

2010 International Conference on Optoelectronics and Image Processing

(ICOIP 2010)

**Haiko, Hainan, China
11 – 12 November 2010**

**Volume 1
Pages 1-728**



**IEEE Catalog Number: CFP1031L-PRT
ISBN: 978-1-4244-8683-0**

2010 International Conference on Optoelectronics and Image Processing

ICOIP 2010

Table of Contents

Volume - 1

Preface - Volume 1	xvii
Committees - Volume 1	xviii
Reviewers - Volume 1	xx

Proceedings of the 2010 International Conference on Optoelectronics and Image Processing—Volume 1

A Decoupling Control Method Based on Backstepping Control and ESO Compensation	3
<i>He-ping Liu, Zhuang-ju Li, and Yun-jian Wang</i>	
A Fluorescence Optic Fiber Temperature Sensor Using Visible Wavelengths	8
<i>Jinling Wu and Junhai Yang</i>	
A Fuzzy Support Vector Machine for Imbalanced Data Classification	11
<i>Xiaohong Fan and Zongyao He</i>	
A Hand Shape Recognition Method Research Based on Gaussian Mixture Model	15
<i>Lingming Sun, Wei Wei, and Fu Liu</i>	
A Hierarchical Framework for 2D Data Matrix Recognition	20
<i>Anan Liu, Tianyue Dang, Dong Han, and Zhaoxuan Yang</i>	
A Kind of Energy Consumption Modeling Method for Heat-Setting Machines	24
<i>Zhang Yibo, Ren Jia, Zhao Xinlong, Pan Haipeng, and Dai Wenzhan</i>	
A Lane Detection Method for Lane Departure Warning System	28
<i>Jia He, Hui Rong, Jinfeng Gong, and Wei Huang</i>	

A Method of Error Separation for Fiber Optical Gyroscope Based on Star Sensor Measurement	32
<i>Peng-cheng Nie, Jing Yao, and Dong-yun Yi</i>	
A Modified Segmentation Algorithm for Infrared Image	36
<i>Li Jingfu, Long Zhijun, Li Yanze, and Tang Rongfang</i>	
A Modified SUSAN Corner Detection Algorithm Based on Adaptive Gradient Threshold for Remote Sensing Image	40
<i>Wei He and Xiaolian Deng</i>	
A Multifunction Snapshot ROIC Design for Low and High Background Application	44
<i>Bin Hu, Ping Li, and Ai-wu Ruan</i>	
A New Algorithm for Vehicle Routing Problems with Capacity Limited Based on Minimum Spanning Tree	47
<i>Yang Yuewu</i>	
A New Approach to GPS Carrier Phase Ambiguity Resolution Using Single Epoch Single Frequency Data	51
<i>Fan Qian, Xu Chengquan, and Zhang Ning</i>	
A New Approach for Moving Shadow Detection	55
<i>Si-ming Huang and Bing-han Liu</i>	
A New Horizon Electronic Image Stabilization Algorithm Based on SVM	59
<i>Xue Yantai and Wu Tao</i>	
A New Identification Technique Based on Binocular Visual System	64
<i>Feng Ruicheng, Rui Zhiyuan, Jin Wuyin, Zhang Chi, and Li Haiyan</i>	
A New Method To Predict Fatigue Crack Growth Life for the Armored Hull	67
<i>Wang Hongyan, Yang Tao, and Shang Qigang</i>	
A New Rejuvenation Approach of Software Aging	71
<i>QingE Wu, Yong Qi, XiaoNing Du, and ZhenYu Han</i>	
A New Vector Method to Diagnose Individual Misfiring Cylinder Based on Crankshaft Angular Vibration	75
<i>Hua Chunrong, Yan Bing, Dong Dawei, and Xu Mingheng</i>	
A Novel Approach for Image Enlargement	79
<i>Shih-Chieh Lin, Yu-Che Chien, Chih-Ting Chen, and Peng Chiangsieh</i>	
A Novel Controller for Energy-Efficient and Wide-Speed-Range Drive for Permanent Magnet Synchronous Motor Based on the Interconnection and Damping Assignment Passivity Based Control	83
<i>Li Hongmei, Wang Xichen, Zheng Shusong, Bao Zhengjie, and Ni Xiaojun</i>	
A Novel Fiber CAN Hub and Its Networking Schemes	88
<i>Feng Wei, Zhiwei Qian, and Honglin Ding</i>	
A Novel Method for the Distortion Modification of Camera Lens	92
<i>Minghua Pan and Guoli Zhu</i>	

A Novel Method of Spectrum Extraction Based on Fourier Telescopy in the Laboratory	96
<i>Zhang Yan, Yang Chunping, Guo Jing, Kang Meiling, and Wu Jian</i>	
A Research of Image Identification Signal Processing for Longitudinal Rip of the Transport Belt	100
<i>Tiezhzhu Qiao and Jiaxin Zhang</i>	
A Review of Some Available Human Neck Finite Element Models in Vehicle Crash Conditions	104
<i>Wang Fang, Li Guibing, and Yang Jikuang</i>	
A Road Safety Evaluation Method Based on Clustering Neural Network	108
<i>Zhenguo Yi, Yunpeng Wang, Daxin Tian, Guangquan Lu, and Haiying Xia</i>	
A Robust Cooperative Collision Warning Algorithm for Unreliable Wireless Communication Channel	112
<i>Jian-guo Xing and Shu-fang Liu</i>	
A Robust EGR Control System for Gasoline Engine Using PID	116
<i>Yang Xiaolong, Huang Ming, Liu Jingping, and Liu Biao</i>	
A Rule of Updating Position in Microscopic Pedestrian Model	120
<i>Guo Renyong</i>	
A Simple and Efficient Method for Verification of Vehicle Speed Measuring System	124
<i>Fang Qiang and Huang Zhenyu</i>	
A Simple Method of Tempered Glass Insulator Recognition from Airborne Image	127
<i>Xinye Zhang, Jubai An, and Fangming Chen</i>	
A Simplified 3D Gaze Tracking Technology with Stereo Vision	131
<i>Ke Zhang, Xinbo Zhao, Zhong Ma, and Yi Man</i>	
A Speckle Reduction and Characteristic Enhancement Algorithm to Ultrasonic Image Based on Wavelet Technology	135
<i>Yue-qin Li, Jin-ping Li, and Lei Han</i>	
A Statistical Method of Energy Consumption Based on Energy-Tree	139
<i>Ren Xiwei, Ren Gongchang, Yang Fan, and Song Anling</i>	
A Study of Distributed Traffic Information Acquisition Based on Clustered VANET	143
<i>Yizhi Wang, Jianming Hu, Qi Wang, and Yi Zhang</i>	
A Study on Coaxial Type DBD Decomposing NO/N ₂ Mixture Gas by Optical Emission Spectrum	149
<i>Zhinan Liu, Yixi Cai, Jun Wang, Chuanhong Sun, and Wenhe Han</i>	
A Study on Lead Acid Battery and Ultra-capacitor Hybrid Energy Storage System for Hybrid City Bus	154
<i>Dai Haifeng and Chang Xueyu</i>	

