

2019 5th International Conference on Transportation Information and Safety (ICTIS 2019)

**Liverpool, United Kingdom
14 – 17 July 2019**

Pages 1-764



**IEEE Catalog Number: CFP19ING-POD
ISBN: 978-1-7281-0490-4**

**Copyright © 2019 by the Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP19ING-POD
ISBN (Print-On-Demand):	978-1-7281-0490-4
ISBN (Online):	978-1-7281-0489-8

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

TABLE OF CONTENTS

2019-0001 Rescaled Range Analysis Of Vessel Traffic Flow In The Yangtze River	
<i>Zhen Yu, Zhonglian JIANG, Lunwu Tan, Huaihan Litt, Qiong Yang</i>	1
2019-0002 Can Internet Rental Bicycles change people's travel behaviour? A survey from China	
<i>Xuxin Zhang, Weihua Zhang, Zhongxiang Feng, Wesley Kumfer, Quanyuan</i>	5
2019-0005 Analysis of Main Influence Factors and Algorithm of Flight Distance for Rescue Helicopter at Sea	
<i>Zhu Weiwei, Yu Yuanyang, Sun Ting, Zhu Yuechen</i>	13
2019-0007 Optimization of Combined Horizontal and Vertical Curves Design of Mountain Road Based on Vehicle-Road Coordination Model	
<i>Yuchuan Du, Lei Yue, Shuo Litt</i>	16
2019-0009 Anti-collision Decision Making by Course Alteration and Speed Change under COLREGs	
<i>Yong Zeng, Jinfen Zhang, Mingyang Zhang, Tingwen Li</i>	25
2019-0010 A Guidance Method for Lane Change Detection at Signalized Intersections in Connected Vehicle Environment	
<i>Tao Wang, Liangjie Xu, Guojun Chen, Wei Zhao</i>	32
2019-0011 Design of Automatic Identification System for Enclosed Waters Based on LoRa	
<i>Qianqian Chen, Changshi Xiao, Yuanqiao Wen</i>	39
2019-0012 The Risk Analysis of Parametric Rolling to Semi-Submersible Vessel Sailing at Sea	
<i>Xiaojun Li, Zhou Ran, Lequn Zhu</i>	45
2019-0013 The Study on Control Methods to Semi-submersible Vessel Loading 300,000-ton FPSO	
<i>Zhou Ran, Xiaojun Li, Lequn Zhu</i>	50
2019-0014 The evaluation of emergency rescue capability for general aviation enterprises under specified rescue demand after earthquake	
<i>Xiuyan Zhang, Xiaobing Hu, Hang Li</i>	56

2019-0019 A Study on Bus Drivers' Driving Anger	
<i>Qingfeng Lin; Yuanchang Deng</i>	62
2019-0020 Separate Dual-Left Turn Signal Optimization Timing	
<i>Chunfang Feng; Zibo Zhu</i>	68
2019-0021 Research on Setting Method of Guide Line of Separate Dual-Left Turn Lanes	
<i>Zibo Zhu, Chunfang Feng, Yangyang Zhao; Jian Li</i>	73
2019-0023 A comparative study on psychological factors of drink-driving behavior by using two different models	
<i>Weixiong Zhang, Yuanchang Deng, Qingfeng Lin; Jieling Jin</i>	79
2019-0024 The Prediction of Multimodal Public Transportation Sharing Rate Based on Data	
<i>Huaizhong Zhu, Xiaoguang Yang, Yizhe Wang; Nan Zhang</i>	85
2019-0025 Safety Assessment of Navigation Based on the Ship Handling Simulator	
<i>Jun feng Xu, Jin jing Zhao, Lei Zhang; Xiao song Li</i>	92
2019-0026 Water transportation system service level evaluation model	
<i>GAO Guangxu, LIU Zhao , LI Yan , LIU Wen, LIU Jingxian; Qi Zhengjiao</i>	99
2019-0028 A Multi-mode Two-Level Transportation Model Based On Network Vulnerability	
<i>Wenjun Hu; Xizhao Zhou</i>	104
2019-0029 A Transportation Model Considering Road Reliability Under a Two-Way ATIS System	
<i>Wenjun Hu; Xizhao Zhou</i>	109
2019-0030 Method to Comprehensively Evaluate Road Network Traffic Conditions during Freeway Reconstruction and Extension	
<i>Nan Ouyang, Zichu Zhou; Yong Fang</i>	118
2019-0031 Car Following Behavior under Foggy Conditions with Different Road Alignments — A Driving Simulator Based Study	
<i>Qiangqiang Shangguan , Xuekun Wang , Shuo Liu; Junhua Wang</i>	127
2019-0033 Current problems and risk analysis on high pollution risk operation of ship	
<i>LIU Chen; CHEN Rong-chang</i>	136

2019-0034 Integration of Internet of Things (IoT) and Block chain to increase humanitarian aid supply chains performance	
<i>Daniel Arias Aranda, Luis Miguel Molina Fernández, Vladimir Stantchev</i>	140
2019-0038 Research on the current status and existing problems of oil vapor control for vessel in China	
<i>LIU Chen, CHEN Rong-chang</i>	146
2019-0042 Fatigue life evaluation of high-speed maglev train bogie under higher operating speed grade	
<i>Feng Guo, Jianxin Liu, Yifan Li</i>	149
2019-0043 Evaluation Model of Maritime Search and Rescue Response Capability	
<i>Ke Zhang, Guozhu Hao, Yanfei Tian, Cheng Xie, Jingjun Zhu</i>	155
2019-0046 Automated Traffic Volume Analytics at Road Intersections Using Computer Vision Techniques	
<i>Bozhao Qi, Wei Zhao, Haiping Zhang</i>	161
2019-0047 A Low-cost Driver and Passenger Activity Detection System based on Deep Learning and Multiple Sensor Fusion	
<i>Bozhao Qi, Wei Zhao, Xiaohan Wang, Shen Li, Troy Runge</i>	170
2019-0050 Marine Shafting Fault Detection Method Using improved Envelope Analysis	
<i>Bing Han, Yuhang Chen</i>	177
2019-0051 Indoor Navigation for a Complex Parking Building Based on Computer Vision	
<i>Yulin Jia, Zhihong Jin, Haiping Zhang, Yuanchen Li, Xiaohan Wang, Lixin Shen</i>	183
2019-0056 Research On Visual Laser Navigation Of Ships	
<i>Yabin Li, Kunyu Tao, Xuedong Li, Feilong Wang</i>	191
2019-0057 A simulation platform for multi-ship collision decision making	
<i>Xian Lin, Jinfen Zhang, Yong Zeng, Weidong Hu</i>	197
2019-0058 Study on the Optimal Distance Between Two Ships Encountering in a Channel Based on Ship-Ship Interactions and Bank Effects	
<i>Feilong Wang, Yabin Li, Biguang Hong</i>	203
2019-0059 Worse than Rayleigh Fading of V2V Communications in Ramp with Soundproof Walls Scenario	

