng, WANG Zhao-bo.....(615)

考虑表面张力的两相流动自适应网格直接数值模拟

Direct numerical simulation for two-phase flow considering surface tension by using adaptive mesh refinement

刘成，万德成

LIU Cheng, WAN De-cheng .....(621)

直立圆柱波浪爬升 HOS-CFD 数值模拟

Numerical simulation of surface elevation around a circular column based on HOS-CFD

韩勃，万德成

HAN Bo, WAN De-cheng .....(633)

基于自适应网格技术的 Clark-Y 水翼空泡数值模拟

Numerical simulation of cavitation around Clark-Y hydrofoil based on adaptive mesh refinement

梁尚，李勇，万德成

LIANG Shang, LI Yong, WAN De-cheng.....(645)

基于高阶谱方法的不规则波数值模拟的参数研究

Numerical simulation of irregular waves based on High-Order Spectral method

杨晓彤，庄园，万德成

YANG Xiao-tong, ZHUANG Yuan, WAN De-cheng .....(656)

分隔板对细长柔性立管涡激振动抑制的数值模拟

Numerical simulation of vortex-induced vibration suppression of a flexible riser with attached splitter plate

李敏，邓迪，万德成

LI Min, DENG Di, WAN De-cheng.....(664)

基于重叠网格方法模拟物体入水

Numerical simulation of water entry of cylinder and box square column based on overset grid method

谢路毅，张晓嵩，万德成

XIE Lu-yi, ZHANG Xiao-song, WAN De-cheng .....(676)

船舶波浪中复原力臂时域预报方法研究

Study on the time domain prediction method for roll restoring arm variation in waves

卜淑霞，顾民，鲁江，王田华

BU Shu-xia, GU Min, LU Jiang, WANG Tian-hua .....(685)

基于三维水弹性理论的 COMPASS-TAFTS 软件开发及应用

The development and application COMPASS-TAFTS based on three-dimensional hydroelasticity theory

倪歆韵，王墨伟，田超

NI Xin-yun, WANG Mo-wei, TIAN Chao.....(696)

时间权重思想在连续腔体流动中的研究

Time scale method in CFD residence time research in multi-chamber contactors

周晓泉, NG How Yong, 陈日东

ZHOU Xiao-quan, NG How Yong, CHEN Ri-dong .....(704)

横向水流作用下圆孔向上通气气泡流场数值模拟

Numerical Simulation of upwards ventilation flow field from a circular orifice with liquid cross flow

方明杰, 李杰

FANG Ming-ming, LI Jie .....(715)

Parallel, hybrid KD tree and geometry level set method for simulating ship hydrodynamics using unstructured dynamic overset grid

HUANG Jun-tao .....(722)

基于 SFEM-DFPM 方法的流固耦合问题模拟技术

An SFEM-DFPM coupling approach for modeling fluid-structure interactions

张智琅, 龙厅, 刘谋斌

ZHANG Zhi-lang, LONG Ting, LIU Mou-bin .....(733)

## 工业流体力学

竖壁外含不凝气蒸汽凝结过程的数值模拟

Numerical study of film condensation process of steam with non-condensation gas on vertical plate

王效嘉, 田茂诚, 魏民, 衣秋杰, 李亚鹏, 贾文华

WANG Xiao-jia, TIAN Mao-cheng, WEI Min, YI Qiu-jie, LI Ya-peng, JIA Wen-hua .....(742)

旋流场与破乳剂共同作用下油水分离特性

Oil-water separation characteristics under combined action of swirling flow field and demulsifier

顾成曦, 侯林彤, 刘硕, 张健, 许晶禹

GU Cheng-xi, HOU Lin-tong, LIU Shuo<sup>1,2</sup>, ZHANG Jian, XU Jing-yu .....(748)

U型振荡水柱式波能装置数值模拟研究

Numerical investigation of a U-type oscillating water column wave energy device

郭宝明, 宁德志

GUO Bao-ming, NING De-zhi .....(755)

不同攻角条件下绕平头回转体初生空化的形成及发展特性研究

Study of inception cavitating flows around an axisymmetric blunt body with different angles of attack

杨龙, 胡常莉, 罗倩

YANG Long, HU Chang-li, LUO Qian .....(761)

含不凝气蒸汽气泡凝结过程的数值模拟

Numerical study on condensing process of the air-steam mixture bubble

王效嘉, 田茂诚, 唐亮亮, 张冠敏

WANG Xiao-jia, TIAN Mao-cheng, TANG Liang-liang, ZHANG Guan-min .....(769)