A Study on Pedestrian Injuries Based on Minivan and Sedan Real-World Accidents	160
<i>Jin Nie, Jikuang Yang, and Fan Li</i>	
A Study on Ripple Effects of Logistics Industry in China	164
<i>Zhang Jiansheng and Tan Wei</i>	
A Study on the Evaluation Method of the Freeway Traffic Accidents Forewarning System	168
<i>Chu Zhaoming and Cheng Lin</i>	
A Study on the Outside Sensitive Damping Valve of Hydro-pneumatic Suspension for Vehicles	172
<i>Xun Wang and Si-zhong Chen</i>	
A SUMO-Based Ontology of Expressway Network for Domain Knowledge Management	177
<i>Guo Junjie and Tang Liantao</i>	
A Video Tracking System for Limb Motion Measurement in Small Animals	181
<i>Qi Xu, Cong Cai, Houlun Zhou, and Hangkong Ren</i>	
Adaptive Video Coding Scheme Based on Spatial Resolution Regulation on Low Bit-Rate	185
<i>Haohao Song, Zihua Qiu, and Jian Gu</i>	
AHP Application in the Selection of Routes for Hazardous Materials Transportation	189
<i>Yang Jun and Cheng Wei</i>	
An Edge Detection Method Brought to Videogrammetric Systems for Micro-platform	192
<i>Song Xiaodong, Li Hang, Si Donghong, Xu Haili, and Xue Yujun</i>	
An Effective Method of Automatic Image Mosaic for Remote Video Monitoring System	196
<i>Zhao Zhenbing, Wang Rui, and Zhang Tiefeng</i>	
An Enhanced Algorithm for Forest Fire Detection Based on MODIS Data	200
<i>Liu Shixing, Zhang Yongming, Song Weiguo, and Xiao Xia</i>	
An Equilibrium Analysis of Outsourcing Service Competition with Asymmetric Cost	204
<i>Hui-qiu Wu, Yan Li, and Bo Sun</i>	
An Idea to Simulate the Environmental Vibration Caused by Urban Rail Traffic	208
<i>Cui Gaohang, Tao Xiabin, Wang Futong, and Chen Xianmai</i>	
An Improved Edge Preserving Smoothing Method (IEPS)	214
<i>Georgia Rugumira, Gang Wang, Xin-Lin Huang, and Joseph Wambura Matiko</i>	
An Improved LIEP Method Utilizing Electrothermal Technology	217
<i>Qiaoling Ji, Yi Jiang, and Xiaowei Ji</i>	

An Improved Method for Image Denoising Based on Gauss Curvature and Gradient	221
<i>Qiu Shufang and Zhang Xiaoming</i>	
An Integrated Analysis Approach for Dynamic Energy Distribution of Off-Road Vehicle Powertrain	225
<i>Gao Siyuan, Zhao Changlu, Han Kai, and Zhang Fujun</i>	
An Optimal Torque Controller Based on Iterative Learning Control for Switched Reluctance Motors for Electric Vehicles	230
<i>Zheng Yi, Xiao Li, Sun Hexu, and Dong Yan</i>	
Analysis and Optimization of Aerodynamic Performance of Train at Transitional Zone Between Cut and Wind-Break Walls	234
<i>Wang Bingshan</i>	
Analysis of Factors Affecting High-temperature Stability of Asphalt Mixture Based on Grey Relation Entropy	239
<i>Liu Qinan, Ma Tao, and Li Chunlei</i>	
Analysis of Falsework Foundation Deformation Effect on Existing Highway Safety	243
<i>Wang Jun and Han Xuwei</i>	
Analysis of Individuals' Activity-Travel Behavior Based on a Structural Equation Model	247
<i>Fan Rui, Wang Wei, and Yang Min</i>	
Analysis of Spatial-temporal Coupling for Urban Travel Demand and Land Use	251
<i>Peng Hu, Wang Jifeng, Jiang Yulin, and Yang Rui</i>	
Analysis on Beam Over-deflection Affecting the Bearing Performance of Continuous Rigid Frame Bridge	255
<i>Wang Rongxia, Jin Kexi, and Li Xu</i>	
Analysis on Quality Control in Food Supply Chain Based on Dynamics Evolutionary Game Model	259
<i>Xin Ma</i>	
Analysis of the Risk Pooling to Inventory Management for a Three-Stage Supply Chain	263
<i>Ping Yao, Dali Jiang, and Tianju Zhu</i>	
Analysis the Impact of the RFID Technology on Reducing Inventory Shrinkage	267
<i>Deng Sheng, Fan Tijun, and He Weili</i>	
Application of Contrast Source Inversion Algorithm for Reconstructing Complicated Targets from Experimental Transverse Electric Data	271
<i>Jinghong Miao, Changyun Miao, and René Marklein</i>	

Application of Fuzzy Comprehensive Evaluation Model in the Risk Assessment for Logistics Park Construction	275
<i>Wang Yuzhou and Chen Bin</i>	
Application of Multi-scale Wavelet Kernel in Traffic Flow Forecasting	279
<i>Yu Fang, Jizhen Niu, and Fan Wang</i>	
Application of Steel Banded Reinforcement Technique in Rural Road and Bridge Rebuilding	283
<i>Jun Yang</i>	
Application of Trigger Point Mechanism in Time Decision-Making of Freeway Reconstruction and Extension	286
<i>Cheng Haiqian, Guan Hongxin, and Liu Tiexin</i>	
Applied Research on the Impedance Matching Balance Transformer of Three-Phase to Four-Phase Used in AT Traction Power Supply System	289
<i>Dajiang He, Longfu Luo, Liangyuan Liu, and Jing Xiao</i>	
Applying Safety Audit and Speed Management Concept in Freeway Project	292
<i>Zhong Xiaoming</i>	
Assessment of Residue Fatigue Life of Crankshaft Based on Theory of Fatigue Damage	298
<i>Ai-ling Shen, Wen-hua Yuan, Zhou Dongyi, and Yu-mei Liu</i>	
Asynchronous Agent Based Computing for Military Vehicle Scheduling and Planning	302
<i>Zhu Zhaoqian, Zhang Wenming, and Ma Guangshun</i>	
Automotive Supply Chain Management Research	306
<i>Yanping Liu, Baozhong Zhang, and Yong Wang</i>	
B-Mode Relational Degree Analysis in Thermal Process Modeling	309
<i>Yuan Yifang, Sun Jianping, and Tian Jing</i>	
Broken Railway Fastener Detection Based on Adaboost Algorithm	313
<i>Yiqi Xia, Fengying Xie, and Zhiguo Jiang</i>	
CDGPS-Based Calibration of Odometer's Scale Factor with Temperature for Vehicle Navigation System	317
<i>Libin Zhu and Wei Wang</i>	
CFD Simulation of Vault Temperature for Vehicle Fire in Large Cross-Section Road Tunnel	321
<i>Han Xin and Cong Beihua</i>	
Characterization of Smoke Particles Using Polarization Modulated Scattering	325
<i>Qixing Zhang, Yongming Zhang, Binhai Liu, and Shenyong Liu</i>	
Color Watermarking Algorithm Based on Modified QFFT and DCT	328
<i>Zuo Wei and Wang Weijiang</i>	
Competitive Location Model of Logistics Node Integrated the Level of Logistics Service	332
<i>Han Shuang, Ji Xingzhao, and Wang Xiaoxia</i>	