<i>Changzhen Li, Tongcheng Fan, Junyi Yu, Wei Chen; Fang Li; Kun Yang</i>	210
2019-0062 Research on Ship Track Control in Bridge Area Based on Differential Evolution Algorithm	
<i>Xiaodong CHENG, Chunhui ZHOU, Ling ZHOU, Langxiong GAN, Changshi XIAO, Fucai JIANG</i>	215
2019-0064 Research on the Urban Transportation Network and Electric Power Distribution Network Based on Complex	
<i>Tao Xu, Hui Hou, Chengzhi Wang, Mengya Xue; Hao Fan</i>	222
2019-0065 Panoramic reconstruction of central green belt of different levels of highway based on UAV platform	
<i>Tao Duan, Lingzhi Sang, Pengcheng Hu, Ronggao Liu; Lin Wang</i>	229
2019-0067 Estimation of single ship emission location and intensity inversion in port water	
<i>Xin Peng, Changshi Xiao, Fan Zhang, Yuanqiao Wen, Liang Huang, Chunhui Zhou, Haiwen Yuan; Yimeng</i>	236
2019-0068 Analysis of factors influencing severity of urban expressway accidents in Guangdong province	
<i>Chenjun Shi; Yuanchang Deng</i>	243
2019-0071 Efficacy Evaluation of Maritime AtoN by Fuzzy AHP Approach	
<i>ziyi Nie, Zhonglian Jiang, Xiumin Chu; Zhen Yu</i>	247
2019-0077 Resilience assessment of maritime container shipping networks – A case of the Maritime Silk Road	
<i>Jing Wu, Di Zhang; Chengpeng Wan</i>	252
2019-0079 Identifying Behavior Patterns in Intercity Coach Passenger Ticketing across Multiple Channels and Stages	
<i>Jun Li, Shunping Jia; Wei Jiang</i>	260
2019-0082 Study on risk management of floating transportation and installation operation of immersed tunnel based on ShenZhong Link	
<i>Jianwei Sun; Dianliang Xiao</i>	266
2019-0085 Train Diagram Evaluation Method Considering the influence of Line train Diagram's Adjustment for Urban Rail Transit Network	

<i>Rudong Yang, Ruihua Xu</i>	271
2019-0087 Research on Navigation Risk Identification of Three Gorges Ship Lock Based on Improved Analytic Hierarchy Process	
<i>Yumeng Zhou, Xiumin Chu, Zhonglian Jiang, Zhen Yu</i>	276
2019-0092 Prediction of Seasonal Variation in Traffic Collisions on Rural Highways Using Neural Network Regression Models: A Case Study in the Province of British Columbia	
<i>Zongfan Luo, Jianbing Li, Ming Zhong</i>	281
2019-0093 The Moderating Effect of Risk Tolerance on the Hazardous Attitudes and Safety Behavior of Maritime Pilots: a Chinese Case	
<i>Yongtao Xi, Shenping Hu, Zaili Yang, Shanshan Fu, Tingrong Qin</i>	286
2019-0094 Construction of superhydrophobic surfaces for antifouling and drag reduction applications	
<i>Chengqing Yuan, Xiaoyan He, Xiuqin Bai</i>	293
2019-0096 Study on Port Energy Consumption Inventory and Monitoring Technology	
<i>LI Haibo, LI Wen, SUN Xiaowei</i>	298
2019-0097 Ontology-based Construction and Application of Knowledge Graph of Maritime Dangerous Goods	
<i>Qi Zhang, Yuanqiao Wen, Dong Han, Fan Zhang, Chuihui Zhou, Changshi Xiao</i>	303
2019-0098 Research and Application of Port Crane Lightweight Technology	
<i>LI Haibo</i>	309
2019-0099 Dynamics Simulation for Process Risk Evolution Mode on Fueling of LNG-fueled Vessel	
<i>Shenping Hu, Shaoyong Xuan, Zhuang Li, Qingyun Hu, Yongtao Xi</i>	313
2019-0102 The calculation method of DUKC for ultra large-scale ships in restricted waters	
<i>Weizhi Guo, Jingxian Liu, Qian Xu, Yanchao Fu, Zhao Liu</i>	324
2019-0104 A Low-cost Simultaneous Localization and Mapping Algorithm For Last-mile Indoor Delivery	
<i>Wenmin Wang, Wei Zhao, Xiaohan Wang, Zhihong Jin, Yuanchen Li, Troy Runge</i>	329
2019-0108 Advanced Driver Assistance Systems and Risk Identification in Cooperative Vehicle Infrastructure System Environment	

<i>Weifeng Wang, Mengfan Zheng, Jian Wan, Nengchao Lyu</i>	337
2019-0115 Structure Design of Rail Flexible Material Based on Mechanical Calculation	
<i>Jinyan Zhu, Wanqing Zhang, Han Luo, Hongheng Liu, Rongchun Shi</i>	344
2019-0117 Effects of Built Environment on People's Travel Behavior in Nanchang, China	
<i>Zicong Luo, Yubing Xiong, Zecheng Xiong</i>	348
2019-0122 Research on Transit Signal Priority Strategy of Single Intersection Based on V2X Environment	
<i>Yi Zhang, Tangtao Yang, Jiwen Tan, Tony Z. Qiu</i>	356
2019-0127 Characteristics of vessel traffic flow during waterway regulations: A case study in the Yangtze River	
<i>Zhonglian JIANG, Zhen YU, Daiyong ZHANG, Xiumin CHU, Qiong YANG</i> ..	364
2019-0131 Evaluation of Vehicles' Platooning on Expressways Based on V2X	
<i>Jiwen Tan, Tangtao Yang, Yi Zhang, Tony Z. Qiu</i>	369
2019-0134 Statistical Analysis of Ship Collision Accidents in the Yangtze River	
<i>Yun Zhang, Lingzhi SANG, Shanli Yang</i>	376
2019-0139 OBU Design and Test Analysis with Centimeter-Level Positioning for LTE-V2X	
<i>Haiyang Kong, Wei Chen, Shuaizhi Fu, Hongjiang Zheng, Luyao Du, Yan Mao</i> ..	383
2019-0144 Real-time Detection of Vehicle and Traffic Light for Intelligent and Connected Vehicles Based on YOLOv3 Network	
<i>Luyao Du, Wei Chen, Shuaizhi Fu, Haiyang Kong, Changzhen Li, Zhonghui Pei</i> ..	388
2019-0145 Development of AtoN Real-time Video Surveillance System Based on the AIS Collision Warning	
<i>.....Yongtao Wang</i>	393
2019-0147 Temporal and Spatial Distributions of Primary Delays in a High-Speed Rail System	
<i>Chao Wen ,Zhongcan Li, Javad Lessan ,Hongguo Shi ,Liping Fu ,Matthew Iulian</i> <i>Muresan</i>	399
2019-0150 Stress Intensity Simulation of Printed Circuit Heat Exchanger for S-CO2 Brayton Cycle	

