



## Contents

### Hydrodynamics

- Blind prediction of ship manoeuvring motion in 4 degrees of freedom based on support vector machines  
 .....WANG Xue-gang ZOU Zao-jian LIU Cheng (1013)
- Thrust allocation with dynamic forbidden sectors in dynamic positioning system  
 .....LI Bo WANG Lei (1024)
- Using vortex lattice and surface panel method to predict the unsteady hydrodynamic performance of  
 podded propulsors  
 .....MA Cheng QIAN Zheng-fang CHEN Ke CAI Hao-peng ZHUANG Guang-yu (1035)
- An improved moving particle semi-implicit method for dam break simulation  
 .....WU Qiao-ru TAN Ming-yi XING Jing-tang (1044)
- Study of vortex induced characteristics of multi-columns with low mass ratio  
 .....GU Jia-yang YANG Jian-min XIAO Long-fei (1055)
- Numerical simulation of the installation of deepwater manifold through pendulous installation method  
 .....LI Xin YU Jian-xing ZHOU Qing-ji MA Wei-lin YIN Han-jun (1072)
- Two-dimensional SPH simulations of wedge slamming  
 .....YU Hao SI Hai-long HU Jia-jun LI Zheng-jie (1086)

### Structural mechanics

- Experimental and numerical investigations on ultimate strength of ship plates under  
 longitudinal cyclic loads.....YANG Ping CUI Hu-wei DAI Yin-ze ZHOU Liang (1100)
- Research of vertical bending moment in amidships calculation method caused by the crash-breaking way  
 .....REN Hui-long WANG Chuan LI Hui ZHAI Shuai-shuai WANG Jin-feng (1109)
- Effect of plastic zone size induced by a single dwell overload on the fatigue crack growth rate under  
 cyclic loading.....WANG Fang CUI Wei-cheng (1117)
- Vibrations of multi-span non-uniform beams with arbitrary discontinuities and complicated  
 boundary conditions  
 .....ZHANG Zhen-guo WANG Jian ZHANG Zhi-yi HUA Hong-xing (1129)
- Mathieu instability analysis of deepwater top-tensioned risers  
 .....ZHANG Jie TANG You-gang (1142)