Compositive Assessment Model of Flame Combustion Stability Based on Grey Theory	336
<i>Li Jie, Liu Shi, Lei Jing, Huang Yaosong, Li Zhihong, Wang Fuzhen, and Wang Zepu</i>	
Comprehensive Evaluation and Spatial Distribution Analysis of Logistic Development in Xinjiang	340
<i>Xiaoyan Quan, Li Jiao, and Hongru Du</i>	
Construction of Underground Transportation Hub Safety Monitoring Simulation System	344
<i>Shufeng Liu, Jia Wang, Zhixin Chen, and Lei Zhang</i>	
Correlation Analysis between Airfoil Icing and Icing Cloud Conditions Based on PLS Methods	348
<i>Chengxue Liu, Yongzhong Wang, Lei Chang, and Jun Li</i>	
Cost Accounting/Control Study on Logistics of Specialized Automobile Enterprise Based on Object-Standard-Activity-Based Costing Method	352
<i>Hong-tao Yang</i>	
Creep Monitoring for Subway Station Structure by Fiber Bragg Grating Sensors	358
<i>Y. Zhou and Y.F. Wang</i>	
Crucial Issues in Logistic Planning for Electric Vehicle Battery Application Service	362
<i>Haiming Wang, Haifeng Xu, and Alex K. Jones</i>	
Decision Analysis to Solve Misplaced Inventory with RFID	367
<i>Ren Chi and Fan Tijun</i>	
Demand Feature Identifying for Emergency Goods under Earthquake Rescue Logistics by Vague Set Based BP Neural Network	371
<i>Chang Chunguang, Ma Xiang, Song Xiaoyu, and Kong Fanwen</i>	
Design and Optimization of Video Compression System Based on H.264	376
<i>Shuxin Yin and Chunlei Jiang</i>	
Design and Implementation of Embedded Data Acquisition System for Mobile Vehicle	380
<i>Li Nan, Zhou Zhou, Li Qingjiang, Yin Qinghong, Sun Zhaolin, Xu Xin, and Xu Hui</i>	
Design and Implementation of Intelligent Monitoring System for Ship-Hull Status Based on CAN Bus	384
<i>Yang Shenhua, Zheng Minjie, Wang Xinghua, and Chen Chunsen</i>	
Design and Implementation of Simulation Maintenance Training System for a Certain Type of Command and Control System	389
<i>Wei Zhang, Zhichao Shao, Changjun Wei, Dawei Wang, and Jianhua Tu</i>	
Design and Implementation of the Remote Management System for Electric Public Vehicles' Batteries Data	394
<i>Jun Bi, Lu Wang, and Long-tao Qi</i>	

Design and Optimization of Autopilot System of Flight Simulator	397
<i>Jian-shu Gao and Jing Li</i>	
Design and Simulation WEEE Reverse Logistics Network in Guangxi	403
<i>Liu Xianfeng, Qiu Jianwei, and Liu Meilian</i>	
Design for a New Type Automobile MRF Absorber	409
<i>Li Liqiang, Yan Zhanhui, Li Xiaodong, and He Huichao</i>	
Design of Motor Driver for a Two-Wheeled Self Balancing Vehicle	413
<i>Wang Lujun and Xu Yong</i>	
Design of Multi-channel Image Superimposition System Based on FPGA	417
<i>Li Yong, Chang Tianqing, Bai Fan, and Zhang Lei</i>	
Development and Application of Tunnel Geological Prediction Online Consultation Platform	421
<i>Meng Lubo, Li Tianbin, and Fang Xing</i>	
Development of a Power Management System for Electric Vehicles with Multiple Power Sources	425
<i>Chi-Sheng Tsai and Ching-Hua Ting</i>	
Development of a Single Wheel Test Bench for Anti-lock Brake System	429
<i>Renguang Wang, Bin Wang, and Hanwen Sun</i>	
Development Strategy of Green Logistics Based on SWOT Matrix—A Case Study	432
<i>Jianliang Peng</i>	
Discussion on Section Construction Techniques for Continuous Bridge of Large-Span Concrete	436
<i>Jun Yang</i>	
Discussion on the Methods for Mass Excavation and Embankment in Silt	439
<i>Jun Yang</i>	
Distributed Optimization Model and Solution of Home Appliances Logistic	442
<i>Liu Tibin</i>	
Double-Coupler Fiber Ring Resonator Gyroscope	448
<i>Shuguang Zhu, Guangqi Huang, Weibing Fan, Wei Liu, Yubo Tang, Qian Mo, Xiaofeng Hu, and Zhiqiang Li</i>	
Driver Factor Characteristics of Traffic Safety on the Low Traffic Volume Qinghai-Tibet Highway in China	452
<i>Jiang-bi Hu and Yang Yang</i>	
Dynamic Analysis About the Effect of Foundation Pit Excavation Adjacent to the Existing Railway	456
<i>Han Xuwei and Wang Jun</i>	
Dynamic Analysis of Light-Weight Aggregate Concrete Boards in the Renovation of Bridges	460
<i>Shun-wei Chen, Dong Liang, Xin Zhao, Dan-dan Kong, and Xia Li</i>	

Effect of Common Rail System on Vehicle Engine Combustion Performance	464
<i>Wang Ping, Ji Chunjun, Tang Bin, and Song Xigeng</i>	
Effects of Higher Order Mode Waves on Muffler Performance	468
<i>Zeng Falin, Li Dehua, and Zeng Yuping</i>	
Efficiency Analysis of Multi-Functional Lane in Urban Expressway Based on Simulation	473
<i>Yu Bai, Di Wu, and Xiaoguang Yang</i>	
Electronic Control Unit Development for Unit Pump Diesel Engine	479
<i>An Xiaohui, Liu Bolan, Cui Tao, Xie Zhenxing, and Zhang Fujun</i>	
Energy Supply Strategy for Battery Electric Vehicles in China	483
<i>Jianhong Ye, Xiaohong Chen, and Qing Zhao</i>	
Engine Fault Diagnosis Based on Wavelets Packet and Neural Networks	488
<i>Chen Anyu, Jia Jide, Dai Xiliang, and Zhu Zhongkui</i>	
Establishing the Impact Evaluation Indicators System for Rural Road Investment Projects: Evidence from Fujian Province, China	492
<i>Yuefeng Chen, Yuan Tian, and Xiaohong Chen</i>	
Estimation of Rear-ends Accidents Caused by the Delay of Controlling Behaviors	498
<i>Dan Yu, Zhixiang Hou, Jiajia Li Jian Yang, and Xiaomei Yin</i>	
Evaluating the Performance of Link Travel Time Estimation Based on Floating Car Data	504
<i>Beipeng Mu, Jianming Hu, Tingting Zhao, and Yi Zhang</i>	
Evaluation Emergency Transport Performances in Response for Hazardous Materials Road Transportation Accident Based on SPN: A Case of Jiangsu	509
<i>Yan Yuanchun, Liu Haoxue, and Zhang Yong</i>	
Evaluation for the Risk of Virtual Enterprise Based on Entropy-Weighted Fuzzy Comprehensive Evaluation Model	514
<i>Tang Qiusheng and Zhang Lihua</i>	
Evaluation of Land Economical Use for Expressway Construction	518
<i>Li Xia, Chen Mingming, Cui Hongjun, and Ren Xilong</i>	
Evolution of Knowledge Sharing Model in the Development of Supply Chain Management	522
<i>Changli Feng, Yi Zhang, Jian Li, and Tianpeng Li</i>	
Experimental Analysis on Sound Sources of Calibrating Acoustic Emission Sensitivity	526
<i>Yong-mei Hao, Xiao-hui Gu, Chang-shun Zhang, and Xiu-kun Ge</i>	
Experimental Study of Air-Fuel Ratio Control Strategy for a Hydrogen Internal Combustion Engine	530
<i>Zhong-yu Zhao and Fu-shui Liu</i>	