<i>ZHANG Lei-yuan, SHU Ai-bing, MA Chao-Feng</i>	406
2019-0154 Maritime Safety Assessment in the 21st-Century Maritime Silk Road under Risk Factors Coupling	
<i>Lequn ZHU, Lingye Zhang, Li-xiaojun, Zhou-Ran</i>	411
2019-0158 A Simulation of the Traffic Behavior with Autonomous Truck Platoons Based on Cellular Automaton	
<i>Mingtao Song, Feng-Chen, Xiaoxiang-Ma</i>	416
2019-0159 Fuzzy PD Controller Based Path Tracking for Autonomous Vehicle under i-VICS	
<i>Huaxin Pei, Jishiyu Ding, Jianming Hu, Yi Zhang</i>	424
2019-0161 Study on Heat Transfer and Pressure Drop Characteristics in Fin Micro Channels of Hybrid Heat Exchangers	
<i>Mingjian Lu, Jian Wang, Jiawei Wang, Xinping-Yan, Yuwei-sun</i>	431
2019-0162 Simulation Analysis on Lubrication Performance of Water-lubricated Elastic Supported Tilting Pad Thrust Bearing	
<i>Changxiong Ning, Xingxin Liang, Wu Ouyang, Xinping-Yan</i>	437
2019-0166 Estimating the Total Delay Times Owing to Disruptions in High-Speed Rail Systems	
<i>Ping-Huang</i>	446
2019-0171 Analysis of Pedestrians' Red-light Violation Behavior at Signalized Intersections	
<i>Yuan Zhang, Yuanchang Deng</i>	452
2019-0182 Speed Reconstruction of Pedestrian-vehicle Collision Based on Finite Element and Multi-body Coupling Modeling	
<i>Quan Yuan, Haojie Yang, Junwei Zhao, Yibing Li</i>	458
2019-0185 Classification of Ship Trajectories by Using Naive Bayesian algorithm	
<i>Weigang WANG, Xiumin CHU, Zhonglian HANG, Lei LIU</i>	466
2019-0188 Major factor affecting freight train collision severity at road-rail level crossing using multinomial logit model	
<i>Hamed Mehranfar, Arman Tadayon, Moein Sadeghi, Moein Sadeghi</i>	471
2019-0192 Simulations of Traffic Control Managements on PM2.5 Emissions Reduction	

<i>Yuhong Chen, Chaozhe Jiang, Chao Wen, Hao Wu, Youhua Tang</i>	475
2019-0193 Effect of Traffic Signal Control Strategies on PM2.5 Emissions and Stop Delay	
<i>Yuhong Chen, Hao Wu, Fang Xu, Chao Wen, Youhua Tang</i>	PIC
2019-0195 Turbine Machine Working Condition Short-term Prediction Using Intelligent Analysis of Online Lubricant Monitoring	
<i>Kun Yang; Xia Wang; Ping Song</i>	491
2019-0202 Aggressive Lane-change Analysis Closing to Intersection Based on UAV Video and Deep Learning	
<i>Yanping Hao; Liangjie Xu; Xiaohan Wang; Yuanchen Li; Guojun Chen</i>	496
2019-0203 Prediction of urban expressway total traffic accident duration based on multiple linear regression and artificial neural network	
<i>Jie Zhang, Junhua Wang, Shou'en Fang</i>	503
2019-0206 Method of Pedestrian-vehicle Conflict Eliminating at Unsignalized Mid-block Crosswalks for Autonomous Vehicles	
<i>Feng Chen, Cunbao Zhang, Zhou Bin</i>	511
2019-0207 Optimal Design and Steady-state Characteristic Analysis of High Speed S-CO₂ Axial Turbine Blades	
<i>Chengqing Yuan; Di Peng; Yurwei Sun</i>	516
2019-0210 Research on Fault Identification of Ship PV System Based on Aerial Photography Image Recognition	
<i>Ziyan Ma, Yan Zhang; Huiyuan Li</i>	527
2019-0211 Design of small usv power system based on hybrid storage of wind and light storage	
<i>Hengtao Wang, Yan Zhang; Huiyuan Li</i>	532
2019-0214 Thermal Hydraulic Performance Analysis of PCHE Precooler for Supercritical CO₂ Brayton Cycle	
<i>Mingjian Lu, Jian Wang, Xinpeng Yan, Yurwei sun, Zikang Gong</i>	537
2019-0215 System Identification Based Parameter Identification of Responding Type Ship Motion Model	
<i>Yanfei Tian, Liwen Huang, Lijia Chen, Junmin Mou, Yixiong He, Ke Zhang</i>	542
2019-0222 Effect of Low-temperature on the Tribological Properties of the Different	