不同截面形状的矩形微通道流动传热特性及综合性能研究

Research on flow heat transfer characteristics and comprehensive properties of micro-channels with

different cross-section shapes

范凌灏, 田茂诚, 张冠敏, 张明建

FAN Ling-hao, TIAN Mao-cheng, ZHANG Guan-min, ZHANG Ming-jian ..... (775)

叶环电驱浆导管形状对水动力性能的影响研究

Influence of the ducted shape of the Rim-Electric Driven Propeller on the hydrodynamic performance

赵鑫, 周军伟, 余平

ZHAO Xin, ZHOU Jun-wei, YU Ping ..... (781)

水轮机式液力透平蜗壳改型数值分析

Numerical analysis of the volute modification in a hydraulic turbine

庞烨, 孙帅辉, 朱景源, 郭鹏程

PANG Ye, SUN Shuai-hui, ZHU Jing-yuan, GUO Peng-cheng ..... (787)

三级离心混输泵级间相互作用对首级性能的影响研究

Numerical study on gas-liquid two-phase flow in centrifugal mixing pump

郑小波, 张开辉, 郭鹏程, 孙帅辉, 汪昭鹏

ZHENG Xiao-bo, ZHANG Kai-hui, GUO Peng-cheng, SUN Shuai-hui, WANG Zhao-peng (793)

混流式水轮机部分负荷工况典型涡流特征研究

Vortex flow characteristics investigation into Francis turbine operating at part load conditions

孙龙刚, 郭鹏程

SUN Long-gang, GUO Peng-cheng ..... (799)

导管长度对泵喷推进器水动力性能的影响研究

Research about influence of duct length on hydrodynamic performance of pump-jet propulsion

孙瑜, 苏玉民

SUN Yu, SU Yu-min ..... (807)

动态入流下带控制系统风力机的气动特性模拟

Aerodynamic simulation of wind turbine under dynamic inflow condition with control system

魏德志, 黄扬, 万德成

WEI De-zhi, HUANG Yang, WAN De-cheng ..... (816)

考虑注采强度的黏弹性聚合物驱压力恢复分析

Build-up analysis on pressure of viscoelastic polymer flooding considering injection production intensity

袁鸿飞, 尹洪军, 徐国涵, 刘肯鑫, 邢翠巧

YUAN Hong-fei, YIN Hong-jun, XU Guo-han, LIU Ke-xin, XING Cui-qiao. ..... (831)

基于水质特征因子和物理优化模型的污水管网地下水入渗解析与定位研究

Pin-pointing groundwater infiltration into sewer network using chemical marker in conjunction with physical based optimization model

赵志超, 尹海龙, 郭龙天

ZHAO Zhi-chao, YIN Hai-long, GUO Long-tian ..... (839)

油滴在柱形旋流器中聚并性能研究

Study on coalescence performance of oil droplets in cylindrical cyclone

史仕荧, 郑之初, 梁楚楚

SHI Shi-ying, ZHENG Zhi-chu, LIANG Chu-chu ..... (845)

超临界二氧化碳钻井时井底压力研究

Bottom hole pressure analysis of supercritical carbon dioxide drilling

丁璐, 倪红坚, 王瑞和, 杜玉昆, 王勇

DING Lu, NI Hong-jian, WANG Rui-he, DU Yu-kun, WANG Yong ..... (855)

旋转冲击钻井破岩理论与技术研究

Present situation and prospect of rotary percussion drilling technology

王勇, 倪红坚, 王瑞和, 刘书斌, 张恒, 王鹏

WANG Yong, NI Hong-jian, WANG Rui-he, LIU Shu-bin, ZHANG Heng ,WANG Peng (862)

原油在微米管束中的非线性流动特征分析

Analysis of nonlinear flow characteristics of crude oil in micron tube bundles

高豪泽, 许叶青, 宋付权

GAO Hao-ze, XU Ye-qing, SONG Fu-quan .....(869)

深水气井关井期间管柱内水合物生成沉积定量预测

Quantitative prediction of hydrate formation and deposition in shut-in tubing for deepwater gas wells

童仕坤, 王志远, 张伟国, 张剑波, 潘少伟, 付玮琪, 孙宝江

TONG Shi-kun, WANG Zhi-yuan, ZHANG Wei-guo,ZHANG Jian-bo, PAN Shao-wei,

FU Wei-qi, SUN Bao-jiang .....(877)