Experimental Study of Non-thermal Plasma Injection System Converting NOx in Simulated Diesel Emissions	534
<i>Jing Wang, Yixi Cai, Jun Wang, and Dongli Ran</i>	
Experimental Study on the Deflagration Characteristics of the Liquid Propellant Spray Electrical Ignition and the Simplified Model Calculation	538
<i>Yu Yonggang, Zhao Na, Li Ming, and Zhou Yanhuang</i>	
Exploiting the Symmetrical Characteristic of Faces to Classify Face Images	542
<i>Caikou Chen and Yong Xu</i>	
Face Detection Using MATLAB	545
<i>Abhinav Phirani, Sourav Kumar Patel, Arghya Das, Radhika Jain, Vaibhav Joshi, and Hari Singh Dhillon</i>	
Fatigue Driving Detection System Design Based on Driving Behavior	549
<i>Wang Hailin, Liu Hanhui, and Song Zhumei</i>	
Fingerprint Image Segmentation Based on Support Vector Machine	553
<i>Xiaokai Wang, Jingwei Tie, and Yanan Pei</i>	
Finite Element Analysis of Acetabular Transverse Fracture Reconstruction Treated with Different Internal Fixation Methods	557
<i>Pei Baoqing, Mu Jiao, Li Hui, Li Deyu, and Wang Yuhai</i>	
Fire Risk Analysis of Subway Station Fire on Different Ventilation Modes	561
<i>Jia-lei Tan, Tong Wang, and Long-zhe Jin</i>	
First Engineering Practice of Traffic Calming in Zhaitang Town in China	565
<i>Li Changcheng, Zhang Gaoqiang, Zhang Jianjun, and Zheng Hao</i>	
Forecast Map Matching Model for Vehicle-borne Navigation Based on Roadway Characteristic	569
<i>Youwen Liu</i>	
Full-Field Displacement and Strain Measurements for Debonding Test of SMPM Laminates Using ESPI	572
<i>Guo Tong and Song Yongsheng</i>	
Functional Module Design of Virtual Maintenance Training and Testing System for a Certain Type of Command and Control System	576
<i>Quanzhi Zhou, Junxian Liu, Ruidong Wang, Chang Shu, and Chuanfei Qiu</i>	
GPU Based Spot Noise Parallel Algorithm for 2D Vector Field Visualization	580
<i>Bo Qin, Fang Su, Zhanbin Wu, and Jingjing Wang</i>	
Highway Transport Volume Forecast Based on Changeable Combination Model	584
<i>Chen Xiufeng, Zhu Guangmiao, Qu Dayi, and Zheng Runyu</i>	
Image Decomposition Model Using Curvelets and Wave Atoms	588
<i>Guojun Liu</i>	
Image Processing Algorithms of Calibration at the Accident Scene	592
<i>Wang Fengyuan, Sui Xuezhi, Ren Yuhua, and Lai Jingyan</i>	

Impact Elastic Wave Based Highway Guard Rail Post Embedding Depth Measurement Technology	596
<i>Gaoqiang Zhang, Jiaye Wu, and Jerry Wu</i>	
Impact Evaluation of Rural Road Investment Projects on Household Welfare in Rural Area: Evidence from Fujian Province, China	601
<i>Yuan Tian, Ye Li, and Xiaohong Chen</i>	
Impact of Flights Delays on Productivity of Yangtze River Delta Airports	607
<i>Wei Wei and Xia Hongshan</i>	
Impact of Weather on Morning Peak Congestion	612
<i>Jiatan Wang, Hao Wang, Wei Wu, and Xiaoguang Yang</i>	
Implementation of Shallow Sea Depth Remote Sensing Module Based on ENVI Redevelopment	616
<i>Xiong Xianming and Ma Wendong</i>	
Incipient Fault Feature Extraction Using Lifting Scheme Packet	619
<i>Jiang Hongkai and Dou Dandan</i>	
Influence of the Curved Surface on Surface Roughness Measurement Using Dichromatic Speckle Pattens	623
<i>Zongheng Yuan and Jianwei Zhang</i>	
Integrated Approach to Select Logistics Enterprise Based on Uncertainty Information	627
<i>Wei Ying, Ji Baoping, Zhou Feng, Zhang Di, and Liu Yixiang</i>	
Integrated Capacity Evaluation Method on Terminal Area Capacity Based on the Controller Workload Statistics	632
<i>Ming Zhang, Ting-ting Zhang, and Songchen Han</i>	
Intelligent Motorway Fog Information Disseminating Strategies Research	637
<i>Zhi Xiaoling, Li Changcheng, Tang Junun, and Wen Tao</i>	
Interior Noise Prediction of Subway Cab Caused by Track Irregularities	642
<i>Shi Yu, Xiao Yougang, Chen Feifei, and Zhang Ping</i>	
Internet-Based Advanced Traveler Information Service: Opportunities and Challenges	646
<i>Zhang Dong, Yang Xiaoguang, Liu Haode, and Teng Jing</i>	
Intuitionistic Fuzzy Evaluation for Supply Chain Coordination Degree Based on TOPSIS	651
<i>Dongdong Chen</i>	
Inverse Characteristics of Magnetically Controlled Shape Memory Alloy under External Force	655
<i>Lu Jun and Wang Ling</i>	
Investigation of Aberration for Optical System in Integral Stereolithography System	659
<i>Xu Guangshen, Jin Jing, Luo Sheng, and Yang Jian</i>	

Investigation of Highway Safety Evaluation System	663
<i>Ma Tao, Shi Guifang, and Yuan Hao</i>	
Location Optimization of Urban Passenger Transportation Terminal	668
<i>Xuemei Zhou, Di Di, Xiaoguang Yang, and Di Wu</i>	
Logistic Planning and Decision under Uncertainty	672
<i>Hu Xiaolong</i>	
Logistics Countermeasures for Small and Medium-Sized Enterprises and Industrial Cluster	676
<i>Zhu Fuliang and Liu Xinghua</i>	
Low-Cost Technical Measures for Rural Road Safety Enhancement in Beijing	681
<i>Zhang Gaoqiang, Zhang Jianjun, and Zheng Hao</i>	
Luminescence and Energy Transfer of Ce ³⁺ , Dy ³⁺ in YAB	686
<i>Yang Yong, Zhu Chuanzheng, Yang Zhiping, and Li Lihu</i>	
Maneuvering Characteristics Study in Steady State of Human-Ship System	689
<i>Sheng Jinlu, Zhang Guichen, Sun Ming, and Xin Junfeng</i>	
Marine Salvage Management Information System Based on Google Earth/GPS Technology	692
<i>Hong-jun Pan and Xiaoqiu Yao</i>	
Measuring Control Delay at Signalized Intersections Based on Vehicle Infrastructure Integration System	695
<i>Li Pengkai, Yang Xiaoguang, Wu Wei, and Yan Yawen</i>	
Method for Optimization of Urban Public Transport Network Based on AHP and Entropy	699
<i>Li Xiaowei, Chen Hong, and Ma Juan</i>	
Model Based Torque Control and Estimation for Common Rail Diesel Engine	704
<i>Wang Hongrong, Wang Yongfu, and Liu Zhi</i>	
Model Design and Test Study of a New Type Space-Combined Tied Arch Bridge	708
<i>Pan Tang, Airong Liu, JunPing Zhang, and YongHe Li</i>	
Modeling and Animation of Realistic 3D Virtual Human Using Inertial-sensor	712
<i>Jun Li and Darong Huang</i>	
Modeling of Fuel Injection Process under Two-Phase Condition	716
<i>Li Running and He Yongling</i>	
Author Index - Volume 1	721

2010 International Conference on Optoelectronics and Image Processing

ICOIP 2010

Table of Contents Volume - 2

Preface - Volume 2	xvii
Committees - Volume 2	xviii
Reviewers - Volume 2	xx

Proceedings of the 2010 International Conference on Optoelectronics and Image Processing-Volume 2

