

Table of Contents

Preface and Conference Organization

Chapter 1: Sustainable City and Regional Development

How might Compact Cities Contribute to Sustainable Transport S. Chao, J.Y. Chen and J.J. Zou	3
Research on Therapy Garden Design for Immigrant Women J. Zhang	8
Comparative Study on Urbanization Level of Six Central Provinces Based on Matter-Element Extension Theory Y.K. Wang	12
Capital City Variation Influence on City Pattern of the Eastern Region of the Loess Plateau in China Y.R. Guo, L.Z. Jiang and L.M. Long	17
Reflection on Speeding up the Progress of Agricultural Informatization Z.R. Zhang and X. Zhao	21
Foreign Metropolitan Vicinity-Ideas in Development of Changchun and Jilin Regions H.W. Su, S.Y. Bai and Y. Hong	25
Micro Layout Research of Reclamation Area Based on Plane Grid Topology Formation Q.D. Cai and W.X. Luan	29
Study on the Old Street Culture Protection and the Sustainable Development in Renewing Old Urban Districts-The Example of Shanty Towns Renewal in Baotou Beiliang N. Liu	36
Reducibility - Ecological Ethics of the Development of Scenic Area: Take the Tourism Development Planning of Luomeile Canyon as an Example T. Tian and F.X. Cheng	41
Research on Sites Layout of Integrative Public Transit in Urban and Country J. Wu, J. Meng and X.L. Zou	46
Study on the Land Use Structure in Xuzhou City for it's Sustainable Development X.H. Rong, C.X. Li and X.Y. Zhang	52
The Index System and Methods of Monitoring Damaged Cultivated Land Quality in Mining Area Based on Agricultural Land Classification Y. Gao, Z.Q. Hu, J. Li, W. Xiao, J.Y. Zeng and Z.D. Jiang	56
Spacial Development Characteristics of Small Cities and Towns under the Background of Urban-Rural Integration: A Case Study of Jiangyin City R. Li and H. Bing	64
Population Spatial Migration Tendency Forecasting with Grey Model and Fourier Series C. Jiang, J. Wang, Y. Le, J.B. Shang and Y.S. Shi	69
Research on Urban Smart Water Resources Emergency Management T. Yu, M.X. Yang and Y.Z. Jiang	75
Study on Efficiency of Rainfall and Flood Water Resources Utilization in Coastal Area Y.Q. Chen and X.F. Huang	79
Prediction of China's Water Shortage in the Year of 2025 F.R. Zhang	83
The Empirical Study on Evaluation of Green University Y.K. Liu, X.P. Feng and Y.L. Chen	89
Research on the Regional Industrial Competitiveness & its Spatial Pattern in Shandong Province Based on the Spatial SSM B.Y. Shan and L. Wang	94
Constructing Model of Amount of City New Housing at Various Levels Supply under Equilibrium Condition Z.J. Yan	98
The Research of the Measures of Food Management Problem for Liaoning Province X.W. Wang	103

A Non Parametric Approach for Measuring the Operational Efficiency of Water Service Providers	
C. lo Storto	108
Research of Pedestrian Streets Space and Human Activities — A Pedestrian Street in Changsha as an Example	
S.G. Zhu and H.Y. Chen	114
Effects of Water Trading on Main Crops in Beibei District, Chongqing	
W.H. Zhang, J.Y. Jin and Y.X. Han	119