## 船舶与海洋工程水动力学

参数化定义螺旋桨侧斜及其优化设计研究

Parameterization and optimization of propeller skew

周斌, 李亮, 薛强

ZHOU Bin, LI Liang, XUE Qiang.....(891)

波浪与多潜体相互作用的非线性数值模拟

Nonlinear numerical simulation of interaction between waves and multi-submersibles

张时斌, 王博, 张信翼, 宁德志

ZHANG Shi-bin, WANG Bo, ZHANG Xin-yi, NING De-zhi ..... (899)

随机海浪中船舶波浪载荷与砰击载荷的时域水弹性响应分析

Time-domain hydroelastic analysis of ship wave loads and slamming loads in random seaways

焦甲龙, 陈超核, 任慧龙, 李辉

JIAO Jia-long, CHEN Chao-he, REN Hui-long, LI Hui..... (905)

限制水域内船舶阻力和兴波特性研究

Investigations on the advancing resistance and ship-generated waves of the confinement effect during the inland waterway transport

杜鹏, 胡海豹, 黄潇

DU Peng, HU Hai-bao, HUANG Xiao .....(912)

船舶混合体网格开发及黏性绕流数值模拟

Development of ship hybrid volume mesh and numerical simulation of viscous flow around ships

张筠喆, 李廷秋, 马麟

ZHANG Yun-zhe, LI Ting-qiu, MA Lin .....(920)

基于 RANS 方程的高速滑行艇阻力计算

The resistance calculation of the high-speed planing based on RANS equations 王慧, 朱仁传, 杨云涛 WANG Hui, ZHU Ren-chuan, YANG Yun-tao.....	(926)
基于高阶谱方法的聚焦波下船舶的运动	
Numerical simulations of ship motion in focusing wave based on HOS method 肖倩, 朱仁传 XIAO Qian, ZHU Ren-chuan.....	(932)
带水平开孔板浮箱式防波堤水动力特性的理论研究	
Wave diffraction through a floating box breakwater with horizontal perforated plates 何舒玥, 刘勇 HE Shu-yue, LIU Yong.....	(938)
近岸反射对波浪能装置水动力特性影响的解析研究	
Influence of costal reflection on the hydrodynamic characteristics of the wave energy converter device: an analytical study 张洋, 李明伟, 赵玄烈, 耿敬 ZHANG Yang, LI Ming-wei, ZHAO Xuan-lie, GENG Jing .....	(949)
三模块半潜平台水动力分析及系泊设计	
Hydrodynamic analysis of three connected semi-submersible modules and their mooring design 俞俊, 程小明, 路振, 张凯, 倪歆韵 YU Jun, CHENG Xiao-ming, LU Zhen, ZHANG Kai, NI Xin-yun .....	(955)
水平细长椭球潜体迎面遭遇内孤立波时的运动响应	
Motion response of a horizontal slender submerged ellipsoid induced by head-on interfacial solitary waves 刘孟奇, 魏岗, 孙志伟, 王若愚, 勾莹 LIU Meng-qi, WEI Gang, SUI Zhi-wei, WANG Ruo-yu, GOU Ying .....	(963)
船舶装货过程中加注管背压波动耦合效应	
Coupling effect of back pressure fluctuation of oil filling pipe during tanker loading operation 袁世杰, 卢金树, 邓佳佳, 吴文锋, 张建伟 YUAN Shi-jie, LU Jin-shu, DENG Jia-jia, WU Wen-feng, ZHANG Jian-wei .....	(971)
基于 RANS 方法的球鼻艏型式对肥大型船舶绕流场影响分析	
Rans study on the flow around a high block coefficient ship with different shapes of bulbous BOWS 张艳云, 阚瑾瑜, 刘佳伦 ZHANG Yan-yun, KAN Jin-yu, LIU Jia-lun.....	(977)
基于 RANS 方法的片体间距对双体船静水阻力性能影响研究	
Investigation into the effect of separation to length ratios on resistance performance of catamarans in calm water based on RANS methods 卢苏立, 程细得, 刘佳伦, 王绪明 LU Su-li, CHENG Xi-de, LIU Jia-lun, WANG Xu-ming .....	(983)
压浪板与阻流板对 M 型滑行艇迎浪运动的影响	
The influence of trimming flap and spoiler on the motion of the M-type planning craft in head waves 曹亚龙, 易文海, 高志亮	