Modeling of Passenger Evacuation Model in Transfer Hub Platform	3
<i>Hailin Zhang, Hao Liu, and Ke Zhang</i>	
Modeling the Generation and Organization of Household Non-work Activity: A Case Study of Beijing	8
<i>Xianyu Jianchuan</i>	
Modelling of Petrol Engine Power Using Incremental Least-Square Support Vector Machines for ECU Calibration	12
<i>Pak-kin Wong, Chi-man Vong, and Weng-fai Ip</i>	
Models of Storage Cost Analysis for Warehouse Leasing and Expanding	16
<i>Lian-fu Zhang, Yong-gang Zhu, and He-yan Hu</i>	
Morphological Modified Global Thresholding and 8 Adjacent Neighborhood Labeling for SWIR Image Mosaic	19
<i>Zhou Qianting, Xu Zhipeng, Liao Shengkai, and Wei Jun</i>	
Multiple Path Toll Distribution Problems with Weight Toll on Highway Networks	24
<i>ShuGuang Li and Qing-hua Zhou</i>	
Natural Frequency Analysis of Simple Supported Box Beam	27
<i>Cong Chen and Guobo Wang</i>	

Network Emergency Evacuation Modeling: A Literature Review	30
<i>Zhang Xiongfei, Shi Qixin, He Rachel, and Ran Bin</i>	
New Research of Optical Voltage Transducer	35
<i>Feng-wei Lou and Zheng-hong Xi</i>	
Noise Character Study of Excavator Based on Spectrum Analysis	39
<i>Hu Xiaodong, Gong Lixiao, Lv Jiantao, and Gong Quanshuai</i>	
Non-destructive Testing of Pipeline Liquids Using Ultrasonic Technology	43
<i>Yulei Wang and Shuqing Li</i>	
Numerical Simulation on Dynamic Response of Highway Roadbed Slope	47
<i>Zhong Wei, Yang Tao, and Bai Guangliang</i>	
Numerical Simulation on the Horseshoe Vortex Formation Around the Hull-Sail Junction of Submarine	51
<i>Liu Zhihua and Xiong Ying</i>	
Offset, Bisector and Medial Axis Construction on NURBS Surface Based on GPU	55
<i>Gang Zhou, An Li, and C.L. Li</i>	
On HC Emission Statistical Features of Passenger Cars Using Large Sample Measuring and Multiple Parameter Data Analyzing	59
<i>Qiao Xiangming and Xu An</i>	
On the Basis of AHP Strategic Alliance Stability Analysis	63
<i>Tong Ling and Wang Chunhe</i>	
One New Map Matching Model for Vehicle-Borne Navigation System	66
<i>Yourwen Liu</i>	
Operation Mode for Multilane Freeway and Its Effects	69
<i>Duan Li and Guo Xiucheng</i>	
Optic-fiber Sensor Based on Fluorescence Mechanism	73
<i>Wu Jinling and Yang Junhai</i>	
Optimization Method of the Cycle and Critical Phase on Signal Control Intersection	76
<i>Jun-bo Zhao, Jie Yang, and Hui-ling Zhang</i>	
Optimization Model of Traffic Accident Black-Spots Formation Mechanism	80
<i>Sheng Yugang and Xu Weijuan</i>	
Optimization of Configuration for Retro-reflective Sheeting in Guide Signs Based on Dynamic Intervention Technology	83
<i>Huang Kai, He Yong, Tang Jianjuan, and Hou Dezhao</i>	
Optimization of Longitudinal Section Design of Railway Coal Logistics Yard in Xinjiang	86
<i>Yang Yu, Si Ma, and Lingjuan Chen</i>	
Optimizing Retrieval Sequencing in Container Yards	90
<i>Jin Li and Hong-Xia Yu</i>	

Optimizing the Quantity of Off-Broad Charger for Whole Vehicle Charging Station	93
<i>Wang Zhenpo, Liu Peng, and Xin Tao</i>	
Parameters Calibration for Car-Following Model Based Desired Safety Margin	97
<i>Zhang Xiaoxuan, Lu Guangquan, and Cheng Bo</i>	
Parametric Spectral Properties of Optical Parametric Amplification Based on Broadband Pump	101
<i>Haibin Xu and Juguan Gu</i>	
Passenger Transfer Predict of Comprehensive Transportation Hub	105
<i>Yu Xiaofei, Zhou Xuemei, and Yang Xiaoguang</i>	
Pedestrian and Bicycle Detection and Tracking in Range Images	109
<i>Yun Wu, Qing-Jie Kong, Zhonghua Liu, and Yuncai Liu</i>	
Performance of Dilemma Zone Mitigation System at Signalized Intersections	113
<i>Fan Lei, Lin Lihua, and Tian Rui</i>	
Performance-Based Fire Protection Design Method for Large Cross-Section Road Tunnel	116
<i>Han Xin and Cong Beihua</i>	
Pile's Elastic Modulus Influence on Share Load Ratio Between Piles and Soil of Combination-Pile Composite Foundation	120
<i>Zhu Hongbing and Li Xiu</i>	
Port Withdrawal Mechanism in China Based on a Low-Carbon Perspective	124
<i>Wang Ling and Wang Nuo</i>	
Predicting Cotton Yarn Hairiness in Rotor Spinning	127
<i>Zhao Bo</i>	
Prediction of Hairiness of Polyester/Viscose/Cotton Blended Ring Spinning Yarn	131
<i>Zhao Bo</i>	
Properties of Terahertz Waves Propagation in a Bounded Plasma Slab with High Collision Frequency and High Density	135
<i>Cheng-Xun Yuan, Zhong-Xiang Zhou, and Xiao-Li Xiang</i>	
Quantitative Research on Vehicle Exhausts Pollution in the City	141
<i>Feng Chaoqing, Tian Rui, Lin Li hua, and Chai Junlin</i>	
Realistic 3D Face Reconstruction Based on VTK and MFC	145
<i>Jian Rong, Cuilian Zhao, Zhijian Fan, and Shidong Hu</i>	
Realization of Auto-focusing Model in FPGA	150
<i>Chen Guojin, Zhu Miaofen, Li Yongning, and Wang Wanqiang</i>	
Real-Time Georobot Automatic Monitoring During Shield Under-crossing Existing Tunnel	153
<i>Mei Wensheng, Zhou Yanfang, and Hou Jinbo</i>	

