

9th International Conference of Chinese Transportation Professionals 2009

(ICCTP 2009)

**Harbin, China
5-9 August 2009**

Volume 1 of 5

ISBN: 978-1-61567-393-3

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (422;) by the American Society of Civil Engineers
All rights reserved.

Printed by Curran Associates, Inc. (202;)

For permission requests, please contact the American Society of Civil Engineers
at the address below.

American Society of Civil Engineers
1801 Alexander Bell Drive
Reston, VA 20191

Phone: (800) 548-2723
Fax: (703) 295-6333

www.asce.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2634
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

Volume 1

TRANSPORTATION SAFETY

Information Needs of Urban Transit Travelers—The Case of Wuhan, China	1
<i>Zhengdong Huang, Xuejun Liu, Jie Li</i>	
Study on the Rational Size of the Box Girder Used in Cable-Stayed Bridge Based on ANSYS	8
<i>Xia-lin Yang, Xue-xian Sun, Ya-ping Wu, Xiao-dong Mao</i>	
Research on the Crashworthiness of Two-Layer Thin-Walled Structures	15
<i>Shourme Xiao, Qiyu Shan, Guangwu Yang, Hanzhen Chen</i>	
Effects of Roadway Lighting Level on the Pedestrian Safety	21
<i>Huaguo Zhou, Ping Hsu</i>	
Analysis of a New Combined Micropile Structure for Preventing Slope Slippage and Its Application in a Practical Project	30
<i>S. G. Xiao, K. Cui, D. P. Zhou, J. Feng</i>	
Experimental Research on the Mechanical Parameter of Fly Ash Soil	41
<i>Han-bing Liu, Chang-yu Li, Hai-bin Wei</i>	
The Bearing Character of Bridge Piles in Karst Areas	49
<i>Hourong Kang, Xiedong Zhang, Hong Li</i>	
The Analysis of Traffic Landscape from Users' Perspective: The Case of the Zhangjiang Tram	56
<i>Na Li, Xiaohong Chen, Wen Xiong</i>	
Traffic Incident Acoustic Recognition Based on Wavelet Decomposition and SVM	65
<i>Xianglong Luo, Qisheng Wu, Guohong Niu</i>	
Gray-Periodic Extensional Combinatorial Model for Road Traffic Accidents in Cold Regions	71
<i>Shi An, Lilan Li</i>	
A Multi-Objective Decision Model of Traffic Rescue Service Site Location on Road	80
<i>Gan Chai, Chengwei Fang, Jiaxiang Zhou, Shui Wan</i>	
The Method of Road Safety Analysis Based on Two-Dimensional Speed Difference	87
<i>Xingwang Liu, Jingmei Wu</i>	
Risk Evaluation for Highway Transportation of “Toxic Gas” Hazardous Materials—Based on a Back Propagation (BP) Neural Network	93
<i>Kai-zheng Liu, Hao-zue Liu</i>	
Study on Different Residual and Weight Coefficient in Model Updating of Bridge Structure	100
<i>Jie Li, Min-shui Huang, Hong-ping Zhu</i>	
Study on a Passageway Location Model on Underground Expressway	108
<i>Yucong Hu, Bingqiang Situ, Wenzhou Jin, Qin Liu</i>	
Optimum Choice for the Construction Management Plan Based on Entropy Weight	115
<i>Yong-Fen Ruan, Jin-Ping Wang, Wang Dong, Mou Jie</i>	
Lane Change Behavior Character and Its Influence to Traffic Safety on Urban Roads	122
<i>Y. Zhang, Q. Huang, M. Zhang, X. Yu</i>	
Study on the Rules of Crash Distribution	129
<i>X. Zhong, X. Chen, Z. Wei</i>	
Quick Maintenance for Tunnel Lining Voids with Polymer Grouting Technology	136
<i>Jianguo Xu, Fuming Wang, Bo Wang</i>	
Safe Spacing Research Based on the Theory of Cellular Automation on Freeways in Foggy Weather	142
<i>Q. Shi, Z. Huang, W. Liu</i>	
Simulation of Turning Stability Control for Two-Motor-Drive Electric Vehicles	150
<i>Shaobo Xie, Cheng Lin, Peng Liu, Xiaowei Zhang</i>	
The Simulation Analysis of Passenger Evacuation in One Metro Station Based on Exodus	157
<i>Y. F. Ye, Q. F. Hu, H. W. Huang</i>	
Research of Company Freight Traffic Generation Prediction Models in High-Tech Park	164
<i>Ke Zheng Yaping Zhang</i>	
Bending Vibration Suppression of High Speed Railway Passenger Car Body	171
<i>Caihong Huang, Jing Zeng, Ren Luo</i>	
Analysis of Deformation Characteristics of Collision Vehicles Using Close-Range Photogrammetry	177
<i>Z.-M. Tao Y.-L. Pei</i>	
Traffic Safety Evaluation of the 30 Provincial Capital in China Based on Principal Component Analysis	185
<i>Sheqiang Ma, Chunfu Shao, Zhuanglin Ma, Dong Liu</i>	
Study on Spatial Information Model and Database of Traffic Facilities Management Systems Based on ArcGIS	192
<i>Y. Wang, S. Dong, H. Kui, T. Gao, H. Yu, H. Wang, Y. Liu</i>	
Expressway Data De-Noised Approach Based on Wavelet Analysis	198
<i>Zhenjun Wang, Jizhen Guan, Jianling Yu, Jing Liu</i>	
Influence Analysis of Deep Discount Policy on Public Transit Ridership	204
<i>Yan Han, Hongzhi Guan, Xuejiao Fang</i>	

Design and Validation of Wireless Dynamic Testing System for Bridge Based on the 941B Type Vibration Sensor	211
<i>Zhonglong Li, Lianzhen Zhang, Xiaodi Zhu, Hongjiang Gu, Zitian Jiang</i>	
Application of Fractal Theory in Pavement Surface Texture Measurement	219
<i>Yan Yuan, Anxing Lai, Yun Que</i>	
Research on Application of Externally Prestressing for Simple-Continuous Bridge	226
<i>Kejian Sheng, Rongda Li, Zonglin Wang</i>	
Restraint Efficacy Analysis and Structure Optimization for the Design of Airplane Metal Chocks	234
<i>Fuhai Li, Hongbin Gu, Hongyu Yao</i>	
The Comparison of Three Getting Signal Control Delay Video Methods at Signalized Intersection	241
<i>Huiling Zhang, Keping Li, Hongbo Qian, Guimin Su</i>	
Enhancing Immersion through Adjusting Parameters of Vehicle Driving Simulator	247
<i>Xiaobo Zhou, Shunying Zhu, Hong Wang, Bing Liu</i>	
A Calculation Method for the Information Utility of Traffic Guide Signs	254
<i>Li-Li Zhu, Jian-Jun Shi, Xin-dong Chen</i>	
Safety Evaluation Methods of Road Traffic Based on Gray Cluster Theory	260
<i>L. Wei, Z. Guan</i>	
Road Traffic Control Information and Traffic Resource Analysis System	268
<i>Hui Zhang, Zhongzhen Yang, Yonglei Jiang, Haigui Kang</i>	
Research on the Crashworthiness Optimization of Curved-Road Concrete Barriers	277
<i>Zhengbao Lei, Lan Liu, Zuo Peng, Shijing Hou</i>	
Highway Accidents Analysis with Panel Data Model	287
<i>T. Xu, X. Sun, Y. He, C. Xie</i>	
The Impacts of Differential Speed Limits on Speed	294
<i>Shicui Liu, Xiaoduan Sun, Yulong He, Shuzhan Hou</i>	
Study on the Influence of Coarse Aggregate on the Pavement Performance of Road Cement Concrete	300
<i>Ai-qin Shen, Jian-ping Xiong, Jun-hui He, Tai-jun Liu</i>	
Research on the Competitiveness of China's Ports	307
<i>B. Liu, C. Liu</i>	
Equilibrium Model of Trip Modes in Road Traffic and Orientation of Charge Policy	317
<i>Linlin Wu, Qifen Zha, Jianyi Liu</i>	
Analysis of the Influence of Emergent Incident on Expressways by Simulation	323
<i>M. Li, W. Jin, S. Fang</i>	
Optimization of Regional Traffic Structure from the Perspective of Sustainable Development	330
<i>Linlin Wu, Qifen Zha, Jianyi Liu</i>	
Performance Evaluation of Waterproof Bond Layer Materials Based on Grey Target Theory	336
<i>Xin Yu</i>	
Probabilistic Pedestrian-Vehicle Conflict Micro-Model in Non-Signal Controlled Multi-Lane Segments	343
<i>S. Lu, S. Fang, S. Zheng</i>	
Research on Simulation of Train Tracing Operation Based CBTC	351
<i>Z. Ma, X. Chai, L. Chong</i>	
Research on Rapid Curing Technology of Lime-Flyash-Cement Stabilized Macadam	357
<i>Yuanzhao Chen, Zhenxia Li, Xuancang Wang</i>	
Experimental Research on Shear Connectors' Stress of Composite Beam Bridge under Complex Stress Condition	365
<i>Shibo Zhang, Ronghui Wang, Junping Zhang, Lingling Gong</i>	
A Retrograde Vehicle Detection Method Based on the Optical Flow Field	371
<i>You-ting Zhao, Xi-ying Li, Zhen-bo Wang</i>	
Research on a Risk Analysis System of Vessel-Bridge Collision	378
<i>Tao Fu, Junjie Wang, Junjian Zhang</i>	
Methods of Setting Maximum Speed Limits on Freeways	384
<i>Guozhu Cheng, Yulong Pei</i>	
Study on the Carrying Capability of Preplanned Regional Earthquake Evacuation Corridor Based on Macro-Simulation	390
<i>Yang Wang, Zhijie Li, Jing Cao, Xiaokuan Yang</i>	
The Analysis of Traffic Flow State on Foggy Expressway Based on Fuzzy Clustering	398
<i>Jianjun Wang, Chenfeng Xie, Zhenwen Chang, Jingjing Zhang</i>	
Research on the Impact of Drivers' Heart Rate on Longitudinal Slope of Freeway Tunnel	405
<i>Jianyou Zhao, Cao He, Yami Shi</i>	
A Study on Cable-Removing Scheme of the Cable-Stay System of the Zhijing River Bridge	413
<i>Jianjun Wei, Nianhe Chen</i>	
Design Theory for Speed Control by Using Constant Edge Rate	419
<i>Bing Liu, Shunying Zhu, Hong Wang, Jing Xia, Qinmei Sun</i>	
Optimization of Dynamic Dispatching Decisions of Local Wagon-Flows in Terminals with IRTS	425
<i>Zuoan Hu, Yusong Yan</i>	
Laboratory Evaluation of the Warm Mix Asphalt Performance in Liaoning	433
<i>Yanhai Yang, Huai'zhi Zhang, Yaodong Wu</i>	
Model of High Speed Railway Wheel Ovalization	440
<i>Xueshan Zhang, Xinbiao Xiao, Xuesong Jin</i>	
From Time Based Speed Series to Behavior Sequence: The Transformations and Applications of VTDR Data	449
<i>Zhenfeng He, Zhenzhi Huang</i>	