Chapter 2: Environmental Engineering and Environmental Protection

Photodegradation of Chlorobenzenes in Micellar Aqueous Solutions of Gemini Surfactants	
Z.H. Wang, X.M. Yang and B.Z. Ren	125
Advanced Processing of Biologically-Treated Papermaking Wastewater by Poly-Aluminum Chloride (PAC)	
Y.Q. Zhu, Y.L. Feng, H.Y. Zhang and Z.J. Zhang	129
Characteristics of Straw Biochar and its Influence on the Forms of Arsenic in Heavy Metal Polluted Soil	
J.P. Jiang, X.B. Yuan, L.L. Ye, S.C. Liao and X.H. Zhang	133
Additive Toxicities of Six Imidazolium Ionic Liquids on Photobacterium	
H.L. Ge, S.S. Liu, D.Z. Lv, B.S. Peng and Q. Wu	139
Status Analysis of Building Construction and Demolition Waste Treatment/Disposal and Management in China	
H.J. Zhang, J.J. Zhang and S. Chen	143
Evaluation on Water Quality of Urban Drinking Water Source in Beibei District, Chongqing	
J. Xiang, C.M. Cheng and Y. Zhang	148
Mathematical Model for the Factors Affecting Catalase Activity in Activated Sludge	
J. Yin, J.Y. Cui, J.N. Li and J.X. Wang	152
Research on the Freeway Environmental Supervision Program and Supervision Troops Setting	
L.G. Lu and L.N. Cao	156
Evaluation of Different Passivators for the Immobilization of Heavy Metals Incontaminated Soils	
D.R. Li, Y.H. Wang, J.H. Chen, Q.J. Li, W.S. Wang, W.Y. Huang and B. Leng	160
The Existing Problems of LCA in Construction Engineering: An Overview	
W.J. Wu and L.L. Wang	164
Exploring Tourists' Leisure Farm Environmental Protection Behavioral Cognition and Travel Willingness	
H.C. Huang, Y.H. Lai, K.C. Chen and C.M. Chang	168
A Simulation of Non-Point Source Pollution Loads Using a RS&GIS Model	
G.T. Dong, J. Bai, Y. Lu and S.T. Yang	173
Study on the Relationship between the Activity Change of CAT and INT-ETS in Different Sludge System by Using SBR Process	
J. Yin, J.N. Li, J.Y. Cui, J.X. Wang and K. Zhao	177
Study on Optimization of Operating Parameters for Modified A²/O Process in Changchun Northern Sewage Treatment Plant	
J. Yin, J.X. Wang, J.N. Li and J.Y. Cui	182
The Treatment Countermeasures and Suggestions on Rural Domestic Waste of Hebei Province	
C.Y. Jing, B.Q. Huo and L. Ma	187
The Study of Thermodynamics on the Development of Ecosystem	
Y.X. Xu, H.Y. Zhang, L. Han, X. Xu and F. Li	190
Discussion of Application of Wetland Project in Ecological Environmental Restoration of Urban Rivers	
S. Sheng, J.L. Rui and Y.L. Du	195
Treatment of Waste Seawater from Shrimp Farm Using a Photocatalytic Membrane Reactor	
Z.F. Shi, S.M. Zhang and S. Guo	199

Market Mechanism of Environment Protection of the Energy and Chemical Industry Base in Northern Shaanxi	
S. Hua, X.L. Wang and G. Han	204
Predict River Water Quality Based on Bayesian Hierarchical Model	
M. Liu, W.Q. Shi and J. Lu	208
Research Progress of Acid Mine Drainage Treatment Technology in China	
T.T. Wei, Y. Yu, Z.Q. Hu, Y.B. Cao, Y. Gao, Y.Q. Yang, X.J. Wang and P.J. Wang	214
The New Treatment Model of Petroleum City's Contaminated Land	
Y.G. Du, A.G. Zhou and X. Li	221
Eco-Environment Status and Protection Countermeasures in the Luziping Phosphate Mining Area, Xingshan	
R.Q. Wang, X. Li and A.G. Zhou	226
Anaerobic Digestion of Biodegradable Municipal Solid Waste and Activated Sludge	
S.M. Fang, B.L. Dai, J.H. Yao and P. Xia	231
Effect of Substrate Concentration on Hydrogen Production from Fermentation of Sugar Wastewater	
Z. Zhou, K. Liu and Q.Y. He	235
The Effect of Water Network Connection Project on Water Quality in Lakes Based on Remote Sensing	
N. Zhao, X.F. Zeng, S. Bi, Y. Zhao and J.Z. Zhou	242
Research on SPOT-5 Image-Based Soil Organic Matter Content Estimation	
Y.K. Guo, F. Zeng, M.Q. Ding, X.Y. Cao and J.H. Zhang	246
Study on Characterization and Photocatalytic Properties of the Prepared Bismuth Phosphate	
J.G. Sheng and Y.D. Shan	252
Drying-Rewetting Effects on Soil Nitrogen and Enzyme Activities Dynamics	
Y. Wang, Y. Zheng, X.S. Song and D.H. Yan	256
Eco-Environmental Water Demand Research on Forestland in the Central and Southern Ningxia	
J.Y. Li and W.J. Zhang	262
Experimental Research and Parameter Determination of BMBR Process	
X. Chen, S.F. Wang and J. Jin	268
Using Clustering Analysis to Predict Outflowing Water Quality of Selectively Drawn Water from Water Sources and Reservoirs	
J.S. Lu, B. Zhang and X. Zhang	273
Particles Capturing and Correlation with Head Loss in a Pilot-Scale Biological Aerated Filter	
T. Li, W.Y. Dong, H.J. Wang, J.N. Lin, F. Ouyang and Q. Zhang	279
Study of Application on Reverse Osmosis Concentrated Water Circulation in Desert Greenhouse	
X.F. Yan and J.C. Tian	287
Effects of Circular Orifices Plates with Venturi Tube on Degradation of Hydrophilic and Hydrophobic Pollutants	
Z.Y. Dong and J.J. Hu	294
Research Hotspots of Water Transfer Project in China Based on Multidimensional Scaling Analysis and Cluster Analysis	
Y.F. Xie and P. Du	298
Spatial Variations of Groundwater Solutes in Urban and Suburb of Jilin City	
R.C. Wei, C.L. Xiao and X.J. Liang	304
Numerical Simulation of Sewage Treatment by Deep Sea Discharge in Flowing Ambient Fluid	
M.C. Li, G.Y. Zhang, Q. Si, S.X. Liang and Z.C. Sun	310
Effect of Limited Water Supply on Crop Growth of Spring Maize (<i>Zea Mays</i>)	
H.J. Zhang	314
Effect of Wastewater Treated by EM Reused for Irrigation on Shallow Groundwater Quality	
C. Yin, X.H. Shao, X.W. Zhang, L. Ren, T.T. Chang, W.N. Wang and J.N. Chen	318
The Effect of Mix-Plants Type and Proportion on Physical Properties for Seedling Bricks	
W.J. Zhao, L.R. Wang, H. Ji and W. Sun	325