Real-Time Reliability Optimization of CAN Control Network Based on RMA for Independent Drive Electric Vehicle's Powertrain	157
<i>Cao Wanke, Lin Cheng, Peng Chunlei, and Meng Xiang</i>	
Recognition of Steel Billet Image with Different Orientations in Production Line	161
<i>Xiuhua Zhang, Yijun Yang, and Hanyu Hong</i>	
Regional Logistics System Orienting Small and Medium-Sized Logistics Enterprises	165
<i>You Jia</i>	
Regional OD Matrix Estimation Based on the Ratio of Intersection Turning	168
<i>Cui Hongjun, Liu Chongfang, Wang Ling, and He Hua</i>	
Relational Decision-Making Method for Optimization of Urban Public Transport Network Based on Cumulative Prospect Theory	171
<i>Wang Jun, Li Xiaowei, Chen Hong, and Ma Juan</i>	
Research and Application of Urban Traffic Congestion Evaluation System	177
<i>Hongfei Jia, Yunlong Tan, and Xiaoyan Fu</i>	
Research for Two-Valve Fuel System in Diesel Engine	181
<i>Yongfeng Liu, Tao Qiu, and Xiuxia Lin</i>	
Research of Control and Simulation of 1:5 Tilting Bogie Based on Neural Network Prediction	184
<i>Jimin Zhang, Wenjie Zhao, Zhiqiang Yang, and Baoan Zhang</i>	
Research of Gamma, Color Temperature and Brightness of the Display Effect	188
<i>Baohui Xu</i>	
Research of Information Weapon System Performance Evaluation Based-on DoDAF	192
<i>Huihua Cheng, Benli Wang, Changjun Wei, Weidong Li, and Jingjing Zhou</i>	
Research of Power Optimizing Technique for Solar Photovoltaic System	196
<i>Xu Xiaoli and Qiao Daoe</i>	
Research on Aircraft Pushback Procedure in Busy Airport	201
<i>Tang Xiaowei</i>	
Research on Chaos Characters of Velocity in Traffic Flow	205
<i>Dan Yu, Zhixiang Hou, Huihua Yuan, and Xiaomei Yin</i>	
Research on Edge Detection Based on Mathematical Morphology Algorithm	211
<i>Dong Wei and Wang Tong</i>	
Research on Distributive Regularity of Vehicle Speedometer Indicated Error and Its Modeling	214
<i>Xu An and Qiao Xiangming</i>	
Research on Effectiveness of Freeway Work Zone Speed Reduction Strategies	218
<i>Huang Kai, He Yong, Tang Jianjuan, and Hou Dezao</i>	
Research on Fuzzy On-ramp Metering and Simulation in Urban Expressway	221
<i>Xuewen Chen and Aoshuang Tian</i>	

Research on GPS Navigation System of Flight Simulator Based on Matlab	225
<i>Gao Jianshu and Sui Hongfeng</i>	
Research on Green Packaging of Circular Economy	229
<i>Zhang Guirong, Li Dehua, Wang Zhiping, and Ma Chenglin</i>	
Research on High-Resolution Color OLED Display Technology	233
<i>Guizhu Lu</i>	
Research on Image Focusing Method and System with Wavelet Filtering	236
<i>Chen Guojin, Zhu Miaofen, Li Yongning, and Wang Wanqiang</i>	
Research on Improved Multidimensional Scaling Localization Algorithm for Wireless Sensor Network	240
<i>Liang Tao, Xu Shuai, Chen Haiyong, and Xun Hexu</i>	
Research on Influence Extention of Two-Lane Highway Intersections Based on Traffic Accident Database	244
<i>Wu Lingtao, Yang Manjuan, Tang Chengcheng, Peng Daoyue, Shen Guohua, Zhang Tiejun, and Guo Zhanyang</i>	
Research on Intelligent Control of Tunnel Lighting System Based on LED	247
<i>He Yi, Lang Zheyang, Wu Aiguo, Li Changbin, and Feng Shouzhong</i>	
Research on Inventory Optimization Model of Spare Parts under Zero-Out-of-Stock Constraint	251
<i>Wang Taosheng and Liu Changchen</i>	
Research on Key Technologies of Vehicle Traffic Accidents Rescue	255
<i>lv Chengxu, Zhou Wei, Cai Fengtian, Zhang Weigong, and Li Xu</i>	
Research on Logistics Stripping from Industrial Enterprise	258
<i>Tang Zhenlong, Liu Bingqiang, and An Lanzhu</i>	
Research on Multi-objective Optimization of Vertical Section of the Hump Pushing Zone	262
<i>Chunmin Zhang and Yinzen Li</i>	
Research on Preprocessing Algorithm for PET-CT Image Registration	266
<i>Fangfang Han, Jinzhu Yang, Yang Liu, and Hong Zhao</i>	
Research on Protection Technology of Foundation Pit Excavation Adjacent to Existing Railway	270
<i>Zhou Aizhao, Xu Junping, and Han Xuwei</i>	
Research on Rail Pressure Signal Processing Method of High Pressure Common Rail System	274
<i>Qiu Tao, Wang Changyuan, Fan Zhiqiang, Qi Zhiquan, and Yin Wenhui</i>	
Research on Speed Limit of Work Zones in the Freeway	277
<i>Huang Kai, He Yong, Tang Jianjuan, and Hou Dezao</i>	
Research on the Burst-tire Car of Direction Instability of Dynamic Model Based on Load Transfer	281
<i>Zhang Yanhui, Wang Zhijun, Li Xiaoping, and Wu Song</i>	

Research on the Cooperation Model Between Traffic Guidance and Traffic Control Based on Intelligent and Information Technology	285
<i>Song Shumin, Yang Zhaosheng, Gao Peng, and Yu Yao</i>	
Research on the Coordination Relationship of Yangtze River Waterway Construction and Basin Economy Development Based on Principal Components Analysis	289
<i>Zhou Yefu and Luo Xi</i>	
Research on the Driver Reaction Time of Safety Distance Model on Highway Based on Fuzzy Mathematics	293
<i>Ge Ruhai, Zhang Weiwei, and Wang Zhong</i>	
Research on the Effect of C ₃ H ₆ on NO Conversion Rate in a NTP Reactor	297
<i>Wang Jun, Cai Yixi, Wang Jing, Zhang Lefu, and Li Xiaohua</i>	
Research on the Impact of Long-Term Down Deflection from the Long-Span Concrete Girder Bridge on the Structure Stress	301
<i>Liu Xiaping, Ning Yunlin, Huang Kewang, Zhang Kunhua, and Cheng Jingyang</i>	
Research on the Influence of Shaft Area on Alleviating Tunnel Aerodynamic Effects Through Dynamic Model Test	305
<i>Ming-zhi Yang, Dan Zhou, Jian Zhang, and Wei-bin Zhou</i>	
Research on the Influence of Suburbanization on Traffic in Central District	310
<i>Da-yi Qu, Jin-song Zhuang, Xiu-feng Chen, and Liang Hao</i>	
Research on the Screening of the Port Throughput Forecast Index—The Ports in North Gulf of Guangxi Taken for a Case	315
<i>Liu Xianfeng, Zhu Meihua, and Huang Jian</i>	
Research on the Streamlined Head Structure of High-Speed Train	319
<i>Xu Ping and Yao Shuguang</i>	
Research on Traffic Flow of Representative Section on Urban Arterial Street	323
<i>Liu Shijie, Lin Lihua, and Tian Rui</i>	
Research on Using of Digital Signage in Museum Visiting Navigation	327
<i>Wang Min, He Ketai, and Hong Hua</i>	
Researching on Left-Turning Traffic Organization and Control at Urban Signalized Intersections	331
<i>Lina Xue, Lihua Lin, and Rui Tian</i>	
Reverse Logistics Outsourcing Model Based on Principal-Agent Theory	335
<i>Wang Haiyan and Tu Min</i>	
Reverse Logistics System and Critical Path Optimization of Wood-Based Panel Enterprise: A View Based on Circular Economy	339
<i>Qin Long, LiQing Meng, and Ling Zhi</i>	
Review of Bio-oil Upgrading Technologies and Experimental Study on Emulsification of Bio-oil and Diesel	343
<i>Qianqian Yin, Shurong Wang, Xinbao Li, Zuogang Guo, and Yueling Gu</i>	