CAO Ya-long, YI Wen-hai, GAO Zhi-liang .....	(989)
自适应攻角摆翼推进的水动力性能分析	
Hydrodynamic performance analysis of adaptive angle of attack swing propulsion	
潘小云, 周军伟, 李明阳, 张国政	
PAN Xiao-yun, ZHOU Jun-wei, LI Ming-yang, ZHANG Guo-zheng.....	(1006)
浮式风机平台与多波浪能转换装置混合系统的设计与水动力性能分析	
Optimal design and performance analysis of a hybrid system of floating wind platform and multiple wave energy converters	
胡俭俭, 周斌珍, 刘品, 解光慈, 孙科, 耿敬	
HU Jian-jian, ZHOU Bin-zhen, LIU Pin, XIE Guang-ci, SUN Ke, GENG Jing.....	(1012)
振荡浮子式波能发电装置的水动力响应分析	
Hydrodynamic response analysis of an oscillating float type wave energy converter	
栾政晓, 何广华, 刘朝纲, 黄欣	
LUAN Zheng-xiao, HE Guang-hua, LIU Chao-gang, HUANG Xin .....	(1018)
圆柱附加刚性分离盘涡激振动数值模拟	
Numerical Simulation of vibration response for the circular cylinder with attached splitter plates	
陈雯煜, 王嘉松	
CHEN Wen-yu, WANG Jia-song .....	(1024)
振荡翼潮流能发电装置的水动力性能研究	
Hydrodynamic performance of a current energy generator based on Oscillating Wings	
王舰, 何广华, 莫惟杰	
WANG Jian, HE Guang-hua, MO Wei-jie .....	(1030)
流道形式对舰艇用消声风洞流场和声学特性的影响研究	
Study on the influence of flow channel form on the flow field and acoustic characteristics of the anechoic wind tunnel for vessels	
金哲民, 方斌, 李瀚钦	
JIN Zhe-min, FANG Bin, LI Han-qin.....	(1036)
涵洞式直立堤涵管内振荡流特性研究	
Study on the characteristics of oscillating flow in the culvert pipe on a vertical breakwater	
殷铭简, 赵西增	
YIN Ming-jian, ZHAO Xi-zeng.....	(1044)
NREL5MW 风机的气动性能和流场特征研究	
A study of the aerodynamic performance and flow-field characteristics of NREL 5MW wind turbine	
孔荷林, 范菊, 王立志, 朱仁传	
KONG He-lin, FAN Ju, WANG Li-zhi, ZHU Ren-chuan .....	(1050)
深远海渔业养殖平台水动力特性时域分析	
Analysis of hydrodynamic properties of the offshore aquaculture fish platform in time domain	
苗玉基, 田超, 周怡心, 俞俊	
MIAO Yu-ji, TIAN Chao, ZHOU Yi-xin, YU Jun .....	(1060)
上浪冲洗对浮冰摇荡运动影响特性研究	
The influence of overwash on the motion response of ice floe	