Material of Marine Hydraulic Vane Motor

<i>Gao Wan, Sheng Li, Qing Wu, Kun Yang, Kun Yang</i>	548
2019-0225 Marine Pilot's Reliability Index (MPRI): Evaluation of marine pilot reliability in uncertain environments	
<i>Atiyah Atiyah, Christos Kontovas, Farhan Saeed, Zaili Yang</i>	558
2019-0226 Research on multi-AGV path planning in automated container terminal	
<i>Meng Yu, Zhiling He, Dawei Li, Liang Yin</i>	565
2019-0230 Research on G-LBS System for Intermodal Transport Mobile Equipment Based on Satellite	
<i>Jieyin Lyu, Shouqin Zhou, Ruixue Huang</i>	573
2019-0231 Crashworthiness and structural optimization of Jingha guardrail	
<i>Xuejing Du, Yulong Pei, Ke Chen, Deren Xin, Tiejun Wang, Guozhu Cheng</i>	580
2019-0233 A method for measuring film thickness of water lubricated tilting pad thrust bearings	
<i>Xingxin Liang, Xinping Yan, Wu Ouyang</i>	586
2019-0234 Development and Comparison of Freight Distribution Models of Inland Water Transport along Yangtze River Economic Belt with Ship Visa Data	
<i>Guihua Deng, Ming Zhong, John Douglas Hunt, Yiming Zhang, Zhi Ren, Junda Huang</i>	590
2019-0236 Civil flight accident risk analysis based on information diffusion technique	
<i>Yiran Xie, Leping Yuan, Xinglong Wang, Xiaoxuan Tian, Huan Li</i>	599
2019-0239 Risk Factors Analysis Modeling for Ship Collision Accident in Inland River Based on Text Mining	
<i>Shaoyue Shi, Danhong Zhang, Yixin Su, Mingyang Zhang, Miaoyun Sun, Houjie Yao</i>	602
2019-0242 Comparative Study on Safe Storage of Dangerous Goods Containers in Port Areas	
<i>Xin Lu, Chaoyu Ruan, Ruijing Li, Tiansheng Xie, Hongwei Xu</i>	608
2019-0243 Design and Implementation of Runway Incursion Automatic Warning Simulation System	
<i>Jian Zhang, Hong Liu, Qunting Yang</i>	611
2019-0245 Evaluation of Alternative Pre-trained Convolutional Neural Networks for	

Winter Road Surface Condition Monitoring

<i>Guangyuan Pan, Liping Fu, Ruifan Yu, Matthew Muresan</i>	614
2019-0246 Combination Strategy of Dynamic Variable Speed Limit Method Based on Real-Time Crash Prediction Model for Highway	
<i>Hao Song, Junhua Wang</i>	621
2019-0248 “Port before Factory” Mode Based on Symbiosis Theory	
<i>Xiaoling Huang, Yawei Wang, Jiewei Guo, Jihong Chen, Jack Xunjie Luo</i>	626
2019-0250 Investigation on Multi-objective Freeway Control Strategy using Macroscopic and Microscopic Traffic Flow Data	
<i>Huahui Xie, Jie Fang, Huixuan Ye, Yunjie Lyu</i>	633
2019-0257 SMS performance evaluation in China	
<i>Yanqiu Chen, Mei Rong</i>	640
2019-0261 Research on Safety Performance Monitoring Method Based on the Analysis of Low Consequence Events	
<i>Junjie Liu, Meiyue Cui, Huijuan Yan</i>	646
2019-0265 Study on Flight Crew’s Team Situation Awareness Based on Team and Task Process	
<i>Yanqing Wang, Chaoqun Liu</i>	653
2019-0268 Airlines Safety Inspection Based on System Safety Theory	
<i>Yuan Zhang, Yijie Sun, Yanqiu Chen</i>	659
2019-0273 Statistical Analysis of Train Delay and Delay Propagation Patterns in a High-Speed Railway System	
<i>Ping Huang, Chao Wen, Jie Li, Qiyuan Peng, Zhongcan Li, Zhuan Fu</i>	664
2019-0278 A Bayesian Network Model for Real-time Crash Prediction Based on Selected Variables by Random Forest	
<i>Mingxian Wu, Xiaoduan Sun, Donghui Shan, Jianbei Liu, Zuo Wang, Ming Sun</i>	670
2019-0280 Development of risk assessment model for civil aviation service providers	
<i>Mingliang Chen, Yuan Zhang, Yanqiu Chen</i>	678
2019-0283 The Preliminary Application of Observer XT in the Study of Crew Error	
<i>Yuan Cao, Zhibo Yuan, Wentao Wu</i>	684

2019-0285 Construction of Causality Event Evolutionary Graph of Aviation Accident	
<i>Hong Wang, Han Zhu, Yunqing Bai</i>	692
2019-0290 Study on Evaluation Method of Expressway Operation Safety Risk Based on Grey Incidence Analysis and AHP	
<i>Ran Li, Dianliang Xiao, Fengming Pan</i>	698
2019-0294 Mileage Traveled, Driving Time, and Speeding Behavior as Predictors for Hazmat Transportation Risk Assessment Using Naturalistic Driving Data	
<i>Siyao Li, Nanhua Liu, Hui Zhang, Chaoyong Wu</i>	705
2019-0295 Simulating car-following behavior for heterogeneous drivers: the need for driver specific model parameters	
<i>Huaizhong Zhu, Xiaoguang Yang, Yizhe Wang, Nan Zhang</i>	712
2019-0297 Lane-Level Map-Matching at Multilane Intersections Based on Network RTK and Internet of Vehicle	
<i>Shuaizhi Fu, Wei Chen, Haiyang Kong, Hongjiang Zheng, Luyao Du, Changzhen Li</i>	718
2019-0299 Evaluation Method of Coupling between Urban Spatial Structure and Public Transport System	
<i>Kang Zhou, Xiao Peng, Zhong Guo</i>	723
2019-0301 Research on Identification of Risk Factors in Civil Airports	
<i>Xin Wang, Liling Yu, Lingyun Miao</i>	730
2019-0303 Injury Severity of Pedestrians at Mid-blocks: A Random Parameter Ordered Probit Approach	
<i>Zhidan Yang, Feng Chen, Xiaoxiang Ma, Bowen Dong</i>	735
2019-0309 Sector Planning Based on New Complexity Model	
<i>Huafei Jia, Li Wang, Wei Wu</i>	741
2019-0314 Potential Field Based Path Planning with Predictive Tracking Control for Autonomous Vehicles	
<i>Wenhui Wang, Weifeng Wang, Jian Wan, Duanfeng Chu, Yang Xu, Liping Xu</i>	746
2019-0316 The network optimization of subway station bottleneck based on the queuing theory	
<i>Dewen Kong, Guangtong Liu, Kun Wang, Lishan Sun, Shunchao Wang, Wei Luo</i>	752