The Effect of Mix-Plants Type and Proportion on Water Retention Characteristic for Seedling Bricks	
W.J. Zhao, L.R. Wang, H. Ji and Y.W. Fan	330
Study on Ancient Chinese Ecological Thought and Practice	
K.Z. Jia	335
Simulation of Runoff for Varying Mulch Coverage on a Sloped Surface	
S.F. Cui, Y.H. Pan, Q.Y. Wu, Z.H. Zhang and B.X. Zhang	339
Research Methods and Experimental Design Influence on Surface Soil Properties in Steppe Area of Northern China Wind Power Field	
R.P. Zhou and C.X. Hai	344

Chapter 3: Architectural Design and its Theory

Simple Analysis on Acoustic Quality of Existing Multi-Function Auditorium	
G.J. Su and F.H. Lu	351
Importance of Physico-Chemical Methods in Evaluating the State of Building Structures and Design of their Redevelopment	
Á. Dufka, L. Mészárosóvá and J. Kosíková	355
Research on Urban Feminine Public Space	
C.C. Chu and C. Luo	362
The Research on the Factors of the Fujian Hakka Tulou's Form	
S.P. Wang and J. Huang	366
Uygur Architectural Decorative Patterns Classification and the Development and Application of Information Technology	
G. Li	372
Study on the Green Ecological View of the Cave Dwellings and its Innovation and Development	
Z.G. Li and J. Sun	377
The Impact of Privacy on the Forms of Elevations in Traditional Vernacular Houses in Erbil City	
B.M.A. Khaznadar	381
Analysis of the Building's Exterior Color and Material	
X.H. Ding and H.H. Hu	388
Building Intelligence Quotient: Mathematical Description	
A. Volkov	392
Design Languages of Neo-Huizhou Style Architecture in China	
M. Zhao and W. Gao	396
Haikou QiLou Historical and Artistic Value	
J. Chen and F. Wang	404
Integration of Architecture, People and Environment — A Case of Sports Park Design in Beijing Huangcun Satellite Town	
Y. Wu and X.D. Guo	410
Performance and Characteristics of Garden Spaces of Buildings in China's Chengde Mountain Resort	
X. Geng, K.S. Chen, R.F. Gao, S. Jin and H. Huang	415
Discussion on Affordable Housing Design and Sustainable Development	
Z. Jia and C.L. Meng	424
Evergrande Mingdu Community in Taiyuan as an Example to the Present Situation of Human Settlement Environment	
J.W. Guo and J.B. Zhao	429
The Cultural Aesthetic Meaning of Chinese Traditional Folk Dwelling — Take the Folk Dwellings in the Middle of China as Examples	
G.Z. Wu	433
Graphic and Architectural Design in the Digitized Era	
M. Wu and J.T. Liang	438
Cosmology and the Traditional Thai Design of the Royal Throne of Rattanakosin Royal Hall	
S. Seviset and J.Q. Lin	442