张曦, 朱仁庆, 李志富 ZHANG Xi, ZHU Ren-qing, LI Zhi-fu.....	(1067)
海冰对水中悬浮隧道非线性水动力载荷影响特性研究 The effect of ice sheet on hydrodynamic properties of a submerged floating tunnel	
李志富, 赵桥生, 邵飞 LI Zhi-Fu, ZHAO Qiao-sheng, SHAO Fei .....	(1073)
一种新型海上单柱浮式风电平台基础模型 A new type of marine single-pillar floating wind power platform basic model	
陆尚平, 詹杰民, 朱立峰, 范庆 LU Shang-ping, ZHAN Jie-min, ZHU Li-feng, FAN Qing .....	(1079)
载人潜水器空间运动仿真计算研究 Research on space motion simulation of manned submersible	
赵桥生, 何春荣, 李德军, 彭超 ZHAO Qiao-sheng, HE Chun-rong, LI De-jun, PENG Chao .....	(1088)
某超大型集装箱船斜航数值模拟 Numerical simulation of oblique movement of an oversize container ship	
吴琼, 熊小青, 李兆辉 WU Qiong, XIONG Xiao-qing, LI Zhao-hui .....	(1095)
泵喷推进器水动力性能的数值模拟及不确定度分析 Numerical simulation and uncertainty analysis of hydrodynamic performance of pump-jet propulsion	
孙明宇, 董小倩, 杨晨俊 SUN Ming-yu, DONG Xiao-qian, YANG Chen-jun .....	(1103)
块状冰对螺旋桨水动力性能的影响 Effects of block ice on hydrodynamic performance of propeller	
杨建, 董小倩, 杨晨俊 YANG Jian, DONG Xiao-qian, YANG Chen-jun .....	(1111)
仿生导管桨水动力性能研究 Study on hydrodynamic performance of bionic ducted propeller	
张正骞, 李巍, 杨晨俊 ZHANG Zheng-qian, LI Wei, YANG Chen-jun .....	(1119)
船型参数对船舶骑浪/横甩薄弱性衡准影响分析 Influence of ship form parameters on the vulnerability criteria for surf-riding and broaching	
储纪龙, 顾民, 鲁江, 王田华 CHU Ji-long, GU Min, LU Jiang, WANG Tian-hua.....	(1128)
E7779A 螺旋桨斜流工况下的空泡数值模拟 Simulation of propeller cavitation in oblique flow based on OpenFOAM	
赵旻晟, 万德成 ZHAO Min-sheng, WAN De-cheng.....	(1137)
基于 HOS 方法的 KCS 运动响应与波浪增阻数值研究 Numerical study of added resistance and motions of KCS based on HOS Method	
郭浩, 万德成	

GUO Hao, WAN De-cheng .....	(1146)
对转舵桨的水动力性能研究	
Investigation on hydrodynamic performance of contra-rotating rudder propeller	
王志勇, 范余明, 孙群, 吴琼	
WANG Zhi-yong, FAN She-ming, SUN Qun, WU Qiong.....	(1162)
Research on the slamming effect of offshore platforms under extreme waves conditions	
FU Li-ning, FENG Guo-qing, SUN Shi-li, LIU Peng-cheng, DU Shi-xin .....	(1170)
实桨自航模拟及线型优化效果预报	
Ship self-propulsion simulation with actual propeller and hull lines optimization	
陈骞, 查晶晶, 李嘉宁	
CHEN Qian, ZHA Jing-jing, LI Jia-ning .....	(1184)
冰水混合环境下冰区船冰水动力特性研究	
Study on interaction forces of ships-ice-water	
赵桥生, 国威, 王习建, 韩阳	
ZHAO Qiao-sheng, GUO Wei, WANG Xi-jian, HAN Yang.....	(1193)
冰区船舶操纵性研究进展综述	
Review of ship maneuverability in ice	
韩阳, 师超, 赵桥生, 王迎晖	
HAN Yang, SHI Chao, ZHAO Qiao-sheng, WANG Ying-hui .....	(1200)

## 海岸环境与水利水电和河流动力学

掺气减蚀的小气泡保护作用及研究展望	
The protect effect of micro bubbles in entrain air to reduce cavitation damage and its research prospects	
陈先朴, 邵东超	
CHEN Xian-pu, SHAO Dong-chao .....	(1210)
完全非线性波浪与结构物相互作用模型—基于 HOSNWT 理论模拟入射波浪	
Fully nonlinear wave-structure interaction model—Simulation of incident waves based on HOSNWT theory	
刘佳旺, 滕斌	
LIU Jia-wang, TENG Bin.....	(1218)
引航道与泄洪河道交汇区流速及通航条件研究	
Study on flow velocity and navigation conditions at the intersection area of approach channel and flood discharge channel	
杨升耀, 秦杰, 杜志水, 洪坤辉	
YANG Sheng-yao, QIN Jie, DU Zhi-shui, HONG Kun-hui.....	(1228)
弱流下四柱结构波浪爬高的求解	
Solution of wave run-up on a four-cylinder structure with small forward speed	
王硕, 滕斌	
WANG Shuo, TENG Bin .....	(1234)
凸起型阶梯对阶梯溢流坝面压强特性影响	
Influence of raised ladder on pressure characteristics of stepped spillway dam	