Road Safety in Sections under Mixed Flow Traffic Environment	456
<i>Sisi Liu, Xiaoduan Sun, Yulong He</i>	
Analysis on Vehicle No-Sideslip Single Side Skid Equivalent Frictional Coefficient	463
<i>Yongheng Yue, Qiang Zhao, Qingdong Xia</i>	
Discussion on Methods of Traffic Routes' Alignment Survey and Application of Principle of Least Squares	470
<i>Yubao Liang, Baoxi He, Shaotang Liu, Qianli Ma</i>	
A Study on Speeding Driving Based on Expected Speed	480
<i>Chen Hu, Xiaoduan Sun, Shicui Liu</i>	
Vehicle Tracking from Videos Based on Mean Shift Algorithm	486
<i>Chang-Zhen Xiong, Yi-Gui Pang, Zheng-Xi Li, Ya-Li Liu, Ying-Hong Li</i>	
The Evaluation of Micro-Benefit on Highway Construction Investments	494
<i>Hong Chen, Yujia Tian, Dianliang Xiao, Fengxia Wang</i>	
Noise Source Identification and Noise Reduction of a Double Crank Four Ring-Plate-Type Cycloid Reducer	501
<i>B. Yang, Y. Liu, X. Zhang</i>	
Analysis Model for Operating Speed on Two-Lane Secondary Highway	507
<i>Dianliang Xiao, Yujia Tian</i>	
Study on the Method for Calculating Ship Squat in the Restricted Channel	515
<i>Zhong-Yi Zheng, Long-Hui Gang, Hong-Xi Li</i>	
A Study on Driver's Dynamic Visual Characteristics	521
<i>Fei Song, Xiao-kuan Yang</i>	
Study of Hydrodynamic Pressure on the Cylindrical Pile-Cap Pier in Deep Water Subjected to Seismic Action	528
<i>Haopeng Liu, Bo Song, Guoming Zhang</i>	
Influencing Factors Contributing to Rear-End Collisions on Highways: PCA Based Investigation and Findings	536
<i>H. Jun, H. Xu, Y. Pei, H. Ji</i>	
Passenger Transport Demand Prediction for Newly-Built Regions	542
<i>Maomin Zhang, Yisheng Liu</i>	
The Method to Identify Black Spots of Long Highway Tunnel	549
<i>Zhuanglin Ma, Chunfu Shao, Shengrui Zhang, Juan Zhang</i>	
Study on the Relationship of Traffic Flow Complexity and Traffic Conflict on Urban Road	555
<i>Zhihong Xu, Xuewu Chen, Meikin Zhang</i>	
Control and Monitoring of Surface Subsidence for Shallow Tunnel under Existing Railway	562
<i>Xinzheng Wang, Liying Xing</i>	
Void Classification Standard for Cement Concrete Pavement Slabs Based on Service Life	569
<i>Sheng Zeng, Jia Xu</i>	
Design of 3D Virtual Simulation and Evaluation System for Road Traffic Signs	575
<i>Haifeng Jiang, Zhiyong Zhang, Jian Chen, Zhengpeng Fang</i>	
Using VISSIM to Calculate the Capacity of Urban Expressway Interchange	583
<i>X. Zang, W. Zhou</i>	
RGB Based Crowded Pedestrian Counting in Red Light Time	590
<i>G. Y. Zhang, Q. Zhao, Z. W. Luo, H. Wei</i>	
Impact of Posted Speed Limits on Operating Speed in Urban Expressways	597
<i>H. Wang, X. Sun, B. Li, Y. He</i>	
Nonparametric Analysis of Timely Distribution of Traffic Crash	605
<i>Yaping Zhang, Xiang Lan, Ke Zhang, Lihua Liu, Xu Yao</i>	
Evaluation of Fire Risk at Highway Tunnels	611
<i>Jing Huang, Shao Yun Ren, Wei Zhang</i>	
The Analysis of Rural Road Safety and Its Strategies	618
<i>Feng Sun</i>	
A Traffic Accident Reconstruction Study on Continuous Collision of Three Cars	624
<i>Qiang Yu, Lang Wei, Tao Chen</i>	
Study on the Preventive Maintenance Time for Asphalt Pavement	630
<i>Ronghuan Ying, Ting Wu, Lijuan Wang, Zhaoguang Hou</i>	
Wavy Road Elevation Measurement Based on the Principle of Inertia	637
<i>Y. Han, H. Wang</i>	
Investigation of Relationship between Level of Service and Safety	643
<i>Xuesong Wang, Hangfei Lin, Xiaohong Chen</i>	
Research and Application of Graphic-Attributes Integration Based on Web GIS in Aviation Accident Investigation	650
<i>Rui-shan Sun, Ding Yuan, Zi-nan Xie</i>	
Study and Implementation on JPEG Image Enhancement System of Tire Mark	656
<i>Tao Chen, Lang Wei</i>	
Analysis of Characters and Causes of Road Traffic Accident Migration	662
<i>Chengwu Jiao, Manjuan Yang, Yubo Hao</i>	
A Time-Varying Route Optimization Model for Urban Hazmat Transportation	669
<i>Yunpeng Wang, Wencai Sun, Shiwu Li, Weiyuan Sun, Jingjing Tian, Haiwei Wang, Hui Wang, Yi Chen, Gang Cao</i>	
A Speed Limit Model of Vehicle for Urban Road Hazmat Transportation	676
<i>Yunpeng Wang, Wencai Sun, Shiwu Li, Guman Li, Jingjing Tian, Hui Wang, Wanji Chen</i>	
Risk Assessment of Road Operation Environment under Atrocious Weather Condition	683
<i>Yan Ma, Zhong-yin Guo, Hua Guo, Yong-gang Xu</i>	
Study on Accident Reconstruction Model Based on Reverse-Reasoning Method	693
<i>Lili Zheng, Tongqiang Ding, Jianfeng Xi, Jian Sun, Jiang Li</i>	

Evaluation Study of the Median Markings in Undivided Highway Tunnels	700
<i>Fengxiang Guo, Jian Xiong, Hongqi Liu, Huasen Wan, Yaqin Qin</i>	
The Numerical Analysis of Sound and Vibration from a Tire by FEM and BEM	706
<i>Liang Chang, Wang-Xin Xiao, Wei-Ping Xie</i>	

Volume 2

Technology Research on the Vehicle Collision Accident Self-Alarm System	712
<i>Zhe-Wen Tian, Jia-Qi Xu, Qian Feng, Shuai Lei, Xiao-Ming Mei</i>	
Research on Pedestrian Safety under Rapid Development of Motorization	719
<i>Shuling Wang, Zhili Lui, Jifu Guo, Yanyan Chen</i>	
Gradually Rolling Prediction of the Use-Level of Road Network Based on BP Neural Network	725
<i>Tao Zhang, Xiang-shen Hou, Xin-kai Li, Hai-min Jing, Bing-qian Zheng</i>	
Identification of Hazardous Locations Based on Integrated Highway Safety State Analysis	733
<i>Yan Wang, Zhongyin Guo</i>	
Analysis of Crowd Behavior in Route Choice Based on Dynamic Programming	742
<i>Xiaobei Jiang, Hui Xiong, Hongwei Guo</i>	
Vehicle Dynamics Model in Two-Dimension Collision Accident	751
<i>Yi Cao, Yu-long Pei, Wen-sen Xiang</i>	
Vehicle Trajectory Model in Two-Dimension Collision Accidents	757
<i>Yu-long Pei, Yi Cao, Jun Ai</i>	
Analysis of Runway Incursion in Civil Airport Based on Bayesian Network	763
<i>Yang Gao, Yang Li</i>	
Investigation of the Relationship between Red-Light-Running Frequencies and Intersection Features	769
<i>Yiyi Cai, Xuesong Wang, Xiaohong Chen</i>	
Effect of Sunlight Glare on Drivers' Psychophysiological Characteristics	777
<i>Han Gao, Yulong Pei</i>	
Evaluation of Road Traffic Safety Based Improved Fuzzy-AHP Method	783
<i>Liwei Hu, Yulong Pei, Zhuo Qiu, Ze Liu</i>	
Road Traffic Safety Micro-Evaluation Based on Bayes Theory	790
<i>Leilei Dai, Yulong Pei, Shaohua Ping</i>	
Impact Analysis on Countdown Device on Transit Priority Signal Control	796
<i>Ke-ping Li, Yu-pu Dong, Hong-bo Qian</i>	
Driving Simulation Study on Traffic Flow Characteristics on the Climbing Lane on a Two-Lane Rural Road	804
<i>Yaqin Qin, Jian Xiong, Hongqi Liu, Fengxiang Guo, Huasen Wan</i>	
A Safety Protection Technology System on Highway Roadside in China	812
<i>Yang Li, Rongguo Ma, Yuxin Niu, Longfei Wang</i>	
Study on Pedestrian Safety and Countermeasures in Crosswalks around Campus—Case Study at Ludong University in Yantai	819
<i>Jiuchun Gu, Chunyan Mu, Liangshen Wang, Kening Liu, Jing Sun</i>	
Enhancing Airport Security and Place Marketing with Spider Web Networking	826
<i>Li-Yen Hsu</i>	
Dynamic Response of a Magnetically Levitated Vehicle in a Crosswind	832
<i>Jian-Jun Wu, Xiao-Hong Shi</i>	
Research on the Design of Inner Horizontal Surface of the Airport	841
<i>Rui-shan Sun, Li-xan Zhang, Hong-yuan Zhao</i>	
Grey Relational Analysis Method of Main Reasons of Road Traffic Accidents	847
<i>Jianfeng Xi, Shuangwei Wang, Na Zhou, Yan Gao, Zhenglin Ding</i>	
Study on Fuzzy Neural Network Model of Vehicle-Bicycle Conflicts at Grade Intersection Based on Failure Tree Analysis	854
<i>Ying-hui Liang, Xing-qiang Zhang</i>	
Research on the Prediction Model of Traffic Accidents Using the Least Square Support Vector Machine	861
<i>Wei-hua Zhang, Qian Sun, Hao Sun</i>	
Study of Anti-Slide Pile Composed of Arch and Truss Structure Based on FEM	871
<i>Chenglin Han, Xiedong Zhang, Liang Yin</i>	
Analysis of the Influences of Fatigue on Driver's Behavior Characteristics	878
<i>Y. Ma, Y. Pei, Y. Wang</i>	
Dilemma Zone Modeling Using Yellow-Onset Vehicular Trajectory Data	886
<i>Heng Wei, Zhixia Li</i>	
Evaluating the Impacts of Ramp Configurations and Influential Factors on Freeway Exit Ramps	895
<i>Hongyun Chen, Jian John Lu</i>	
Uncertainty Analysis of Collision Velocity in Motor Vehicle Crash Using Evidential Reasoning Algorithm	906
<i>Ruiguang Shen, Jun Ai, Yulong Pei</i>	
Choice of Reasonable Longitudinal Gradient at Alignments of Mountain Highways Based on Driver's Physiological Reactions	914
<i>Xian-Qiang Ren, Jian-Yi Liu, Song Gao</i>	
Impacts of Road Sight Distance on Safe Driving Conditions	920
<i>Xian-Qiang Ren, Jian-Yi Liu, Song Gao</i>	