2019-0317 Site selection model and algorithm for oil spill emergency rescue point on the Yangtze River trunk line	
<i>Yuanqiao Wen, Rongxin Song, Fan Zhang, Chunhui Zhou, Wanxia Yi, Zhongyi-Sui</i>	759
2019-0318 Analysis of pollutant distribution based on taxi travel volume: a case comparison of Xi'an and Ningbo, China	
<i>Xiaoke Sun, Hong-Chen, Xiaozhi-Su</i>	765
2019-0319 Safety Risk Assessment Technology of Large Caisson Launching for Gravity Wharf	
<i>Jianhua-PENG</i>	773
2019-0320 The Best Practice of Safety performance management in Airlines	
<i>Ling Zhang, Jing Chen, Yao Zhang, Xingchen-Yan</i>	778
2019-0323 Small Scale Characteristics Analysis on Highway V2V Channel for Intelligent Transportation Systems.	
<i>Tongcheng Fan, Wei Chen, Changzhen Li, Xuanhao-Shu, Fuxing-Chang</i>	789
2019-0324 Disruption Management in Liner Shipping: A Service-Cost Trade-off Model for Vessel Schedule Recovery Problem	
<i>Jiangbo-Xing, Yuhong-Wang</i>	794
2019-0326 A Research on Pedestrian's Short-term Memory Characteristics of Subway Guide Signs	
<i>Haoru Li, Leyu Wei, Jinliang Xu, Xiaodong-Zhang, Xingli-Jia</i>	800
2019-0327 Comparision of vehicle positioning performance based on RAC technology	
<i>Jing Ji, Wei Chen, Jiantong Zhang, Yan Shen, Yuanbo-Li, Luyao-Du</i>	805
2019-0329 A Cloud-Based Platform for Marine Oil Spill Emergency Response Capability Visualization	
<i>Liang Huang, Xin Peng, Fan Zhang, Yuanqiao Wen, Changshi Xiao, Yimeng-Zhang</i>	810
2019-0332 Intellectualized Data Collection and Fault Diagnosis for Ships Information System	
<i>Song Gao, Chuanxu-Yan, Zhenchong-Liu</i>	816
2019-0333 Taxi Passenger Travel Spatial and Temporal Characteristics Analysis and Application Based on	
<i>Yunrui Sun, Xiaowei-Hu, Xinyu-Zhou</i>	821

2019-0339 Construction of Ping An Airport's Total Risk Monitoring Indicator System	
<i>Min Luo, Cong Wu, Yangyu Chen</i>	829
2019-0343 An Optimized MAC Protocol for Safety Messages' Broadcasting in VANETs	
<i>Hongjiang Zheng, Huixian Wang</i>	833
2019-0352 Estimation of shipping insurance premiums for Arctic routes	
<i>jingyu zhang, ling sun</i>	839
2019-0353 Simulation of Low-Altitude Wind Shear Identification Based on Gradient Detection and PCA	
<i>Zibo Zhuang, Zheng Dai, Ruohong Ling, Xing Chen, Zhiwei Xing, Delong Song</i>	850
2019-0354 Flight Incidents Prediction Based on Model of X-12 and ARIMA	
<i>Fenglu Zhao, Ruishan Sun, Xiong Chen, Kai Zhang, Shaohua Han</i>	855
2019-0357 A Method for Road Surface Anomaly Detection from Remote Sensing Data by Deep Convolutional Networks	
<i>Wei Xia, Shikai Sun, Bingqi Zhang, Lin Wang</i>	861
2019-0359 Study of the Dynamic Location of Emergency Rescue Facilities for Urban Bus Considering Rescue Urgency	
<i>Ling-tai Zeng, Yugang Liu, Yutian Tang, Geng Xiao</i>	868
2019-0363 Resource Allocation Method for Inter-Cell Interference Coordination in Heterogeneous Networks with Almost Blank Subframe	
<i>L. Jiang, H. Che, W. Sun, J. Liu</i>	875
2019-0370 Examining Usage Patterns of Public Biking Behavior Based on IC Card Data: Comparison Before and After the Usage of Free-floating Shared Bikes	
<i>Zhuanzhuan Shi, Hong Chen</i>	880
2019-0371 Scenario analysis of CO2 emission peak in road transport of Chinese provinces: A case study of Guangdong	
<i>Tong Chen, Yong Hong Liu, Li Li, Marc Stettler, Hui Ding, Xuelan Zeng</i>	888
2019-0372 Modeling Quartiles and Variance of Optimal Traveling Salesman Tour Lengths	
<i>Hongtai Yang, Xiuqin Liang, Zhaolin Zhang, Xu Zhang, Malik Muneeb Abid, Yugang Liu</i>	897
2019-0374 A Vehicle Trajectory Adversary Model Based on VLPR Data	

<i>Chen Xiong, Hua Chen, Ming Cai, Jing Gao</i>	903
2019-0375 A Study of Interference between Pedestrians and Vehicles in Drop-off Area at Railway Station based on Cellular Automata	
<i>Jianhui Cheng, Dewei Li</i>	913
2019-0380 Path Planning Method for General Aviation under Hazardous Weather Using Heuristic Algorithm	
<i>Li He, Anfei Zhao, Xiaoliang Wang, Zhe Zhang, Peng Wang, Renbiao Wu</i>	920
2019-0383 Driving Style Analyses for Car-sharing Users Utilizing Low-frequency Trajectory Data	
<i>Rongjie Yu, Xiaojie Long, Jian Li</i>	927
2019-0387 Utilizing Structure Equation Model to Analyze Multi-Crash Contributing Factors for Shanghai Urban Expressway System	
<i>Rongjie Yu, Yiyun Wang, Yin Zheng</i>	934
2019-0388 An application of convolutional neural network to derive vessel movement patterns	
<i>Xiang Chen, Achuthan Kamalasudhan, Xinyu Zhang</i>	939
2019-0392 Optimal Service Design of Demand Responsive Connector with Elastic Demand	
<i>Hongtai Yang, Zhaolin Zhang, Xiuqin Liang, Malik Muneeb Abid, Wenbo Fan, Li Pu</i>	945
2019-0395 Cause Analysis and Countermeasures of fatal Traffic Accidents on Road Passenger Transportation Based on Typical Cases	
<i>Jian Tian, Zhiqiang Li, Jianfeng Xi, Hongyu Guo</i>	951
2019-0401 The Vulnerability Analysis of the Multi-layer Air Transport System	
<i>Mo Zhao, Xinglong Wang, Weihuang Pan</i>	956
2019-0403 Optimization of Bus Departure Headway Based on Fuzzy Clustering of Operation Period Considering Congestion and Passenger Flow	
<i>MO Wen, Liu Yugang, Ge Leiyu, Xiao Geng</i>	963
2019-0406 HSE Risk Assessment of Large-scale Ship Construction Project Based on Evidence Reasoning Approach	
<i>Hao Yu, Jiaqi Yang, Siqian Li, Haiyan Wang, Yunpeng Liao</i>	969
2019-0407 Effect of Fatigue and Stress on Air Traffic Control Performance	