陈卫星, 董丽艳, 郭莹莹, 杨具瑞	
CHEN Wei-xing, DONG Li-yan, GUO Ying-ying, YANG Ju-rui .....	(1244)
动水条件下起动底泥中污染物释放数值模拟	
Numerical simulation of pollutant release during sediment starting in dynamic water environment	
程鹏达, 朱心广, 冯春, 王晓亮	
CHENG Peng-da, ZHU Xin-guang, FENG Chun, WANG Xiao-liang.....	(1252)
白垢枢纽新建二线船闸通航条件研究	
Study on navigation conditions of newly built second-line ship locks in the Baigou hub	
洪坤辉, 吴腾, 刘磊	
HONG Kun-hui, WU Teng, LIU Lei.....	(1259)
基于 CFD 的船舶回转运动水动力数值预报	
CFD-based numerical prediction of ship hydrodynamics during turning motion	
高行, 邹早建, 袁帅	
GAO Hang, ZOU Zao-jian, YUAN Shuai.....	(1267)
土石坝逐渐溃决溃口流量计算方法研究	
Study on calculation method of discharge at gradual breach of earth-rock dam	
陈思翰, 田忠	
CHEN Si-han, TIAN Zhong.....	(1275)
海床运动兴波的数值模拟	
A numerical simulation of waves generated by bottom movement	
房克照, 范浩煦, 刘忠波, 孙家文	
FANG Ke-zhao , FAN Hao-xun , LIU Zhong-bo , SUN Jia-wen.....	(1281)
望谟河流域河网分级阈值对径流推求影响	
Effect of the threshold of catchmentarea on runoff analysis in Wangmo River basin	
孙桐, 杨胜梅, 任洪玉, 王协康	
SUN Tong, YANG Sheng-mei, REN Hong-yu, WANG Xie-kang.....	(1291)
官山河两河口河段暴雨洪水顶托效应研究	
Numerical simulation on backwater effect of rainstorm flood at confluence zone in Guanshan River	
王以逵, 訾丽, 王协康	
WANG Yi-kui, ZI Li, WANG Xie-kang.....	(1298)
岔巴沟三川口交汇河段洪水淹没致灾数值模拟	
Numerical simulation of flood inundation at confluence zone in Sanchuankou of Chabagou	
许泽星, 任洪玉, 丁文峰, 王协康	
XU Ze-xing, REN Hong-yu, DING Wen-feng, WANG Xie-kang.....	(1304)
暴雨变化下马贵河小流域洪水特性研究	
Research on flood characteristics with changed rainstorm in Magui river watershed	
周湘航, 欧国强, 郭晓军, 潘华利, 王协康	
ZHOU Xiang-hang, OU Guo-qiang, GUO Xiao-jun, PAN Hua-li, WANG Xie-kang .....	(1310)
苏禄海海啸风险的数值模拟研究	
Numerical simulation of tsunami risk in Sulu Sea	
赵广生, 牛小静	

ZHAO Guang-sheng, NIU Xiao-jing.....	(1316)
涵洞式直立堤的消波性能研究	
Wave dissipation property of the culvert type vertical breakwater	
吕超凡, 刘冲, 赵西增	
LYU Chao-fan, LIU Chong, ZHAO Xi-zeng.....	(1323)
水平淹没射流流态变化规律的研究	
Variation of flow pattern of horizontal submerged jet	
冯彦彰, 郝亚丰, 袁浩	
FENG Yan-zhang, HAO Ya-feng, YUAN Hao .....	(1329)
中高速水下航行体流动涡控机理研究	
Numerical study on vortex control mechanism of high-speed underwater vehicle	
马国祯, 黄伟希	
MA Guo-Zhen, HUANG Wei-Xi.....	(1338)
海啸波对近岸结构物冲击作用数值模拟	
Numerical modeling of tsunami-like wave impact on nearshore structures	
魏学森, 戴孟祎, 周岱, 韩兆龙, 包艳, 赵永生	
WEI Xue-sen, DAIMeng-yi, ZHOU Dai, HAN Zhao-long, BAO Yan, ZHAOYong-sheng(1345)	
倒π型防波堤构型垂荡水动力系数黏流分析研究	
Heaving hydrodynamic coefficient analysis of an inversed- $\pi$ type breakwater based on CFD simulation	
张益凡, 马山, 段文洋, 陈小波	
ZHANG Yi-fan, MA Shan, DUAN Wen-yang, CHEN Xiao-bo .....	(1352)
基于 NSGA2 算法与模型树的球鼻艏多航速阻力性能优化	
Multi-speed resistance performance optimization of bulbous bow based on NSGA2 algorithm and model tree	
张乔宇, 金建海, 陈京普	
ZhANG Qiao-yu, JIN Jian-hai, CHEN Jing-pu .....	(1358)
植被影响下滞水区水流流场和平均滞留时间研究	
Study on turbulent flow field and mean retention time in a dead-water zone with or without vegetation	
向珂, 杨中华, 刘建华, 方浩泽	
XIANG Ke, YANG Zhong-hua, LIU Jian-hua, FANG Hao-ze .....	(1364)
基于 CFD 的槽道滑行艇阻力性能研究	
Research on the resistance performance of the channel planningcrafte based on CFD	
邢晓鹏, 邵文勃, 马山, 邵飞	
XING Xiao-peng, SHAO Wen-bo, MA Shan, SHAO Fei .....	(1371)
粗糙底床泥-水界面有效扩散系数的影响因素及其标度关系	
Influencing parameters and scaling relationship of effective diffusion coefficient at sediment-water interface for rough bed	
陈春燕, 赵亮, 王道增, 樊靖郁	
CHEN Chun-yan, ZHAO Liang, WANG Dao-zeng, FAN Jing-yu.....	(1377)