A Study on Multifactorial Prediction Model for the Road Traffic Accidents	927
<i>Zhao-hui Liu</i>	
Case Studies for Shaking Table Tests on Seismic Soil-Pile Group-Bridge Structure Interaction in Liquefiable Ground	934
<i>Liang Tang, Xianzhang Ling, Pengju Xu, Xia Gao, Liqian Wu</i>	
CT Scan on Frozen Roadbed Soil under Dynamic Triaxial Test Condition of Beilu River Section, Qinghai-Tibet Railway of China	942
<i>Lixia Wang, Xianzhang Ling, Feng Zhang, Yibin Pu, Liqian Wu</i>	
Freeze-Thaw Stability of Slopes in Seasonally Frozen Regions of the Northeast China	951
<i>Lina Wang, Xianzhang Ling, Feng Zhang, Xia Gao, Liqian Wu</i>	
Stability and Reinforcement Methods of a High Slope at the Hang-Yong Natural Gas Pipeline in China	958
<i>Liquan Wu, Feng Zhang, Xianzhang Ling, Huoming Yu, Tianhong Chen, Wei Liu</i>	
Stability of Slope with the Weak Structural Plane Based on 2-D Nonlinear Finite Element Method	965
<i>Feng Zhang, Liqian Wu, Xianzhang Ling, Zhanyuan Zhu, Lina Wang</i>	
Vibration Characteristics of Permafrost Embankment Induced by Passing Trains in Qinghai-Tibet Railway in Winter	973
<i>Zhanyuan Zhu, Xianzhang Ling, Lina Wang, Feng Zhang, Shijun Chen, Liqian Wu</i>	
Reliability Analysis of Cable-Stayed Bridge under Reaction of Seldom Occurred Earthquake	980
<i>Feng-chen Li, Li-na Zhang, Da-peng Wang, Ze-ping Yang, Ou Yang</i>	

TRANSPORTATION PLANNING AND OPERATIONS

The Key Technology of “One Road One Line with Straight Driving” Public Transportation System	986
<i>Zhiyong Guo, Wei Wang, Xuewu Chen</i>	
Research on Urban Public Transit Dispatching System Based on Real-Time Prediction and Game Theory	993
<i>Hui-ying Wen, Gong Cheng, Peng-fei Li</i>	
Individual and Population Learning in Route Choice Behavior of Drivers: Experiment and Model	1001
<i>Liang Pu, Hong-zhi Guan, Zi-xu Lu, Shan Huang, Jia Fang</i>	
Research on a Generalized Cost Model for Optimization of Ningbo-Zhoushan Port’s Collection and Distribution System	1014
<i>W. Liu, H. Pan, X. Pi</i>	
Assessing Performance of Public Transit Network Using Network-Based Accessibility Measures	1021
<i>Fangqiang Lu, Xuewu Chen</i>	
Modeling Study of Coal Allocation and Distribution Plan Based on Graph Theory and Fuzzy Optimization Method	1027
<i>Liang Xian, Hui Wang, Jin Zhang</i>	
A Comprehensive Bus Line Evaluation Method Based on Fuzzy C-Means Clustering Algorithm	1034
<i>Suping Chen, Xuewu Chen, Min Yang</i>	
A Nonlinear Model for Decision-Making for Container Slot Chartering and Allocation under Liner Shipping Alliance	1041
<i>Ji-hong Chen, Hong Zhen</i>	
Study on the Model of Hub Location under Earthquake Conditions	1048
<i>Shi An, Lei Ye, Candong Wang</i>	
Empirical Correlation Analysis of Parking Arrival and Departure Rates for Urban Parking Facilities	1056
<i>Jun Chen, Huanhuan Chao, Hua Bai</i>	
Transit Network Optimization Method Based on BRT Attracting Region: A Case Study of Changzhou	1063
<i>Zimu Li, Xuewu Chen, Xiaoqing Liu</i>	
Efficiency Evaluation of Urban Transit Terminals Based on the Cloud Model	1070
<i>Shijun Yu, Yingshun Liu, Yongneng Xu</i>	
Travel Mode Choice in Large Cities of China Based on Loss Aversion Theory	1077
<i>Xuemei Zhou, Yan Meng, Di Di</i>	
Topological Properties of Public Transport Networks: A Temporal Perspective	1084
<i>Xiao-Yong Yan, Ming-Sheng Wang</i>	
Conventional Bus Stop Capacity in Peak	1090
<i>Haijian Bai, Wenquan Li, Ruijuan Dong</i>	
Inhabitant Trip Behavior Similar to Quantum Transition	1097
<i>Rong-Han Yao Dian-Hai Wang</i>	
Study and Simulation of Behavioral Decision-Making Model of Through Bicycles Passing Vehicles at Signalized Intersection	1104
<i>Xing-qiang Zhang, Shen Wang, Ying-hui Liang</i>	
An Optimization Model for Bus Rapid Transit	1111
<i>Bo Yan, Yonglei Jiang, Bin Yu, Zhongzhen Yang</i>	
A Model of Mixed Land Use and Trip Production by BP Neural Network	1117
<i>Yue Zhao, Chunfu Shao, Zhihua Xiong</i>	
Assessment Methodology for Road Network Travel Time Reliability under Ice and Snowfall Conditions	1124
<i>Junqiang Leng, Yaping Zhang, Yuquan Leng</i>	
Multi-Section Short-Term Traffic Flow Prediction Based on Multi-Dimensional Time Series	1131
<i>Gangliang Chen, Lin Cheng</i>	

Research on the Characteristics of Time Headway Distribution in Expressway Weaving Section of Type A	1137
<i>Changlong Xue, Jiaqi Xhao, Yulong Pei</i>	
An Improved Ant Colony Algorithm for Placing-In and Taking-Out of Wagons in Branch-Shaped Sidings	1144
<i>Qianqian Guo, Shaoquan Ni, Chengbing Li, Dingjun Chen</i>	
A Study on Vehicle Trip Distribution Forecasting Based on BP Neural Network	1150
<i>Xiang-hai Meng, Qing Liu, Ying-chun Du, Jian Lu</i>	
Bus Service Frequency Multi-Objective Optimal under Snowy Day	1156
<i>Jian Wang, Xiaowei Hu, Chunbin Hu</i>	
Capacity Model of Low Channeling Roundabout Based on Vehicle Arrival Characteristics	1162
<i>Ruijuan Dong, Weihua Zhang, Haijian Bai</i>	
The Reasonable Distance of Unsignalized Crosswalks Based on Traffic Flow, Stability, and Efficiency	1168
<i>Shunying Zhu, Jing Xia, Hong Wang, Bing Liu</i>	
Study on the Green Traffic Planning System of New Rural Communities	1175
<i>Chang-hong Li, Cong-hong Liu</i>	
Predicting Methods of Trip Modal-Split Based on Structural Model	1181
<i>Zhuping Zhou, Gang Ren, Wei Wang</i>	
A Multi-Class Multi-Modal Combined Model for TDM Measures Evaluation in Large Scale Urban Transportation Network	1188
<i>Tianran Zhang, Dongyuan Yang, Chao Yang, Yali Zhao</i>	
Nonlinear Analysis of Prestressed Steel Box Beams	1198
<i>Yanmin Jia</i>	
Algorithm of PFE and Its Application in Shenzhen Urban Transport Simulation System	1203
<i>Tao Lin, Xiaotian Cui</i>	
The Applied Research on Forecasting Cargo Volume of Northeast Economic Zone by Systemic Dynamics	1209
<i>Shuzhi Zhao, Tonghe Ni, Yonggang Zhu</i>	
A Study on the Location Selection of Public Traffic Transfer Hub Based on Improved Particle Swarm Algorithm	1216
<i>Lifan Lin, Weihua Zhang, Jinxin Hu, Qian Sun</i>	
Region Public Transportation Timetable Optimization Based on Node and Line's Wait Analysis	1223
<i>Wen-xia Sun, Ti Song, Li-xia Ma</i>	
Study on the Method of "Inverse Four-Step" Regulatory Transportation Planning	1231
<i>Jin Wang, Xiaoguang Yang, Xianyao Zhao</i>	
Robust Optimization Approach for Transportation Network Design under Demand Uncertainty	1237
<i>Yafeng Yin, Yingyan Lou</i>	
Analysis on Standards Used in Traffic Impact Study	1249
<i>Lei Lei, Jing Cao, Xiaokuan Yang</i>	
Study on the Location Parking Index Based on Function Division of Parking Space	1258
<i>Lin-bo Li, Man Wang, Bing Wu</i>	
Study on Traffic Impedance Based on Grey Theory	1266
<i>Qiu-ping Wang, Ye-fan Du, Jin-pu Wu</i>	
The Attitude and Psychological Demand Related Determinants of Public Transport Use	1273
<i>Xia Wan, Jun Chen, Wei Wang</i>	
A Study on the Matching of Urban Form and Traffic Pattern	1280
<i>Haifeng Li</i>	
Study on Road Network Reserved Capacity on Different Levels of Service and Stochastic Conditions	1286
<i>Zhengwei Liu, Lin Cheng</i>	
Expansion and Validation of Beijing Household Interview Survey Data	1293
<i>Kai Xian, Zhili Liu, Dexin Zhang, Huabing Du</i>	
Modeling Logistics and Supply Chain with an Integrated Land Use Transport Model: PECAS	1300
<i>Ming Zhong, John Douglas Hunt, John Edward Abraham</i>	
Research on the Bicycle Capacity of Signalized Intersection Based on Fluid Diffusion Characteristics	1306
<i>Lilan Li, Yaping Zhang, Xiang Lan, Ruimin Ye, Yuping Wang</i>	
Analysis and Evaluation of Expressway Planning Schemes Based on Integrated Macro and Micro Simulation	1312
<i>Dui-dui Liang, Yun-tao Chang, Zhong-Ren Peng, Ying Pang</i>	
Evaluation of Traffic Impact on Land Development Projects Based on Matter-Element Analysis	1319
<i>Ying Pang, Yun-tao Chang, Zhong-ren Peng, Dui-dui Liang</i>	
Research on Model of Public Transportation Network Optimization Based on the Demand of Citizen Trips	1326
<i>Yongzheng Kang, Xueqin Niu, Ruijen Liu</i>	
Urban Transport Network Capacity Considering Level of Service	1332
<i>Huapu Lu, Xinxin Yu, Haiwei Wang, Changzhi Bian, Ziyin Deng</i>	
The Balance Lines of International Freight and Incidentals	1338
<i>Xian Liu</i>	
Traffic Management on an At-Grade Signalized Intersection Connecting to Urban Expressway Ramps	1343
<i>Kejun Long, Jianlong Zheng, Xiaoguang Yang, Zhigang Zhou</i>	
Pedestrian Simulation Research of Subway Station in Special Events	1351
<i>Guanghua Zhao, Guanghou Zhang, Yanyan Chen, Ping Wu</i>	
Association of Signal-Controlled Method at Roundabout and Capacity	1359
<i>Yu Bai, Kun Xue, Tao Wang</i>	
Case Study on the Computing Model of the Driving-Into Rate of Service Area	1371
<i>Liyang Mu, Hongjun Cui, Hongqi Hui</i>	