RFID Technology Applied in Highway Traffic Management	348
<i>Wang Hongjian, Tang Yuelin, and Li Zhi</i>	
Road Feature Based Data Model for Multi-scale Transportation Applications	352
<i>Min Huang, Zhi-ren Sha, and Hai-bin Wu</i>	
Robust and Fast Localization Algorithm for Data Matrix Barcode	356
<i>Feng Liu, Anan Liu, Meng Wang, and Zhaoxuan Yang</i>	
Routing Optimization of Container Yard Crane	360
<i>Ji Mingjun and He Maoying</i>	
Safety Assessment Research of Wheel Brake System Based on CPN	364
<i>Luo Yunlin, Duan Xiaojing, and Yang Jianzhong</i>	
Safety Evaluation and Countermeasure Research on the Passenger Transportation in Chongqing Mountainous Rural Areas	368
<i>Yao Hongyun, Cao Yuanwen, and Zhou Zheng</i>	
Seismic Analysis on Long-Span Steel-Truss Arch Bridge with Continuous Rigid-frame	372
<i>Liu Airong, Shen Fulin, Yu Qicai, and Zhang Junping</i>	
Seismically Induced Rock Slope Instability and the Corresponding Treatment: The Case of Leshan Giant Buddha Scenic Spot	376
<i>Luo Yu, He Siming, Li Xinpo, and Wu Yong</i>	
Simulation and Experimental Research on Fluid Fields of the Refrigerated Truck	380
<i>Zhou Dongyi, Chu-ping Shi, and Wen-hua Yuan</i>	
Simulation Analysis of Critical Ventilation Velocity for Vehicle Fire in Large Cross-Section Road Tunnel	384
<i>Han Xin and Cong Beihua</i>	
Simulation on Diesel/DME Mixed Injection System	388
<i>Xu Lijun, Chen Zichen, Li Xiaolu, and Fang Xiaomin</i>	
Simulation Study of Bus Occupant Restraint System in Emergency Brake	392
<i>Ge Ruhai, Hu Manjiang, and Xu Dong</i>	
Situations and Tendency of Intelligent Transportation System in Europe	396
<i>Jinghui Wang, Yawen Yan, Xiaoguang Yang, and Junfei Jia</i>	
Statistical Analysis of the Questionnaire for Light Pollution at Sea with SPSS	402
<i>Zhu Jinshan, Sun Licheng, Xiao Zhongming, Zhao Chunyang, and Li Yin</i>	
Stream Curve and Numerical Modeling for High-Speed Train	407
<i>Guowei Liu and Weixiao Liu</i>	
Study of Expressway Traffic Simulations System Influence of Accident	411
<i>Bin Chen, QingYao Wei, Cao He, and JianBo Wang</i>	
Study of Spatial Accessibility Based on GIS and Value of Time	416
<i>Jing Luo, Xiao-chun Jin, and An-rong Dang</i>	

Study on Automated Incident Detection Algorithms Based on PCA and SVM for Freeway	420
<i>Zhili Cai, Qiushi Ding, and Mingting Wang</i>	
Study on Coordination Control with Bandwidth Optimization for Signalized Intersections in Arterial Systems	425
<i>Nan Ma, Chun-fu Shao, and Yi Zhao</i>	
Study on Green Logistics and Sustainable Development	431
<i>Zhang Guirong, Liu Junli, Li Dehua, and Wang Zhiping</i>	
Study on Heat Transfer Performance of Micro Heat Pipe with Trapezium-grooved Wick	435
<i>Li Xibing, Liu Xianli, Shi Zhimin, Jiang Hui, Lou Xiaozhong, Wang Shigang, Han Gang, and Pan Yongge</i>	
Study on LPG-Electric Hybrid Bicycle	440
<i>Shu-sheng Xiong, Xi-jiang Wu, Chao-shan Zhang, Wei Li, Wei Shi, Xiao-shuai Ren, Yao-hua Jiang, Zhen-ai Qu, Yin-ding Lv, and Wen-hua He</i>	
Study on Multi-depot Vehicle Scheduling Problem Based on Milk-Run Model	444
<i>Ying Dai, Wen-hui Xia, and Xian-long Ge</i>	
Study on Space-Time Distribution Characteristics of Floating Car Data Based on Large Samples	449
<i>Xin Feifei, Chen Xiaohong, and Lin Hangfei</i>	
Study on the Competence Evolvement Mechanism of the Civil Aviation Transport Industry Based on the System Cooperation Theory	453
<i>Ting Cui and Jian Yu</i>	
Study on the Evaluation Indexes System of Barrier-Free Public Transportation System Quality	460
<i>Jiang Yangsheng, Chen Yanru, and Yun Liang</i>	
Study on the Influence Factors of Common Rail System's Injection Mass	465
<i>Tao Qiu, Zhiqiang Fan, Zhiquan Qi, Bingbin Guo, Wenhui Yin, and Chenghui Yu</i>	
Study on the Methods for Passenger Flow Forecast Between Central City and Satellite City	469
<i>Kui-li Sun, Shu-guang Cui, and Lei Mei</i>	
Study on Three-Dimensional Interactive Integration Road Safety Route Selection CAD System	473
<i>Li Wei, Pu Hao, and Xie Chunling</i>	
Study on Traffic Signal Control Base on Radial Basis Function	477
<i>Xiaoying Li</i>	
Suspension Employing Inerter and Optimization Based on Vibration Isolation Theory on Electrical-Mechanical Analogies	481
<i>Nie Jiamei, Zhang Xiaoliang, and Chen Long</i>	
System Construction of Earthquake Emergency Logistics	485
<i>Feng Yuan and Guo Yonghui</i>	

Target Tracking Using Self-Adapting Mean Shift Algorithm	489
<i>Maolei Zhang, Tao Chen, Rui Yang, Hongyong Yuan, and Shunjiang Ni</i>	
Test and Improvement of Ventilation Cooling System for High-Speed Train	493
<i>Liu Tanghong and Xu Gang</i>	
The Advancement of Niche Concepts and Their Modellings	498
<i>Li Yimin and Zha Tengfei</i>	
The Algorithm Research of Terrain Parameter Estimation Based on Lunar Rover's Traveling Information	502
<i>Meng Li, Feng Gao, Peng Sun, and Ying Cui</i>	
The Analysis of Causes of Highway Traffic Black-Spot Based on Rough Set and Fuzzy Set Theory	507
<i>Liu Wenjun and Guo Qing</i>	
The Application of Nerve Net Algorithm to Reduce Vehicle Weigh in Motion System Error	511
<i>Qiu-sheng Ru, Yang Yang, Zong-qi Ning, and Tao Song</i>	
The Application of VISSIM in the Intersection at Grade of Urban Road—Nanshaomen Intersection for Example	515
<i>Lin Yufan and Li Xiaohua</i>	
The Application Research on Mountain Highway Speed-Control Hump	518
<i>Wang Jianbo, Xiao Runmou, Chen Bin, and He Cao</i>	
The Class-Specific Down-Looking Target Localization Combining Recognition and Segmentation	522
<i>An Meng, Jiang Zhiguo, Zhao Danpei, and Liu Zhengyi</i>	
The Compare-Analysis of the Topology and Control Strategies About the Intelligent Charging System in Vehicle	529
<i>Zhao Gang and Sun Hongbo</i>	
The Design of Monitoring System for Unmanned Marine Engine Room Based on FameView	533
<i>Guo Jianming, Meng Qingsong, Huang Zhen, and Zhang Shouping</i>	
The Development and Problems of Land Use Along Urban Rail Transit in China	537
<i>Ma Hang, He Ningning, and Chen Mingyang</i>	
The Development Strategy of Modern Logistics in Henan Province	541
<i>Song Xinsheng, Liu Lihua, and Li Aizeng</i>	
The Dynamic Relationship Between China's Current Account and Capital Account—An Empirical Analysis Based on 1982-2009	545
<i>Li Shusheng and Liang Zhaohui</i>	
The Effect of RF Power, Argon Pressure on Argon Spectral Lines Intensity Excited by Micro-ICP Source	549
<i>Yongqing Wang, Haijun Song, Na Chong, Yingchang Zhou, Rongxia Sun, and Wenjun Chen</i>	