基于改进遗传算法的船舶阻力优化

Optimization of hull resistance based on improved genetic algorithm

查乐, 朱仁传, 周华伟

ZHA Le, ZHU Ren-chuan, ZHOU Hua-wei.....(1383)

S型铺管船体-管线耦合运动数值模拟

Numerical simulation of dynamic coupling between vessel and pipeline in S-lay installation operations

黄山, 朱仁传, 顾晓帆

HUANG Shan, ZHU Ren-chuan, GU Xiao-fan .....(1390)

基于CFD方法的全垫升气垫船兴波波形及阻力计算研究

Research on waveform and wave-making resistance calculation of air cushion vehicles based on CFD method

陈熙, 朱仁传, 顾孟潇

CHEN Xi, ZHU Ren-chuan, GU Meng-xiao .....(1396)

绕辐射水波格林函数的机器学习与预报

Machine learning for radiation-diffraction Green's function and prediction

朱鹏远, 朱仁传, 黄山

ZHU Peng-yuan, ZHU Ren-chuan, HUANG Shan .....(1404)

基于OpenFOAM的低长深比单丁坝绕流数值模拟

Numerical simulation of flow around a single spur dike with low aspect ratio based on OpenFOAM

方麟翔, 詹杰民, 李雨田, 范庆

FANG Lin-xiang, ZHAN Jie-min, LI Yu-tian, FAN Qing .....(1410)

大单宽流量下阶梯消能工预掺气及消能研究

Study on pre-aeration and energy dissipation on stepped chutes under large unit discharges

马飞, 田然, 吴建华

MA Fei, TIAN Ran, WU Jian-hua.....(1416)

椭圆余弦波作用下沙纹底床近区流场及水体紊动特性数值模拟研究

The Numerical investigation of flow field and turbulence near the rippled bed under cnoidal waves

刘诚, 刘晓建, 刘绪杰

LIU Cheng, LIU Xiao-jian, LIU Xu-jie .....(1422)

基于GPU加速MPS方法的三维急弯河道溃坝流动问题数值模拟

Numerical simulation of three-dimensional dam break flow in a channel with sharp bend based on GPU accelerated MPS method

鲁逸豪, 陈翔, 万德成

LU Yi-hao, CHEN Xiang, WAN De-cheng.....(1434)

阶梯式泄水道竖井流态特征研究

Flow observation in helical-stepped spillway dropshafts

任炜辰, 吴建华, 马飞

REN Wei-chen, WU Jian-hua, MA Fei.....(1445)

椭圆余弦波作用下浮体运动响应的数值研究

A numerical study of the motion response of a float body induced by cnoidal waves

刘勇男，张俊生，滕斌，陈昌平

LIU Yong-nan, ZHANG Jun-sheng, TENG Bin, CHEN Chang-ping.....(1451)

深圳湾潮能通量分布特征的研究

Numerical study of characteristics of tide energy flux in Shenzhen Bay

吴婉蓉，郑阳，李强，毛献忠

WU Wan-rong, ZHENG Yang, LI Qiang, MAO Xian-zhong .....(1457)

鲁山地热温泉传热机理分析

Analysis of heat transfer mechanism of geothermal spring in Lushan County

张庆，宾朝晖，许永吉，罗绍河，钱家忠

ZHANG Qing, BIN Zhao-hui, XU Yong-ji, LUO Shao-he, QIAN Jia-zhong.....(1466)