Research on Dynamic Characteristics of Road Network in Snowy Conditions	1378
<i>Xiaoqiang Ren, Longhai Yang, Xiqiao Zhang, Dongxu Fan</i>	
A Study on the Headway Distribution of the Xueyuan Roundabout.....	1385
<i>Ping Han, Dian-hai Wang</i>	
Study on Intersections with Median BRT Stations: Focused on Pedestrian Street-Crossing Characteristics	1392
<i>Ruhua Zhang, Xianyuan Zhu, Li Lei</i>	
The Analysis of Transportation Demand Generation Mechanisms of the Urban Agglomerations in China	1400
<i>Zhi Dong, Bing Wu, Linbo Li</i>	
Study on Residential Daily En-Route Travel Choice Behavior with Traffic Information: Application of RP/SP Joint Survey and Disaggregate Model.....	1406
<i>Yi Zhang, Meiping Yun, Xiaoguang Yang</i>	
A Particle Swarm Optimization Algorithm for Bilevel Programming Models in Urban Traffic Equilibrium Network Design.....	1412
<i>Hui Hu</i>	
Study on Inter-regional Transportation Infrastructure Integration Planning in China	1419
<i>Chaoyang Li, Yi Zhang</i>	
Repositioning of Empty Containers in the Transpacific Market: A Case Study	1425
<i>Yu Zhang, Cristiano Facanha</i>	

Volume 3

Further Development of the German Highway Capacity Manual (HBS2011).....	1439
<i>Ning Wu</i>	
Operational Performance Evaluation of Different Exit Ramps on Florida's Freeways by Considering Number of Lane Change	1445
<i>Jian John Lu, Linjun Lu, Tangyi Guo</i>	
Strategic Transport Model of Beijing and Application to City Centre Transport Policies Evaluation	1453
<i>Rui Zhang, Haiyan Wu</i>	

EMERGENCY RESPONSE SYSTEMS AND TECHNOLOGIES

Real-Time Monitoring System Architecture of Hazardous Goods Logistics Based on RFID	1459
<i>Minai He</i>	
Public Transport Incident Prediction Method by Road Traffic Delays.....	1465
<i>H. Z. Gao, Y. Han, L. L. Zang, C. Xu, H. N. Wu</i>	
The Application of the Maximal Coverage and Partial Coverage Model in the Shelter Location Problem.....	1472
<i>Xiao-Qiang Ren, Juan Chen, Gao Guo, Wen-Ping Cai</i>	
A Framework of the Traffic Organization Simulation System for Freeway Emergency Response	1479
<i>Shaowu Cheng, Xiaofei Ye, Shi An, Tingting Yang</i>	
Application of Locating Technology in the Highway Emergency Response System	1484
<i>Hantao Zhao, Yunpeng Wang, Shiwu Li, Hongyan Mao</i>	
Accident Prevention and Inducement Strategy in Highway Tunnel	1490
<i>Heng Ding, Xiao-yan Zheng, Wei-hua Zhang, Zhong-jie Zhao</i>	
Locating Emergency Response Facilities for Hazardous Materials Transportation with Probabilistic Response Time	1498
<i>Qingping Gao, Yu Luo, Qipeng Yan, Yu Lin</i>	
Test and Analysis of Rail Break Emergency Treatment Device for Railway Switches	1504
<i>Xiangguo Li, Mingsheng Wang, Yunqing Zhang, Chao Ma, Musong Li</i>	
Capacity Reliability of Road Network under Adverse Weather Conditions Based on Fuzzy Theory	1510
<i>Xi-qiao Zhang, Shi An, Yan-hong Tang, Hong-fei Sheng</i>	
Real-Time Dispatching and Routing for Emergency Vehicles after Earthquake Disasters	1516
<i>Wen-Ping Cai, Lei He, Gao Guo</i>	
Establishment of Construction Safety Early-Warning System for Mountainous Freeways.....	1523
<i>Kaifeng Wang, Xiedong Zhang, Xiaohuang Wang, Jianyi Yu, Sheng Yi</i>	
A Study of Vehicle and Materials Depot Location Problems for Winter Road Maintenance	1530
<i>W. P. Cai, G. Liu, W. S. Cao</i>	
Analysis of City Transportation Networks' Travel Time Reliability during Adverse Weather	1536
<i>Jian Wang, Guanglin Sun, Xiaowei Hu</i>	
A Study of Transit Evacuation Route Planning Based on Time-Expanded Network	1543
<i>D. L. Zhang, J. X. Cui, G. Liu</i>	
Integrated Arterial Signal and Access Control Strategy under Non-Notice Emergency Evacuation: Modeling and Simulation-Based Analysis	1550
<i>Heng Wei, Harikishan Perugu, Qingyi Ai, Xiaokuan Yang</i>	
Impacts of the Modernization of Global Navigation Satellite Systems on Intelligent Transport Systems.....	1564
<i>Xin Shi</i>	

INTELLIGENT TRANSPORTATION SYSTEMS

Car-Following Criteria at a Signalized Intersection in Beijing	1570
<i>Q. Yu, J. Liu, J. Rong</i>	
Study of Driver's EEG and Application in Intelligent Transportation Systems	1576
<i>Junqiang Peng, Pingdong Wu</i>	
Short-Term Forecasting of Uncertain Traffic States	1584
<i>Zhihua Xiong, Zhisheng Yao, Chunfu Shao</i>	
Dynamic Model of Transit Signal Priority on Colored Time Petri Net	1590
<i>Ciyun Lin, Zhaosheng Yang, Bowen Gong</i>	
Bus Location Display System Based on GPRS	1597
<i>Song Gao, Ling-yong Zhang, Lei Zhong</i>	
Short-Term Traffic Flow Prediction Based on EMD and Artificial Neural Network	1605
<i>Xianglong Luo, Guohong Niu, Qianjiao Wu</i>	
The Research of Signal Phase Sequences Based on the Conglomeration of Pedestrians and Bicycles	1611
<i>Jin-guang Liu, Quan Yu, Jian Rong, Xiao-ming Liu</i>	
Effects of Lane Changing in Heterogeneous Traffic Flow	1618
<i>Fa Zhang, Qiao-xia Zhao</i>	
Detecting the Type of Multi-Fractality in Traffic Time Series	1624
<i>J. Yu, D. Liu, P. Shang, Z. Wang, L. Guan</i>	
Link Average Speed of Traffic Flow Estimation Method Based on Floating Car	1631
<i>W. Zhu, A. Chang, G. Jiang, W. Zhang</i>	
A "Reality Vision" Navigation Technique Based on Sequence Geo-Referenced Image Databases	1637
<i>Qingwu Hu, Shoujun Liu, Kai Mao</i>	
Signal Timing and Coordination—An Art of Engineering	1648
<i>Z. Tian</i>	
Highway Traffic Parameters Estimation by Using Cell Dwell Time	1656
<i>H. Wang, Y. Han, Z. Liang</i>	
Real-Time Optimization Model of Intelligent Public Transport Network and Its Algorithm	1662
<i>S. Bao, Y. Han, L. Wang</i>	
Frequency Optimization Model for a Public Traffic Scheduling System	1669
<i>C. Xu, F. Wu, Y. Han, H. Gao, Y. Zhang, Z. Li</i>	
Mixed Traffic Micro-Simulation of Urban Branch Roads	1676
<i>B. Liu, X. Lv, W. Li, Q. Li, X. Wang</i>	
Track Access Technology of Traffic Accident Vehicles Based on Video	1682
<i>B. Liu, X. Wang, W. Li, X. Wang</i>	
Collision Avoidance among Multiple Ship Agents	1688
<i>M. Pan, F. Yan, L. Zhao, M. Inaishi</i>	
Traffic Signal Control Optimization of Urban Arterials Based on a Method of Main Intersection Control Strategies	1695
<i>B. Liu, X. Yan, J. Wu, L. Li, X. Wang</i>	
An Interval-Varying Floating Car Data Clustering Approach Based on Self-Organizing Maps	1701
<i>Q. Li, J. Cao, Y. Yue</i>	
A Route-Based Model for Determining Interconnection of Isolated Traffic Signals	1707
<i>W. Ma, Y. Lin, X. Yang</i>	
Optimal Setting of the VMS's Future Range Based on the Characteristics of Driving Speed	1713
<i>T. Wang, J. Chen</i>	
Urban Road Travel Speed Estimation Based on Low Sampling Floating Car Data	1719
<i>Y. Yue, H. X. Zou, Q. Q. Li</i>	
Experimental Study on Sound Countermeasures against Driver Fatigue	1726
<i>R. Fang, X. Zhao, K. Mao, J. Ron, X. Liu</i>	
The Evaluation of Level of Service for Expressway in Operating Stage	1734
<i>Hong-ping Li, Yu-long Pei</i>	
Vehicle Detection from Videos Containing Complex Background Based on Bayesian Statistical Modeling	1741
<i>Ying-hong Li, Ya-li Liu, Yi-gui Pang, Yi-xin Yin</i>	
An Improved Ant Colony Algorithm for the Shortest Path Problem in Time-Dependent Networks	1748
<i>Hui Gao, Yongqiang Liu, Qing Chang, Huagang Xiong</i>	
Intelligent Emergency Traffic Evacuation Spatial Decision Support System for Urban Disasters	1755
<i>Zhichong Zou, Yaowu Wang</i>	
Estimation of Original-Destination Matrices for Public Traffic Passenger Flow	1762
<i>Jian Zhang, Wenquan Li, Jinhuan Zhao</i>	
New Methods for Research in Multi-Agent Traffic Signal Control	1769
<i>Qian-jiao Wu, Rong Lan</i>	
An AHP-Based Performance Evaluation Model of Transportation Control System: The Experience from West Liaohu Rd., Dalian	1776
<i>Jianmei Ding, Changhoug Wang</i>	
An Optimized Signal Control Method for a Freight Arterial Transport System	1783
<i>Changhong Wang, Jianmei Ding</i>	