<i>Xingjian Zhang, Lepingyuan Yuan; Mo Zhao; Peng Bai</i>	977
2019-0408 An analysis of Park-and-Ride service at subway station across Beijing	
<i>Li Qi, Zhang Xin, Yang Zhigang; Yu Zhang</i>	984
2019-0409 Research on Information Analysis and Prevention Strategy of Flight Fatigue Events	
<i>Junjie Liu, Huijuan Yan; Meiye Cui</i>	989
2019-0413 Exploring Spatial Variation in Relationship between Station Level Metro Ridership and Influencing Variables	
<i>Taorang Xu, Hongtai Yang, Dexin Chen; Li Pu; Haipeng Yang</i>	995
2019-0414 Designing Criteria of Continuous Long Slope Alignment at Alpine and High Altitude Area Based on Reliability Analysis	
<i>Duo Xu, Shou'en Fang, Yuren Chen; Shengbin Zhang</i>	1001
2019-0415 Exploring Factors Influencing the Proportion of E-hailing Taxi Trips: A Study Based on Fractional Response Model	
<i>Hongtai Yang, Renbin Pan, Guocong Zhai, Kun Xie; Li Pu; Yi Wen</i>	1008
2019-0429 Maximum Likelihood Estimation - Negative Binomial Regression Traffic Conflict Prediction Model Considering Variable Interactivity	
<i>Wei Jiang, Yutian Tang; Leiya Ge; Ming Li</i>	1014
2019-0431 A Novel WIFI-oriented RSSI Signal Processing Method for Tracking Low-speed Pedestrians	
<i>Zilin Huang, Xianyuan Zhu, Yongjie Lin, Lunhui Xu; Yadong Mao</i>	1018
2019-0433 Reliability Evaluation of Sight Distance on Mountainous Expressway Using 3D Mobile Mapping	
<i>Yu Chen; Yuren Chen</i>	1024
2019-0435 A New Level of Service Method for Roads Based on Available Perception Time and Risk of Sustaining Severe Injury or Death	
<i>Ahmed Adnan Makki, Trung Thanh Nguyen; Jun Ren</i>	1031
2019-0437 The Research of Urban Rail Transit Line Planning in Urban Main Functional Areas	
<i>Ruijia Shi</i>	1037

2019-0438 A Topology Model: Towards Dense Freeway Network with Resource-Constrained Corridors	
<i>Xiaoliang Xing, Yuren Chen</i>	1042
2019-0439 The Effect of Speed and Acceleration on Emission Ratio Based on Actual Road Driving: A Case of Xiaodian District in Taiyuan	
<i>Jieyu FAN, Jian LU, Jing WANG</i>	1049
2019-0441 Rural Speed Limit Selection Concerning the Crash Severity Reduction: ANN Method	
<i>Hesamoddin Razi Ardakani, Shirin Azaraz</i>	1056
2019-0450 Safety Evaluation of Aircraft in Final Approach Based on QAR Data	
<i>Ruishan Sun, Xiaohui Liu, Luping Gao, Xin Zhan</i>	1062
2019-0452 Research on Maximum Driving Time Based on Driving Fatigue Model from Field Experiment	
<i>Qi Zhang, Yafen Wang, Chaozhong Wu, Hui Zhang</i>	1068
2019-0453 A Mechanism for Pricing and Allocation of Mobility Permits on Single-Bottleneck Roadways	
<i>Javad Lessan, Liping Fu, Chris Bachmann</i>	1074
2019-0458 Statistical analysis of typical ship accidents in past 4 years and review of salvage equipment in China	
<i>Ye Yan, Hao Jin, Yingxiang Zhang, Jiwu Wang, Jianhua Guo</i>	1081
2019-0463 Rules of Navigation in River Bridge Waters Based on Ship Out-of Control Theory	
<i>Dejun Chen, Yong He, Junmin Mou</i>	1086
2019-0465 Understanding Lane Change Behavior Under Dynamic Driving Environment based on Real-world Traffic Dataset	
<i>Yi He, Pin Wang, Ching-Yao Chan</i>	1092
2019-0466 Using Perception of Alignment and Short-Term Memory to Understand Middle-aged Driver's Driving Speed on Mountainous Highway	
<i>Fan Wang, Yuren Chen, Kunhui Lin</i>	1098
2019-0467 Study on Route and Scheduling Optimization of Inland River Container Liner Ship Based on Interval Number Programming	

<i>XiongYifan, WangZhengguo, ZhangYu</i>	1105
2019-0469 Energy efficiency analysis of parallel ship gas-battery hybrid power system	
<i>Liyun Fan, Chaohui Xiao, Xu Chao, Hengxi Zhang, Yaowen Lu, Enzhe Song</i> ·	1111
2019-0470 Vehicle Tracking and Motion Estimation on Curve Road Segment by Using Smartphone Sensors	
<i>Ming Dai, Tao Feng, Lu Guo, Kai Yu</i>	1117
2019-0471 Risk Assessment for Cruise Ship Navigation Safety of Inland Waterway Based on Evidential Reasoning	
<i>Weidong GAN, Ming Huang, Yanwei Li, Zongmo YANG</i>	1122
2019-0472 Curve Speed Modeling and Factor Analysis Considering Vehicle-road Coupling Effect	
<i>Shuaifeng Qu, Weifeng Wang, Jian Wan, Zhiqiang Gu, Junru Yang, Duanfeng Chu</i> ·	1127
2019-0473 Comparative Analysis and Control Strategy for Traffic Accidents in Different Types of Tunnels	
<i>Zhaoyou Ma, Changjun Wang, Shou'en Fang, Shuo Liu</i>	1132
2019-0474 Investigating Factors Contributing to Injury Severity in Work Zone Rear-End Crashes	
<i>Kairan Zhang, Mohamed Hassan</i>	1137
2019-0476 Experimental study of departure time choice behavior in commute problem with stochastic bottleneck capacity	
<i>Dongxu Lu, Rui Jiang, Xiao Han, Yong Yang, Qiumin Liu</i> ·	1146
2019-0477 Risk Analysis of Cold Logistics Chains in Maritime Transportation	
<i>lixin Shen, Guoqing Zhu, Xueqi Qian, Lirou Zhang, Yuhong Wang, Xiaowen Shi</i> ·	1152
2019-0478 Research on Standardization Evaluation System of Container Port Safety Production Based on Entropy Weight Method	
<i>Ning Chen, Shanshan Gao</i>	1163
2019-0479 Evaluative Study of the Culture Construction of Road Traffic Safety Based on Structural Equation Modeling	
<i>Zhongqing Xie, Peilin Zhang</i>	1169
2019-0480 Research on Forward Collision Warning System Based on Connected Vehicle V2V Communication	