The Fuzzy Comprehensive Evaluation Model for Highway Service Satisfaction	552
<i>Yang Manjuan, Hou Dezao, and Wang Chenghu</i>	
The Length Definition of the Expressway Tunnel Based on Driving Safety and Comfort	557
<i>Hu Jiangbi and Zhang Meijie</i>	
The Measurement of Micro Platform's Position and Pose Based on Monocular Visual	561
<i>Xu Haili, Li Hang, Si Donghong, Song Xiaodong, and Xue Yujun</i>	
The Obstacle Avoidance and Navigation Based on Stereo Vision for Mobile Robot	565
<i>Yong-guo Zhao, Wei Cheng, Lei Jia, and Si-le Ma</i>	
The Optimal Quantity Discount Policy from a Supplier's Perspective	569
<i>Wang Hexin</i>	
The Optimal Routes and Modes Selection in Container Multimodal Transportation Networks	573
<i>Wang Qingbin and Han Zengxia</i>	
The Parametric Design of Crankshaft	577
<i>Xiao-li Shi and Yuan-jun Lv</i>	
The Realization of Power Company Comprehensive Information Management System	581
<i>Xia Xiangyang, Gong Fen, and Luo Shiwu</i>	
The Research for Deployment Strategy Based on Maximization Lifetime in Hierarchical Structure Wireless Sensor Network	585
<i>Sun Chaosui</i>	
The Research for the Strategic Purchase Model of the Home Appliances Enterprises Based on Revenue-Sharing Contract	589
<i>Lu Yingjin and Jiao Lu</i>	
The Research of a Distributed Simulation Method of Information Sharing in Supply Chain	596
<i>Jia Hongyu, Li Xia, and Cui Yan</i>	
The Research of Classification Method for Significant Risk of Hazardous Chemical Tanker which in Transit	600
<i>YongQing Jiang, DongJi Yang, JingRui Zhao, Bing Wang, and Yang Liu</i>	
The Research of Guangxi's Logistics Based on the System Dynamics	605
<i>Liao Zhigao, Chen Mei, and Chen Zhaohui</i>	
The Research of the Cycle Slips' Detection Method in GPS Navigation and Positioning	609
<i>Tie-sheng Wang, Bing Zhang, and Shan-shan Li</i>	

The Research on Coordinated Development of the Integration of Railway and Highway Transportation	612
<i>Huang Liling and Yang Jiaqi</i>	
The Research Progress of Genetic Algorithm in the Large Warehouse System	616
<i>Yongjie Ma, Wenxia Yun, and Wenjing Hou</i>	
The Running Speed Law and Model under Combined the Effect of both Horizontal and Vertical Alignments	620
<i>Chun-feng Yang, Jian-cheng Sun, and Ji-shu Sun</i>	
The Study of Indoor Air Quality in Train Compartment	626
<i>Bai Guiping and Gong Guangcai</i>	
The Study of Reliability About the Internal Network of Shanghai South Railway Station Based on the Robustness of Complex Networks	630
<i>Xuemei Zhou and Xiaochen Wu</i>	
The Study of Supply Chain Coordination with Contracts in “Contract Farming”	634
<i>Shengchun Liu and Yongwei Wang</i>	
The Study on Energy Loss Distribution Law for Energy System of Oil Depot	637
<i>Qing-lin Cheng, Hai-lian Zhou, and Ling-de Meng</i>	
The Study on L-STBC-OFDM in HF Communication System	641
<i>Yang Jie, Liu Yong, and Wei Na</i>	
The Teeth Image Recognition Using HDM and the Turn Point	645
<i>Xitao Zheng, Yongwei Zhang, and Hong Ding</i>	
The Traffic Capacity Research of the Minor Road on the Unsignalized Intersection with Mixed Traffic Stream Based on the Markov Theory	649
<i>Yao Hongyun, Meng Jingyu, and Qin Lei</i>	
The Unbiased Filtering for Uncertainty Systems	653
<i>Cao Xu and Zhang Huaxun</i>	
The Viscous Resistance Calculation for the Trimarans Based on the Boundary Layer Theory	657
<i>Li Yun and Lu Xiaoping</i>	
Three-Dimensional Packing by a Tabu Search Algorithm in Military Airlift Loading	662
<i>Wang Ailian, Chen Baisong, Zhang Jun, and Li Liangfeng</i>	
Tire-Imprints Image Enhancement Algorithm Based on Wavelet Transformation	666
<i>Wang Zhen, Li Shiwu, and Wang Yunpeng</i>	
Tracking Maneuvering Target on Airport Surface Based on IMM-UKF Algorithm	671
<i>Gong Shuli, Wu Honglan, Tao Cheng, and Huang Shengguo</i>	
Traffic Information Management and Promulgating System Based on GIS	676
<i>Shao Fei, Deng Wei, and Zhang Bing</i>	

Traffic Route Dynamic Guidance Based on Coupling of Time Recursive and Artificial Neuron Network	680
<i>Wang Hongde, Cui Tiejun, and Wang Shiyu</i>	
Traffic Safety Analysis of Overloaded Transportation	685
<i>Shen Juan, Zhou Lili, Yao Yong, Zou Guorong, and Chen Yue</i>	
Traffic Time-Intervals Split Based on the Traffic Flow Variation of Days of Week	689
<i>Yan Yawen, Chen Guojun, Yang Xiaoguang, and Wu Zhizhou</i>	
Travel Time Forecasting Based on Phase Space Reconstruction and SVM	692
<i>Sun Zhanquan, Feng Jinqiao, and Liu Wei</i>	
Trimaran Center Hull Optimization for Minimum Wave Resistance under Fixed Outriggers	696
<i>Cui Yan, Lu Xiaoping, and Zhan Jinlin</i>	
Trimaran Total Resistance Prediction Based on a Nonlinear Free Surface Potential Flow Solver and a RANS Method	702
<i>Wang Zhong, Duan Yexin, Lu Xiaoping, and Su Peixin</i>	
Tunnel Construction Safety Inspection and Polymer Grouting Technology for Tunnel Quick Maintenance	706
<i>Xu Jianguo, Hou Yujie, and Huang Liang</i>	
Two-Dimensional Silver Structures Fabricated by Two-Photon Femtolaser	710
<i>Wang Ting, Zhu Yu, Yang Kaiming, and Ma Jing</i>	
Unified Restoration Method for Different Degraded Images	714
<i>Hanyu Hong, Liangcheng Li, Luxin Yan, and Tianxu Zhang</i>	
Vehicles' Motion Parameters Detection in Intersection Based on Videos of Low View Angle	718
<i>Lu Guangquan, Liu Miaomiao, Xia Shaojun, and Deng Cheng</i>	
Velocity Analysis for UHF RFID Vehicle License Plate	722
<i>Ling-fei Mo, Chun-fang Qin, and Xiao-fen Tang</i>	
Vision Based Tel-operation Robot Virtual Reality Circumstance Modeling in Real-Time	726
<i>Yunhong Lei, Yubo Wang, Mingxin Wang, and Pei Zhao</i>	
Wireless Communication Simulation Experiment on Map Matching Method Between Parallel Roads Based on Mobile Phone Handover	730
<i>Yang Fei and Cui Yaping</i>	
Author Index - Volume 2	733