A Reserve Capacity Model of Optimal Traffic Lane Allocating	1790
<i>Peng Zhang, Wen-quan Li</i>	
Side Road Traffic Considered in Transit Signal Priority Control	1797
<i>Jia Xu, Hangfei Lin</i>	
Short-Term Traffic Flow Prediction with ACD and Particle Filter	1804
<i>G. Y. Zhang, Q. Zhao, Z. W. Luo, H. Wei</i>	
ALINEA-Based Urban Expressway On-Ramp Metering Strategy	1811
<i>Fei Zhang, Yuchuan Du, Lijun Sun</i>	
An Active Parking Guidance Information System Based on Dynamic Agent Negotiation	1819
<i>Longfei Wang, Hong Chen, Yang Li</i>	
Research on Vehicle Information Extraction from High-Resolution Satellite Images	1825
<i>Qi Sun, Yanping Liang, Qulin Tan, Sulan Zhang</i>	
Map Matching Algorithm of a Center Terminal Based on the Road Network Topological Structure	1832
<i>Zhaosheng Yang, Zhijian Wang</i>	
An Improved A* Algorithm for the Intelligent Transportation System	1839
<i>Yan Li, Yang Gao</i>	
Study of the Parking Guidance Reliability of Urban Parking Variable Message Signs	1846
<i>Dongping Li, Keifei Yan, Xiaotian Cui</i>	
Study on Signal Timing Methods of Optimizing Urban Transportation Network Efficiency	1855
<i>Xianmin Song, Dianhai Wang, Ying Peng</i>	
The Prediction of Urban Bus Travel Time	1863
<i>Rui Li, Wenquan Li</i>	
A New Cellular Automaton Traffic Flow Model for an Off-Ramp Junction of a Chinese Urban Expressway	1870
<i>Yusheng Ci, Lina Wu, Yulong Pei, Xianzhang Ling</i>	
A Manual Calibration Method for Simulation of a Freeway Weave Section	1877
<i>Jingguo Dai, Jian Sun, Keping Li</i>	
Efficient Link Travel Time Estimation for Signalized Link by Small Size Probe Reports	1884
<i>Qiang Li, Tomio Miwa, Taka Morikawa</i>	
Phase and Timing Optimization at Actuated-Coordinated Signal Control Intersection	1892
<i>Chengyuan Mao, Yulong Pei</i>	
Signal Intersection Optimal Control Model of Small Region Based on Traffic Equilibrium Theory	1898
<i>Wei Liu, Hai-xian Jiao, Wei-yong Gong</i>	
A Novel Real-Time Road Shape Describing and Parameter Obtaining Method	1904
<i>Meng Wu, Yang Gao, Peng He</i>	
Adaptive Control Method of Multi-Phase Intersection Based on Traffic Status Identification	1910
<i>Wenchen Yang, Zhaocheng He, Ningning Chen</i>	
A Collaborative Software Framework Design in Supporting GLITS I-75 Integrated Freeway and Arterial Operation Project	1920
<i>Ken Yang</i>	
Investment and Finance for the Intelligent Transportation System in China	1927
<i>Mingquan Wang, Yali Zhao, Dongyuan Yang, Xiaofa Shi, Ying Hui</i>	
Advanced Traveler Information Impact on Truck Route Choice	1934
<i>Xiao Qin, Junhee Han, Bruce X. Wang</i>	
Identifying Alternative Routes with Integration of ITS into Traffic-Diversion Strategies	1946
<i>Heng Wei, Yin Hai Wang, Abi Mogharabi, Qingyan (Ken) Yang</i>	
An EEG Predictor of Driving Fatigue	1958
<i>Xiaoli Xie, Xiaoming Liu, Jiangbi Hu, Xintao Cao, Weili Wang</i>	

ENERGY SAVING AND ALTERNATIVE ENERGY

Calculation Method for Braking Torque of Self-Excited Retarder	1966
<i>Xiaojun Yang, Ren He, Haijun Shen</i>	
Fuzzy Control of AMT Clutch Engagement during the Vehicle Starting	1974
<i>Wen-guang Liu, Ren He</i>	
Ration Effect of Rheological and Combustion Properties of Coal-Oil-Water Slurry	1983
<i>Qiang Zhang, Ying Tian, Da-feng Tian</i>	
Research on the 25kW FCPS's Temperature Controlling Simulation	1988
<i>Xianjun Hou, Wengang Gui, Xue Jin, Mu Pan</i>	
Study on Energy Consumption by Land Cargo Transportation	1996
<i>Shunquan Huang, Siqin Yu, Zhongmin Liu</i>	
Case Study: Analysis of CO₂ Emissions Caused by Customers Transportation in Shanghai and Shenzhen IKEA	2003
<i>Yali Zhao, Dongyuan Yang</i>	
Effect of Electro-Mechanical Coupling on Dynamic Performance of Crankshaft of ISG HEV	2009
<i>J. Zhou, F. Sun, X. Hu, X. Cheng</i>	
Forecast the Automobile Population Based on Scenario Analysis	2016
<i>Yuee Gao, Yanjiang Lou, Chao Wang</i>	

The Research of Control Strategy of Permanent Magnet Synchronous Motor for Hybrid Electric Vehicles.....	2023
<i>Hong Xing Wu, Jian Fei Shi, Heng Ji, Guo Ping Zhao</i>	

AUTOMOTIVE EXHAUST TREATMENT AND ENVIRONMENTAL PROTECTION

Monitoring Model for Three-Way Catalyst Converter Efficiency Based on Exotherm	2029
<i>Xiaohong Peng, Zhaowen Qiu</i>	
Study on Burner Type Diesel Particulate Filter System Using Compressed Air from Turbocharger	2035
<i>X. Li, X. Zi, F. Yan, G. Yao, J. Suo</i>	
Runoff Pollutants Control by Asphalt Permeable Pavement	2044
<i>Xiaoguang Xie, Yongpeng Xu, Long Wang</i>	
Research on Numerical Simulation of Pollutant Dispersion at Expressway Toll Plazas Based on Multi- Influencing Factors	2051
<i>Z. Qi, J. He, X. Li, C. Zhao, X. Bao</i>	
Several Questions of Highway Influence Assessment on Dongting Lake Ecosystem in China.....	2058
<i>Su Liu, Yaping Zhang, Zhuokui Xu</i>	
Research on Urban Intersection Vehicle Emission Reduction Based on Microcosmic Simulation	2068
<i>Y. Wang, D. Guo, S. Li, C. Zheng, Wenjuan E, Y. Chen, X. Lu</i>	
The Method of Determining Traffic Impact Range of Developing Project Based on Threshold Value.....	2075
<i>Chao Zhou, Xiaoning Wang, Shuanglong Deng</i>	
Calculation Method on Traffic Noise Pollution of Interchange Based on Geometric Alignment	2082
<i>Xiaoning Wang, Jingjing Tong, Ke Deng</i>	
The Study on Design Method of Vehicle Intake Silencer Based on Three-Dimension/One-Dimension Models Coupling	2088
<i>J. Li, Q. Guan</i>	
Study on Traffic Noise Characteristics of Large Grade Interchange.....	2095
<i>Dejun Wang, Xiaoning Wang, Lianghao Luo</i>	

NEW TECHNOLOGY ON TRANSPORTATION INFRASTRUCTURE (PAVEMENT, BRIDGE)

Effect of Density Variation of Coarse Aggregate on Asphalt Mixture Properties.....	2101
<i>Zhe-sheng Ge, Ke Xu</i>	
Study of an Image-Based Gradation Measurement Techniques of the Asphalt Mixture	2106
<i>Z. Y. Sun, C. F. Wang, A. M. Sha</i>	
Analysis of Thermal Stress Response in Asphalt Overlay	2114
<i>Wensheng Xu, Wei Tian, Hui Luo</i>	
Effect by Different Factors on Ductility of Evaporated Residue of Modified Emulsion Asphalt	2122
<i>Zhipeng Fu, Zhanliang Liu, Lin Jing</i>	
Analysis of Elastic Slab on Non-Uniform Support Foundation Using a Weighted-Residual Method	2128
<i>Zhu Luo, Zhi Fu</i>	
Plastic Behavior for Compaction Pile with Hole Expanded by Blasting or Tamping Techniques	2135
<i>Xiaowei Li, Junhai Zhao, Xueying Wei, Haibing Xiao, Qing Ma</i>	
Bridge Damage Assessment by Dynamic Response in Time Domain.....	2144
<i>Jianqing Bu, Zhanyou Yan, Xiangguo Li</i>	

Volume 4

Viscoelastic Mechanical Properties of Crumb Rubber Modified Asphalt Mixture.....	2153
<i>Lan Wang, Chun-qing Chang, Yong-ming Xing</i>	
Viscoelastic Analysis of Asphalt Pavement Using a Regularized Interconversion Technique between Creep and Relaxation	2159
<i>Yaoting Zhu, Lu Sun, Kesi You</i>	
Performance of Pavement Plate Reinforced with Modified Unsaturated Polyester Fiberglass Reinforced Plastic.....	2165
<i>Wei Xu, Guang-yuan Li, Guo-ping Cen</i>	
Study on Permanent Deformation Characteristics of Asphalt Pavement Based on Discrete Element Method	2171
<i>J. Z. Pei, M. F. Chang</i>	
Mechanism of Rutting Formation in Long and Steep Climbing Sections of Asphalt Pavement.....	2179
<i>J. Z. Pei, Y. Chen, M. F. Chang</i>	
Study on Safety Stability of Excavating Shallow Depth Neighborhood Tunnel in Traversing Construction	2188
<i>Yun-peng Li, Chang-ling Han, Chuan-zhi Ai</i>	
New Concrete Improving Performance of Airfield Pavement	2195
<i>Guangyuan Li, Wei Xu</i>	
Constitutive Relationship of Asphalt Mixture for Finite Element Method	2201
<i>Shaopeng Wu, Hong Wang, Yao Yao</i>	
Limit Value of Railway Bridge for Traffic Safety	2207
<i>Zhihui Zhou, Wenxiao Qin, Jun Zhang, Qingyuan Zeng</i>	