<i>Tangtao Yang, Yi Zhang, Jiwen Fan, Tony Z. Qiu</i>	1174
2019-0483 Factors affecting the severity of rear-end conflicts: a driving simulator study	
<i>Tiantian Chen, Lu Bai, N.N. Sze</i>	1182
2019-0485 Environmental impact analysis of water traffic based on ISM model	
<i>Shixiuyue Tong, Jingxian Liu, LIU Zhao, Lichao Yang, Longxian Cui</i>	1188
2019-0486 Study on Biomimetic Antifouling Surface Preparation based on Surface Microstructure of Crabs	
<i>Chengqing Yuan, Xiaoyan He, Xiuqin Bai, Zongcheng Yang</i>	1192
2019-0489 Effect of average car price on city-level private car ownership: A study based on panel data analysis	
<i>Hongtai Yang, Jingying Wang, Yinan Lin, Guocong Zhai, Xiaohan Liu, Siyu Tao</i>	1196
2019-0491 A GFT centrality-based importance measurement for traction system of high-speed train	
<i>Yanhui Wang, Pengfei Sun, Shuai Lin, Yucheng Hao</i>	1202
2019-0494 Speed and Lane Changing Control Optimization Research on Accident and Congestion Concentrated Sections of Guang-Shen Freeway	
<i>Guang-Yu, Shuo-Liu</i>	1208
2019-0495 The Effect of Remanufacturing Effort on Closed-Loop Supply Chain with Stochastic Demand	
<i>Saidjahon Hayrutdinov, Jian-Ming, Liu-Tong</i>	1213
2019-0496 Dual-Mode Adaptive Cruise Control Strategy Based on Model Predictive Control and Neural Network for Pure Electric Vehicles	
<i>Mingxing Wang, Houyu Yu, Guanglin Dong, Miaohua Huang</i>	1220
2019-0497 What is the best catchment area of bike share station? A study based on Divvy system in Chicago, USA	
<i>Gong Zhang, Hongtai Yang, Shuailin Li, Yi Wen, Yanlai Li, Fanxiao Liu</i>	1226
2019-0498 Usage Characteristics and Mode Choice Transitions of Ride-hailing Users in Chengdu, China	
<i>Guocong Zhai, Hongtai Yang, Renbin Pan, Jingying Wang, Yaohua Xiong</i>	1233
2019-0499 What is the best catchment area of a metro station? A study based on station level ridership modeling	

<i>Shuailin Li, Hongtai Yang, Gong Zhang, Ziwen Ling, Yaohua Xiong, Yantai Li</i>	1239
2019-0502 Level of Service of Multi-Lane highway Section under fluctuated traffic flow condition: a state-dependent Discrete-Event Simulation framework	
<i>Afaq Khattak</i>	1245
2019-0503 Optimized Geometric Design of Mountain Highways based on a Vehicle-Road Coordination Model	
<i>Lei Yue, Hui Wang, Zhoucong Xu</i>	1251
2019-0505 Simulation of Environmental Impact of LNG Filling Barrier Leakage Based on Computer Fluid Dynamics (CFD)	
<i>Ji MA, Zhi-yong LV, Ying-li LU</i>	1258
2019-0506 An Energy Efficiency Optimization Method for Inland Ship Fleet Considering Multiple Influencing Factors	
<i>Jiayuan Li, Kai Wan, Lianzhong Huang, Ranqi Ma, Xiaohao Qu, Yupeng Yuan</i>	1263
2019-0508 Experimental Research on Low Density Parity Check Code (LDPC) in Maritime Navigation Digital System	
<i>Xiang Wang, Jingxian Liu, Zhao Liu</i>	1268
2019-0509 Fuzzy-Logic based Ship-Bridge Collision Alert Model Form Ship Behaviour Perspective	
<i>Bing Wu, Junhui Zhang, Tsz Leung Yip, Xinping YAN, Carlos Guedes Soares</i>	1276
2019-0510 Research on the Analysis Method of Acoustic Visual in Low Visibility of Inland River	
<i>FANG Qingping, LV Zhiyong, LAI Junhao</i>	1282
2019-0511 Space-based satellite frequency offset tracking method	
<i>Yu Wang, Zhiyong Lv, Shuaijie Cui</i>	1285
2019-0512 EEG-Based Multiple Entropy Analysis for Assessing Driver Fatigue	
<i>Jianfeng Hu, Feiqiang Liu, Ping Wang</i>	1290
2019-0514 Short-term demand forecasting for bike sharing system based on machine learning	
<i>Hongtai Yang, Xundi Zhang, Lizhi Zhong, Shiyuan Li, Xiaojia Zhang, Jun Hu</i>	1295
2019-0515 Injury Severity Analysis of Nighttime Work Zone Crashes	