Finite Element Analysis on Shear-Lag Effect in Curved Continuous Box Girder with Corrugated Steel Webs	2213
<i>Zhaotong Hu, Xi Chen</i>	
Nonlinear Analysis of Time-Dependent Effect for Reinforced Concrete Thin-Wall Box Girders Exposed to Fire	2219
<i>Gang Zhang, Shuan-hai He, Ling-bo Wang</i>	
Construction Control of Cable-Stayed Bridges Based on ANN and GA Hybrid Algorithm	2225
<i>Zeying Yang, Haiming Yi, Jianbo Qu, Junjie Song, Xuefu Li</i>	
Experimental Investigation of the First Precast Bi-Pre-Stressing Simple Girder Concrete Bridge	2230
<i>Minjuan Zhou, Nan Wang</i>	
Study on Long-Term Behavior and Ultimate Strength of CFST Columns	2239
<i>Xiayan Zhou, Guohui Cao, Ran He, Xiangrong Liu</i>	
Observation and Theoretical Analysis of the Temperature Field on the Cross Section of Concrete Filled Steel Tubes Arch Bridge Rib	2249
<i>Hang Sun, Hongfei Sheng, Yan Li, Jianglong Li</i>	
Influencing Factor Analyses of Section Types on Vehicle-Bridge Interaction of Concrete Box Girder with Corrugated Steel Webs	2256
<i>Baodong Liu, Pengfei Li, Lingxiang Xue</i>	
Model Test Study of System Transformation for Jiangdong Bridge	2262
<i>Ruili Shen, Dongchun Qi, Maolin Tang, Yong Yan</i>	
Experimental Study on Performance of the Bridge Deck Pavement of SF-PFSC	2271
<i>Wenling Tian, Xiaowei Wang, Shuling Gao, Mingjie Zhou, Xiaoyan Zhao, Erlong Zhang</i>	
Study on Experiment of Concrete Mixed with II Degree Flyash under the Corrosion of Freeze Thawing	2278
<i>Lihua Lu, Sili Chen, Xiating Feng, Haixia Sun</i>	
Experimental Research on the Shear Strength Deterioration between the Freezing and Thawing Surface of Melting Soil Slope in Seasonal Frozen Regions	2284
<i>Yong-chun Cheng, Qi Ge, Yan He</i>	
Design and Construction of Overlay with Mechanical Joint Element on Used Concrete Pavement	2291
<i>Mingjie Zhou, Xiaoyan Zhao, Wenling Tian, Xiaowei Wang, Xinwei Xu</i>	
Resilient Modulus of the Graded Aggregate Material under Long-Term Dynamic Repeat Load	2297
<i>Long Wang, Xiaoguang Xie, Bin Xu</i>	
Prediction of the Soft Roadbed Deformation Based on a Creep Damage Model	2303
<i>Y. L. Wang, Y. Wang</i>	
Research on Relationship between Fine Aggregate Angularity and Asphalt Mixture's Anti-Shear Ability	2310
<i>Chang-jun Zhou, De-cheng Feng, Wen-xin Zuo, Quan Lei</i>	
Application of High Performance Concrete Mixed with Steel Slag Powder in Concrete Pavements	2316
<i>Yunfeng Li, Fanying Kong, Rongqiang Du</i>	
Mechanical Characteristics of Reinforced Gravity Oblique High U-Shaped Abutment	2323
<i>Li-hui Qin, Gui-wei Liu</i>	
Application of Thermal Stress Controlling in Construction of Large Bridge Cushion Cap	2330
<i>Wei Xu, Jianwen Zou, Huixing Ren</i>	
Impact of Gradation Types on Freeze-Thaw Performance of Asphalt Mixtures in Seasonal Frozen Region	2336
<i>Decheng Feng, Junyan Yi, Lei Wang, Dongsheng Wang</i>	
Study on Shear Properties for Adherence of New and Old Concrete and Its Practical Calculation	2343
<i>L. Li, Z. L. Wang</i>	
Research on Flame-Retardant Technique in Application of Asphalt Pavement in Highway Tunnel	2350
<i>Lun Ji, Yi-qiu Tan, Guang-yuan Qi, Zheng-jin Chen</i>	
Fracture Mechanics Analysis of Cracking in Asphalt Pavement Widening	2359
<i>Jun-hui Zhang, Jian-long Zheng, Bao-shan Huang</i>	
Sensitivity Analysis of the Dynamical Parameters on Road Materials	2366
<i>Hai-bin Wei, Han-bing Liu, He-feng Zhang, Chang-yu Li</i>	
Dynamic Effects of Moving Vehicular Loads on Continuously Reinforced Concrete Pavements on Winkler Foundation	2373
<i>Shihua Liang, Xueqiang Yang, Tian Qi, Ganbin Liu</i>	
Theoretical Analysis of Design Parameters on Semi-Rigid Asphalt Pavement with Flexible Base	2381
<i>Ruibo Ren, Hiwen Li, Zheren Wang</i>	
Seismic Hybrid Simulation of a Multi-Span Bridge	2387
<i>Xin-jiang Cai, Shi-zhu Tian</i>	
Experimental Study on Behavior of Geotextile-Reinforced Soil	2393
<i>You-chang Hu, Hai Song, Zheng-jun Zhao</i>	
Study on the Frost Resistance Test Method of Lime-Fly Ash Stabilized Material Base Course	2403
<i>Zhiguo Chen, Zheren Wang, Xiwei Wang, Yufeng Zhao</i>	
Computer-Aided Error Detection of Horizontal and Vertical Alignment in Highway Construction	2412
<i>Su Liu, Yaping Zhang, Lu Yu</i>	
An Estimate Method for Accuracy of Fitting Horizontal Alignment in Old-Highway Based on Fitting Normal Error	2418
<i>Su Liu, Yaping Zhang, Yuqin Feng</i>	
Effects of Layer Interface Conditions on Fatigue Behavior of Asphalt Pavements with Semi-Rigid Bases	2426
<i>Yan-qing Zhao, Chang-hong Zhou, Yi-qiu Tan</i>	
Damage Model Analysis of SBS Modified Asphalt Mixture	2436
<i>Ronghua Ying, Xiao Chen, Ting Wu, Zhiyong Zhang</i>	

Flutter Derivatives Identification of Aeroelastic Model of Hangzhou Bay Bridge	2444
<i>F. Y. Xu, X. L. Hu, A. R. Chen</i>	
A Discontinuous Numerical Method for Asphalt Mixture	2450
<i>Changhong Zhou, Yanqing Zhao, Zheren Wang</i>	
A Safety Evaluation Method of Existing Flexible Suspension Bridge with Double Cable	2456
<i>Li-Xia Lin, Ya-Ping Wu, Nan-Hong Ding</i>	
Relation of Stability Coefficient to Design Parameters for Curved Continuous Rigid Frame Bridges with Long-Span and High-Pier	2463
<i>Jun-li Wang, Shuan-hai He</i>	
A Study on Spatial Correlation and Power Spectrum of Natural Wind at Xihoumen Bridge	2469
<i>Ming Liu, Haili Liao, Mingshui Li, Cunming Ma</i>	
Influence Factors Analysis of Buffeting Response of Self-Anchored Cable-Stayed Suspension Bridge	2475
<i>Haixin Huang, Ying Zhang, Bo Liu, Fuyou Xu</i>	
Stiffness Reduction Factor of Reinforced Concrete Bridge Pier Considering Characters of Nonlinear	2482
<i>Pengfei Luo, Dongjian Shen, Haijie Mi, Xiangya Kong, Jianxin Wang</i>	
A Fuzzy Neural Network Technique for Crack Assessment of RC Bridges	2491
<i>Zhijian Hu, Zhaofang Hu</i>	
Experimental Research on the Combined-Method of Vacuum Well-Point Dewatering and Preloading	2500
<i>Hai-xu Yang, Hai-biao Wang, Xi-bin Dong, Jian-ming Yin</i>	
Experimental Research and Damage Model of Square Concrete-Filled Steel Tube Subjected to Cyclic Loading	2506
<i>Xi-kai Du, Tie-cheng Wang, Hongming He, Kai Yi</i>	
Function Design of Cement Stabilized Crushed Stone Drainage Base	2512
<i>Lin Tian, Xiaoguang Xie, Decheng Feng</i>	
Heat Reflection Coating Design and Performance	2519
<i>Decheng Feng, Xin Zhang</i>	
Research on Key Question of Joint of Large Span Pre-Stressed Box-Girder Concrete Continuous Rigid Frame Bridge with High Piers	2526
<i>Guanghui Wang, Chenglong Wei, Xiaoyan Liu</i>	
Research on Structural Design of Interlocking Concrete Block Pavement for Rural Road	2535
<i>Songlin Ma, Xiangshen Hou, Dayong Wu</i>	
The Analysis of Dowel and Tie Bars Effects on Curling Up in Concrete Pavement Slabs	2539
<i>Xinkai Li, Songlin Ma, Xiangshen Hou</i>	
Experimental Analysis of Interface Bond Performance of UTW	2545
<i>Yuqiang Huang, Decheng Feng, Xinkai Li, Deyou Feng</i>	
The Analysis of the Correlation between International Roughness Index and Body Ride Comfort	2554
<i>Xiangshen Hou, Xuerong Liang, Songlin Ma, Hua Wang</i>	
The Application of Anti-Rutting Agent on Improving the High-Temperature Stability of Asphalt Pavement	2562
<i>Ping Li, Hui-Shan Li, Han-Qing Liu, Yu Qian</i>	
Shake Table Test on Seismic Response of Non-Free Liquefiable Site	2569
<i>X. Z. Ling, X. Gao, L. Tang, P. J. Xu, L. Q. Wu</i>	
Rut-Resisting Capacity of the Whole Surface Course in Continuous Upgrade under Heavy Loading	2577
<i>Hongxin Guan, Qisen Zhang, Yang Xu, Libo Zhou</i>	
Integration of Fortran with ANSYS in Transient Thermal Simulation	2583
<i>Tao Zhang, Yanlin Yu</i>	
Study on Asphalt Treated Permeable Base in Permafrost Regions	2589
<i>Xi-bin Dong, Hai-biao Wang, Li-hui Li</i>	
Continuous Test for Construction Quality of Mixed Filling Roadbed	2595
<i>Caixia Wang, Guanghui Xu, Haibin Cai, Dapeng Song</i>	
An Evaluation of the Effectiveness of Geo-Textile-Binder-Aggregate System for Surface Treatment of Distressed Asphalt Pavement	2602
<i>Yanping Sheng, Shuanfa Chen, Linbing Wang</i>	
Laboratory Investigation of Reclaimed Asphalt Pavement Mixed with Pure Binder Using X-Ray CT Scanner	2611
<i>Cristian Druta, Linbing Wang, Tulong Zhu</i>	
Influence of Curing Regime on the Ductility of Ultra-High Performance Fiber Reinforced Concrete (UHPFRC)	2621
<i>Songlin Yang, Bo Diao</i>	
NURBS Strands Modeling of Prestressed Concrete Bridges	2628
<i>Dawei Yang, Qiao Huang</i>	