<i>Kairan Zhang; Mohamed Hassan</i>	1301
2019-0516 The Causality Analysis between Transportation and Regional Development in City-level China	
<i>Sanwei He, Lei Mei; Wenting Zhang</i>	1309
2019-0517 Wind farm water area path planning algorithm based on A* and reinforcement learning	
<i>Tianqi Zha, Lei Xie; Jiliang Chang</i>	1314
2019-0518 Grid-based Control of Active Cameras for Waterway Ship Surveillance	
<i>Zhaozheng Hu, Ji-an You, Kai Yuan; Fan Zhang</i>	1319
2019-0522 A study on Evacuation Model optimization in Passenger Ship	
<i>Zhirong Tan, Bin Chen, Zao Xiao; Jiaxing Zhang</i>	1324
2019-0523 Research on Location Characteristics of Logistics Industry in Wuhan Based on Spatial Syntax and POI	
<i>Min Tu, Qi Zou; Zhuorui Chen</i>	1330
2019-0524 Research on Intelligent Vehicle Infrastructure Cooperative System Based on Zigbee	
<i>Changqing Dong, Xiaowei Chen, Haibo Dong, Kaixin Yang, Jinwei Guo, Yunlong Bai</i>	1337
2019-0525 AIS-based Grid Method for Determining Ship Domains in Inland Bridge-span Waters	
<i>Gan Zhang</i>	1344
2019-0526 Analysis and Control of Intelligent Traffic Signal System Based on Adaptive Fuzzy Neural Network	
<i>Changqing Dong, Kaixin Yang, Jinwei Guo, Xiaowei Chen, Haibo Dong, Yunlong Bai</i>	1352
2019-0527 Initial Thoughts and Application of AI in Geo-hazards Monitoring and Early Warning of Highroad in Beijing	
<i>Xuejiao Bai, Hongxia Kang, Lingzhi Sang, Zhen Liu; Jahangir Khan</i>	1358
2019-0530 Effect of Cushion Wave-making on Resistance and Attitude of Air Cushion Vehicle in Sideslip	
<i>Zongke Zhang; Zhang Zong-ke</i>	1364
2019-0531 Evaluation Method for Multivariate and Three-dimensional of Oil Port Equipment Management Effectiveness	

<i>Chunping WANG, Shidong Fan, Yuman Yao</i>	1369
2019-0532 Prediction of Grades of Ship Collision Accidents Based on Random Forests and Bayesian Networks	
<i>Li Tang, Yuheng Tang, Kai Zhang, Lin Du, Min Wang</i>	1377
2019-0533 Prediction of Rationality for Ferry Crossing Behavior Based on Multi Hidden Markov Model	
<i>Tingting Cheng, Qing Wu, Bing Wu, Mingyang Zhang</i>	1382
2019-0534 Long-term Vessel Motion Predication by Modeling Trajectory Patterns with AIS Data	
<i>Wenkai Li, Chunwei Zhang, Jie Ma, Chengfeng Jia</i>	1389
2019-0535 Optimizing the anti-collision decisions between multiple ships based on predictive risk evaluations	
<i>Shijie Li, Jialun Liu, Xuming Wang, Hongxu Guan, Qingxin Yan</i>	1395
2019-0536 Course Tracking Control for Smart Ships Based on A Deep Deterministic Policy Gradient-based Algorithm	
<i>Weiye Wang, Feng Ma, Jialun Liu</i>	1400
2019-0537 Ship Course Control Based on BSO-PID Online Self-Optimization Algorithm	
<i>Le Wang, Jialun Liu, Qing Wu, Xuming Wang</i>	1405
2019-0538 Study on Risk-based Operators' Competence Assessment of Maritime Autonomous Surface Ships	
<i>Yuheng Li, Zunlei Duan, Zhengjiang Liu</i>	1412
2019-0539 Collision Avoidance for Unmanned Surface Vehicles based on COLERGS	
<i>Jiayuan Zhuang, Jing Luo, Yuanchang Liu, Richard Bucknall, Hanbing Sun, Cheng Huang</i>	1418
2019-0542 Analysis of Influencing Factors of Ship Operational Energy Efficiency	
<i>Ailong Fan, Yapeng He, Junteng Wang</i>	1426
2019-0543 Discrete and continuous evacuation simulation models for rail tunnel evacuation: a comparison study	
<i>Shao Bo Liu</i>	1433

2019-0547 Estimating the effect of decision deviation spreading in networked synergetic emergency decision-making environment: a case study on maritime accident disposition	
<i>Tengze Fan, Tengfei Wang, Yunxiang Zhi, Yang Wang</i>	1439
2019-0548 Grey Relational Analysis of Environmental Influencing Factors of Autonomous Ships' Maneuvering Decision-Making	
<i>Jie Xue, P.H.A.J.M. Van Gelder, Eleonora Papadimitriou, Zhijun Chen, Chaozhong Wu</i>	1447
2019-0549 The Design of Energy Efficiency Management System for an Electric Propulsion Passenger Ship in Inland River	
<i>Guangming Liu, Meng Li, Peng Wu, Qizhi Yin, Richard Bucknall, Yupeng Yuan</i>	1453
2019-0550 Evaluating Public Transit Equity with the Concept of Dynamic Accessibility	
<i>Asif Raza, Ming Zhong</i>	1463
2019-0552 Study on Safety Features of Road and Traffic Facilities at the Entrance of Interchange Area	
<i>Yang Ding, Ying Yao, Liping Yang, Xiaohua Zhao</i>	1469
2019-0554 Review and Application of Unmanned Surface Vehicle in China	
<i>Xuming Wang, Xuemin Song, Lihua Du</i>	1476
2019-0555 Research on AIS and Radar Information Fusion Method Based on Distributed Kalman	
<i>Dejun Chen, Peng Chen, Chenghao Zhou</i>	1482
2019-0556 Overload Monitoring System for Inland River Ferries	
<i>Qidong Fan</i>	1487
2019-0562 Grey Fuzzy Relation Analysis for Fuzzy Fault Tree of Ship Collision of Human Errors	
<i>Yang Xiang, Quandang Ma, Gang Chen, Feifei Jiang, Fucai Jiang, Jintong Zhan</i>	1491
2019-0563 Simulation Analysis of Steering Gear Hydraulic System Fault Mechanism Based on AMESim	
<i>Peng Chen, Xiang Li, Zhiyin Tang</i>	1496
2019-0564 Spatio-Temporal Vessel Trajectory Smoothing Based on Trajectory Similarity and Two-Dimensional Wavelet Transform	
<i>Xinyi Li, Zhao Liu, Zheng Liu, Ryan Wen Liu, Zikun Feng</i>	1500

2019-0565 Research for Conflict Severity level of Ship Traffic Flow	
<i>Gan Zhang</i>	1506
2019-0566 Research on environmental risk of pollution waters by vessels and other related operations in Hunan Province	
<i>Zhaoxi Cheng, Haifeng Zhou, Yaotian Fan</i>	1511
2019-0567 Job-Housing Spatial Relationship Evolution in Guangzhou Analysis, Reflection and Coping Strategies	
<i>Song Cheng, Jin An, Ma Xiaoyi</i>	1515
2019-0568 Social impacts of alternative land use developments in Beijing: Applying opensource data in a new recursive spatial equilibrium model	
<i>Xiao Rong, Ying Jin</i>	1521
2019-0569 Estimating Space Rents and Land Values in Alberta	
<i>JD Hunt, A Silva, JE Abraham</i>	1528