HIGHWAY MAINTENANCE AND MANAGEMENT

Performance Model for Pavement Maintenance of Expressway in Northwest of China	2635
<i>Yan Zhang, Chen Zhao, Wei-sheng Li</i>	
Pavement Crack Automatic Recognition Based on Wiener Filtering	2641
<i>J. Zhang, A. Sha, Z. Y. Sun, H. G. Gao</i>	
Determine Old Asphalt Pavement Milling Thickness Based on Pavement Surface Deflection Control	2648
<i>Chao-hui Wang, Xiao-zhao Wang</i>	
Stability and Reinforcement Analysis of a High and Steep Cataclastic Rock Slope	2657
<i>Zuyin Zou, Zhanyuan Zhu, Lianjin Tao, You Mo</i>	

Research on the Mechanism for Preventing Reflective Cracks in Old Cement Concrete Pavement Reconstruction	2664
<i>Liang Wang, Jinhua Song, Sheng Feng, Zhiping Jia, Yuchao Lian</i>	
Study on Prolonging Asphalt Pavement Fatigue Life Based on Vision Transverse Intervention	2670
<i>Xiaodong Pan, Peng Hu, Zhen Yang, Cheng Chi</i>	
Reliability Analysis on Pavement Skid-Resistant Performance in Expressway Tunnel	2679
<i>Jian-guo Yang, Yong-li Xie, Xiao Zhang, Wei Ma</i>	
Influence of Crack Size of Old Concrete Pavement Slab on Structure Stress of Asphalt Overlay	2686
<i>M. Zheng, S. Chen</i>	
Stability Analysis of Excavating Rock Slope Based on the Catastrophe Theory	2692
<i>Xiao-zhao Wang, Si-chang Wang</i>	
Reinforcement Learning Control for On-Ramp Metering Based on Traffic Simulation	2701
<i>Xingju Wang, Bohang Liu, Xueqin Niu, Toshihiko Miyagi</i>	
A Fatigue Test on Fiber Reinforced Asphalt Mixtures	2708
<i>Yang Guo, Yinghua Zhao, Naisheng Guo</i>	
Analysis Method for the Prestressed Concrete Bridges Based on Time-Dependent Theory	2715
<i>Hong-Lin Wu</i>	
An Analytical Method for Predicting the Service Life of Bridge Structures	2720
<i>Xiaoguang Wu, Jun Liu, Yanwei Li</i>	
A Study of Cold In-Place Recycling Mixture Used as Binder Course in China	2730
<i>Jonathan Jia, Jinhai Yan, Zhouhui Tao</i>	
Optimization of Vehicle Routing for Plowing and Snow Disposal	2738
<i>Dali Zhang</i>	
Expressway Pavement-Performance Indexes Prediction Based on Gray Model GM(1,1,?)	2745
<i>Li-juan Zhang, Fu-you Xu</i>	
Experimental Tests and Finite Element Modeling of Shrinkage Behavior in Cement Stabilized Aggregate Base	2754
<i>Qiang Li, Fujian Ni, Zaixin Li</i>	
Research on Automatic Identification Method of Pavement Sag Deformation	2761
<i>Jiaqiu Wang, Songlin Ma, Li Jiang</i>	
The Experimental Study of Effects of Herbaceous Plant Protecting Slope in Cold Area	2767
<i>Hai-biao Wang, Bi-feng Jiang, Xi-bin Dong, Hai-xu Yang</i>	
Effect of Inorganic Salts on Frost Resistance of Concrete	2773
<i>Yong Ge, Wencui Yang, Jie Yuan, Baosheng Zhang</i>	
Effect of Lightweight Aggregate with Different Moisture of Autogenous Shrinkage and Stress under Partially Restrained Condition	2779
<i>Shuhui Dong, Baosheng Zhang, Yong Ge, Jie Yuan</i>	
Dynamic Response of Saturated Asphalt Pavement Based on Three Dimensional Finite Element Simulation	2786
<i>Zejiao Dong, Liping Cao, Xiaoliang Cheng</i>	
Permanent Deformation Characteristic of Asphalt Mixture Considering Pavement Temperature Distribution	2793
<i>Liping Cao, Zejiao Dong, Lijun Sun</i>	
Basic Study on Fractal Characteristic of Pore Structure in Cement Mortar	2801
<i>Shanshan Jin, Jinxi Zhang, Shuang Li, Meng Fan</i>	
Node-Importance-Degree-Based Logistics Node Analysis	2808
<i>Li Li, Guoquan Yao</i>	
Study on Evaluation Method of Expressway Roughness	2814
<i>Shuyun Wang, Jinxi Zhang, Yaping Cui</i>	

TRANSPORTATION MANAGEMENT, ECONOMY, AND POLICY

Research on Cost Control in Logistics Enterprises	2821
<i>Lingxiang Jian, Dongbing Li</i>	
Simulation Study on a Freeway Climbing Lane	2827
<i>Xiaomeng Cai, Q. Li, Z. Wang</i>	
Hybrid Genetic and Taboo Search Algorithm for Solving the Bus Timetable Problem	2834
<i>C. Ren, W. Lu, L. Zhao, C. Yin, H. Wang</i>	
Analysis of the Competitive Strategy of the Core Enterprises in Virtual Intermodal Freight-Transportation Enterprise	2840
<i>Dapeng Liu, Xiamiao Li, Minghua Zeng, Xiaodong Cao</i>	
Optimization of Transportation Enterprises Pricing Strategies	2846
<i>Bailing Wang, Hui Li</i>	
Coordinated Development between Transportation System and Socio-Economic System Research Based on SEM	2852
<i>Shengrong Lu, Huiyuan Jiang, Yao Liu</i>	

Volume 5

Study on the Structure of Digitized Transport Networks and Evaluation of Some Logistics Policies	2858
<i>ZhongZhen Yang, Yonglei Jiang, Lianjie Jin</i>	
Research on Optimization of Crew Scheduling of the Passenger Dedicated Line Based on a Genetic Ant Colony Algorithm	2866
<i>Z. Tian, S. Ni, T. Chen, Q. Song</i>	
Analysis for Principal-Agent Relationship between Owner and Construction Agent of Agent-Construction Project	2873
<i>Wenyi Zhao, Xuancang Wang, Ting Zhan</i>	
Research on Calculation of Important Parameters of Freeway Financial Post-Evaluation	2878
<i>Y. Wang, S. Zhu, H. Wang, W. Xin, M. Li</i>	
Empirical Research on Applicable Principle for Toll Mode of Highway	2886
<i>Ying Zhang, Guang Yang</i>	
Research on Travel Behavior Changes under Vehicle-Use-Restriction Measures during the Olympic Games.....	2893
<i>Chun Yan Li, Sheng Yang Sun, Ji Fu Guo</i>	
Study on Congestion Pricing Model of Bus Lane Mixed Use by Carpool Vehicles	2900
<i>Dawei Pan, Wei Deng, Renjie Qian</i>	
Principle Analysis and State Evaluation on Coordinated Development among Transportation Modes.....	2906
<i>Hai-bo Zou</i>	
Evaluating the Equity Impacts of Rural Road Investment Projects on Household Welfare Based on a Quantile Regression Approach: Evidence from Fujian Province.....	2913
<i>Y. Tian, Y. Li, X. Chen</i>	
Study on Using OD Traffic Flow to Identify the Special Boundary of the Expressway Influence Zone.....	2920
<i>Li-Ying Situ, Shun-Ying Zhu, Hong Wang</i>	
Transport Strategy for Sustainable Development of Jiao Dong Economic Region	2927
<i>S. Wang, S. Zhang, L. Ren</i>	
Research of Road Transportation Sustainable Development Based on Ecological Footprint Model.....	2935
<i>Xiao-xia Wang, Lei Fang, Xiao-xia Wang, Jian-feng Lu</i>	
A Study on Signal Timing Optimization of Individual Intersections Based on an Ant Colony Algorithm.....	2942
<i>Ling-jie Li, Xiao-kuan Yang, Zhi Xu</i>	
Study on the Optimization of Vessel Scheduling Design Based on Soft Time Windows under Voyage Charters	2951
<i>Ming Sun, Feifei Fei, Xuefeng Wang</i>	
Congestion Pricing Revenue Redistribution Strategy Based on Traffic Behavior.....	2957
<i>Z. B. Zhao, Y. Tian, Y. Chen</i>	
Investment and Financing Influence Analysis and Countermeasures for Highway Construction in the Period of China's 11th Five-Year Plan	2963
<i>Ruoqi Zhang, Minglan Chen, Xiurong Cai, Fang Liu</i>	
A Study on the Financing Mode of Assets Securitization in Port Project.....	2969
<i>Su Yu</i>	
Study on the Capacity of Right-Turn Movement under Pedestrians' Influence at Signalized Intersections	2976
<i>Wanchao Zhang, Xiaokuan Yang, Zhi Xu</i>	
Ramp Metering Strategies in a Corridor Network.....	2983
<i>Qiong Tian, Haijun Huang, Hai Yang</i>	
Efficiency Loss of the Multiclass, Multicriteria Stochastic User Equilibrium Traffic Assignment against Stochastic System Optimization	2990
<i>Xiaojun Yu, Haijun Huang, Tianliang Liu</i>	
The Application of TUXEDO Middleware in a Network-Based Train Working Diagram Compilation System	2997
<i>Hongxia Lu, Shaoquan Ni, Jinshan Pan, Bin Liu</i>	
Analyzing the Effects of the Growth of Maritime Industries on the Regional Economy with Dynamic Inverse Matrix	3004
<i>Yajun Li, Zhongzhen Yang</i>	
Optimization Theory of Regulation on Rural Transit Market Based on Rule of Transport Equality.....	3011
<i>Changan Zheng, Maosheng Li, Qisen Zhang</i>	
Analyzing the Motivation of Queue-Jumping Driving-Action on Transportation Systems by Prospect Theory.....	3019
<i>Maosheng Li, Qinglong Zhong, Dafei Chen</i>	
Modeling Passenger Choice Behavior in Chinese Multi-Airport Regions	3028
<i>Jiangtao Liu</i>	
Design and Realization of Decision-Making and Analysis Assistant System on National Integrated Transportation Information	3034
<i>J. Zhang, C. Shao, C. Zhang, Z. Ma</i>	
Pricing Model for Expressway with Elastic Demand	3042
<i>Huapa Lu, Xinxin Yu, Haiwei Wang, Changzhi Bian</i>	
Research on Conversion Coefficients between Bicycle, Electric Bicycle, and Pedestrian on Urban Road Intersection	3049
<i>Ai-Zeng Li, Xin-Sheng Song, Wei Wang, Wen-Quan Li</i>	
Simulation Analysis of Merging Area on Urban Expressway in Alternate Rules Based on Cellular Automata Model	3055
<i>Shun Fang, Xiaoning Zhang, H. M. Zhang</i>	

A Study on the Bus Delay Model at Bus Stops	3062
<i>Zhi Xu, Vincent Kwami Akpakli, Xiao-kuan Yang</i>	
A Google-Map Integrated Web-Based Stated Preference Survey for Modeling Personal Mobility	3072
<i>Kai Liu, Yasuo Asakura</i>	
Evaluation of Supervision Engineer's Control over Investment Based on AHP	3079
<i>T. Lu, Q. Li</i>	
Technical Efficiency of Container Terminals in China Using a Multi-Activity Data Envelopment Analysis Model	3086
<i>Ying Li, Lixin Miao</i>	
Expressway Operation Financial Benefit Evaluation under Uncertainty	3093
<i>Liye Zhang, Chang Li</i>	
Research on the Differences in Regional Economy and Transportation among the Three Regions in China	3099
<i>Kechao Sun, Qingnian Zhang, Xinjie Zhang</i>	
Evaluation and Optimization of Public Transport Subsidies for Alternative Energy	3105
<i>Yuan Fang, Xiqun Chen, Xinmiao Yang</i>	
Study on the Control Strategy of Gas Injection of Gas Engines	3112
<i>Song Gao, Yu-ming Li, Ling-yong Ling</i>	

LOGISTICS

Design of Intelligent Decision Module for Storage Location Assignment in AS/RS	3118
<i>Yanru Zhu, Guiliang Zhou, Lina Mao</i>	
Optimization of Open Vehicle Route to Reduce Fuel Consumption Based on Genetic Algorithm	3124
<i>Yong Peng, Haiying Zhu</i>	
Research on Location of Railway Logistics Center	3131
<i>Xionghuan Jin, Haihong Xie, Bo Jiang, Lan Xu</i>	
Study on Logistics Center Location Bi-Level Programming Model and Algorithm Based on Competition	3137
<i>Xiaojun Guan, Xifu Wang, Cuihua Wang, Yana Yan</i>	
A Model and Heuristic Algorithm for Inventory Routing Problem in Emergency Logistics	3147
<i>Binglei Xie, Xiaoming Hu</i>	
Study on Multi-Dimensional Structure Model for Agricultural Products Logistics Organization in China	3154
<i>Xinsheng Yao, Guangyin Xu, Jianhua Qu, Jianguang Wei, Shasha Fan</i>	
Mean-CVaR Model of Wholesale Price Contracts and Dual Purchase Contracts in the Supply Chain	3160
<i>Y. G. Mu, Q. Mai, Z. B. Zhao, Y. J. Feng</i>	
Structure System Model of Modern Logistics	3167
<i>Lijun Chen, Xuewu Chen</i>	
Multi-Objective Interval Number Model of Intermodal Transport under Uncertain Environment	3174
<i>Longhai Yang, Xiaowei Hu, Jian Wang</i>	
A Model on Risk Evaluation for Emergency Guarantee Mechanism of Food Logistics	3180
<i>Xiangrong Huang, Ruhe Xie</i>	
Logistics Distribution Information System Based on 3rd Generation Mobile Communication Technology	3187
<i>Zhongwei Wang, Hongbo Wang, Yan Pang</i>	
Theory Study on Correlation Stability and Profit Allocation of Supply Chain	3197
<i>Hui Hu, Chuantao Wang</i>	
Optimal Dynamic Substitution Policy for Components in an Assemble-to-Order System	3204
<i>Yongqiang Liu, Qing Chang, Xiaohong Zhang, Hui Gao</i>	
Coordination Policies of Supply Chain Where Deterioration Begins at a Random Time Point	3210
<i>Yongqiang Liu, Qing Chang, Xiaohong Zhang, Hui Gao</i>	
Grey Correlation Analysis on Logistics Energy Consumption	3216
<i>Zhiyi Lei</i>	
Research on Taboo Simulated Annealing Combinatorial Optimization Algorithm of Location Routing Problem with Pickups and Deliveries	3222
<i>Dawei Hu, Dengdian Xuan, Huigang Lin, Xiaofen Guo</i>	
Electrical Appliance Reversion Logistics Network Planning	3229
<i>Gang Zhao, Xi Nan, Kecong Lu</i>	
A New Organizational Structure Pattern of Owners Based on Multi-Project	3236
<i>Qiaoting Dong, Yingming Shen, Huijun Li, Zhijun Chen</i>	
Dynamic Alliance of Road Logistics Enterprise Based on Ant Colony Algorithm	3243
<i>Xiaobo Liao, Yamin Huo</i>	
Optimization of Emergency Material Dispatch Problem Based on Adaptive Genetic Algorithm	3249
<i>Xuejun Feng, Qinying Zhang, Wei Wang</i>	
An Algorithm for Vehicle Routing Problem with Soft Time Windows Using Tabu Search	3257
<i>Lixin Zhang, Huimin Niu</i>	
Research on Dynamic Safety Stock Based on Short-Term Weather Forecasting	3263
<i>Wei Liu, Shuzhi Zhao, Wei Wang, Bo Peng</i>	
Study of Operational Characteristics of HAZMAT Vehicles Based on GPS Data	3269
<i>Zhenguo Liu, Xiaofa Shi, Ying Hui</i>	

Risk Evaluation Model for Construction of a Logistics Park Based on Principal Component Analysis	3276
<i>Yuzhou Wang, Qing Huang, Bin Chen, Dewu Liu</i>	

VEHICLE OPERATIONS TECHNOLOGIES

Parameter Sensitivity Analysis of Accident Reconstruction Model Based on Orthogonal Design	3283
<i>Tiefang Zou, Zhi Yu, Ming Cai, Jike Liu</i>	
Study on the Key Technology of Captive Model's Numerical Test	3289
<i>Xiao Wang, Bing Xiao, Bo Yang, Aiguo Shi</i>	
Simulation and Analysis for Stick-Slip Vibration of Locomotive with Hollow-Shaft Drive System	3299
<i>Jianxin Liu, Huaiyun Zhao, Wanming Zhai</i>	
Fatigue Life Prediction of Rubber Nodes	3306
<i>Huichao Wu, Pingbo Wu, Qingqun Lan</i>	
Application Research of GPS Based on Google Earth Platform	3312
<i>Zhen-Bo Wang, Rui-Xiang Chen, Niandong Jiang, Hui Zhang, ZhiRen Sha</i>	
A Study of the Fuzzy PID Control Over the Hydraulic Semi-Active Suspension in Consideration of Automotive Engine and Passenger-Seat System	3318
<i>Xiang Chen, Guo-fang Li, En-yong Wang, Xin-jia Jiang</i>	
Study on Power Control of Electric Power Steering System	3327
<i>Chunyan Mu, Jingnuo Yu, Wansheng Zhao, Jianxia Liu</i>	

RAIL AND TRANSIT SYSTEMS

Simulation of Wheel/Rail Noise of High Speed Train Running on the Slab Track	3333
<i>Xinwen Yang, Caiyun Yan</i>	
Study of Influence of Subway Station Excavation on Existing Metro Deformation	3339
<i>Yun-Peng Li, Zhi-Yin Wang</i>	
Influence of Longitudinal Connection Mode of Ballastless Slab Track on Vibration Characteristic of Train-Ballastless Slab Track-Subgrade System	3346
<i>Qing-Yuan Xu, Zhi-Ping Zeng</i>	
Vehicle Semi-Active Suspension System Simulation with Variable Structure Control Method	3354
<i>Zhongji Li, Huanyun Dai</i>	
Structural Noise of Longitudinal Stiffened Concrete Cylindrical Shell	3361
<i>Weiping Xie, Liangming Sun</i>	
Research on Greedy Train Rescheduling Algorithm	3368
<i>Z. He, H. Li, J. Miao, L. Meng, B. Mao</i>	
Impact on Regularity of Track from Pile Underpinning of Light Railway Bridge	3378
<i>Xiangguo Li, Hailong Wang, Quan Zhou, Jianqing Bu, Musong Li</i>	
Train-Carried Rail Signal Parameters Test System Based on Spectrum Correction Method and Virtual Instrumentation	3387
<i>Y. Guo, G. Cheng, S. Sha</i>	
Study on Style Protection and Urban Traffic Planning of Harbin Jingyu Street	3393
<i>X. Yao, Y. Zhang, Y. Liu</i>	
Study on the System Design and Optimal Models of Urban Rail Transit Traction Calculation System	3399
<i>Hongbo Liu, Hongxia Lu, Miaomiao Lu, Jie Zhang</i>	
Characteristic Analysis of Urban Rail Transit Network Considering Demand and Operation: A Case on Shanghai	3406
<i>C. Yang, Y. Wang</i>	
Adaptability Assessment and Maintenance Technology Research of Existing Railway Line Speed Increases to 200 km/h	3413
<i>Ping Wang, Rong Chen, Xiaoping Chen</i>	
Analysis on Mechanical Performances of High-Speed Railway Transition Curves	3420
<i>Xiangguo Li, Musong Li, Chao Ma, Jianqing Bu, Liangliang Zhu</i>	
Research on Dynamic Measuring System and Model of Novel High Speed Railway Vehicle Bogie	3428
<i>X. Wang, J. Su, Y. Lin, D. Zhou</i>	
Empirical Research on Urban Rail Transit Operation Performance Based on FCE-AHP	3435
<i>Xinlong Jiao</i>	
The Application of Functionally Gradient Material to Problems of Wheel-Rail Contact	3443
<i>Jun Zhang, Liping Sun, Shengwu Wang, Xuesong Jin</i>	
Analysis about Business Investing and Financing Models of Urban Rail Transit	3449
<i>Xiao Tian, Cui Hui Xie</i>	
Characteristics of Fundamental Data for Railway Maintenance and the Construction of Integrated Data Platform	3456
<i>FuTian Wang, Mei Sun, Jianglin Zhou</i>	
Track Structure Vibration Characteristic Analysis Based on FEM 3D Model	3463
<i>Linya Liu, Zhuqing Lu Lu</i>	
Measurement and Simulation Study on Ground Subsidence Induced by Shield Tunneling in Sandy Stratum	3469
<i>Haixia Sun, Wen Zhao, Lihua Lu</i>	
Author Index	