Performance Assessment and Remedial Strategy for China Three Gorges University's Architecture Building	
J. Peng, Z.J. Xian, J. Clarke and M. Gelowitz	454
The Regeneration Design of Sunk-Yaodong in Western Henan of China	
C.J. Ma	459
Research on the Design Methods in Fade of Architecture	
X.D. Hu, J.M. Su and X. Zeng	463
Customer Demand and Product Strategy of Historic Area Renovation in Shenzhen China	
J.W. Xiao	468
Application & Research on Sustainable Development of Residential Area Planning and Design	
B. Wang, J.D. Jia and W.D. Li	475
The Aesthetic Expression of Ecological Architectural Surface Material	
C. Hui	482
A Plan Generation System of Huizhou Traditional Residence	
J.M. Su, X.M. Mei and Z. Hao	486
"Rebirth" of Old Buildings - Impressing on Protecion & Reuse of the Old Buildings of Zeche Zollverein near Essen in the Ruhr Area, Germany	
A. Yuan	496
The Design Methodology for Stone Statue and its Cultural Marketing	
H.W. Cai	500
The Culture and Hue in Design of Chinese Traditional Vernacular Dwellings	
Z.L. Dong	505
Research and Application of the Reforming Scheme of the High-Speed Railway Existing Passenger Station	
L. Han, H.B. Liu and C.P. Xie	509

Chapter 4: Renewable Energy, Low Carbon, Energy Saving in Building and Research of Urban Living Environment

The Feasibility Study on the Application and Promotion of Rockwool Insulation Materials in Building Energy Conservation in Northern Jiangxi	
S.w. Xu and P. Lei	517
Study on Low-Carbon Corrugated Chair Design	
G.M. Huang and L.L. Liu	522
Energy-Saving Renovation in Existing High-Rise Residential Building	
M.F. Su and H. Guo	526
Investigation and Analysis of Winter Energy Utilization of Residential Buildings in Hangzhou	
L. Zhu, X.Q. Qian and K.L. Qian	531
The Strategies of Energy Efficiency Retrofit of Old Industrial Building	
L. Xu and L. Liu	537
Visualized Energy Consumption Monitoring Platform Based on Multi-Level Energy Consumption Model and WebGIS	
Y.B. Jin, F. Xu, J. Wang and S.M. Fei	542
The Influence of Excess Air Coefficient of Boiler Efficiency	
J.S. Shi, F. Peng and B.W. Zhang	548
Energy Consumption Prediction and Monitoring System for Steel Structure Residential Buildings	
Q.X. Wang and C. Lin	553
Analysis on Energy Efficiency and Consumption of Existing Residential Buildings in Shijiazhuang	
W.X. Zheng, D.S. Ju and S.L. Liu	557
Research the Attitudes of University Students in Taiwan toward "Energy-Saving and Carbon-Reducing"	
W.C. Lin and T.R. Chen	561

Analysis of the External Window Retrofitting for Energy Saving and Economy in Wuhan's Residential Buildings G.H. Hu, Y.Y. Li and C.Z. Zhang	566
Research of Existing Building Energy Saving Economic Incentives Policy in Liao Ning Province S.S. Zhang, W. Zhang, X.X. Ji and W.F. Zhang	570
Research on the Countermeasures of the Energy-Saving Reconstruction of Existing Public Buildings in Shenyang S.S. Zhang, Y. Cao, S.K. Yang and Z. Wang	574
Numerical Simulation and Parameter Analysis on Low-Temperature Geothermal System in Homogeneous Porous Medium Y. Shi, F.G. Wang, G.H. Feng, H.L. Tian and H.W. Lei	578
Study of Effect of Higher Temperature on the Properties of a New Silicate-Based Thermal Insulation Material L. Mészárosová, R. Drochytka and E. Tumova	584
Analysis of the Rural House Energy-Saving Technology in Gansu P. Di and Q.Y. Zhang	589
The Main Control Measures of Envelope Insulation Building Y. Xue, R. Wu and H.X. Wen	593
Technical and Economic Evaluation of Ecological Residential Energy Conservation Y. Zhang	598
Technical and Economic Evaluation of Ecological Residential Energy Conservation — For Example a Residential Area Y. Zhang	602
Impact of Building Orientation and Window-Wall Ratio on the Office Building Energy Consumption Z. Yu, W.L. Zhang and T.Y. Fang	606
Spatial-Temporal Analysis on Winter Heat Island Effect Based on Tests - With the Southeastern of Wuhan as an Example X.S. Li, H.Y. Li and S.L. Zhang	612
Study on the Noise Reduction Performance of a New Type Elastic Particles Applied to the Tram T.L. Liu, J.L. Xiao, Z.P. Hu and W. Ping	617
The Comparison of Energy Saving Characteristic of Traditional Residential Envelope Structure in Southeastern Shanxi L. Zhang and Q.F. Shi	624
Usage of Building Information Modelling for Evaluation of Energy Efficiency A. Volkov, A. Sedov and P. Chelyshkov	630
Research of the Operating Mode of the Regulator in the Automatic Climate Systems for Power Saving Purposes I.I. Tishchenkova, I.I. Goryunov and O.D. Samarin	634
Research on Environmental Protection, Energy-Saving and Safety Characteristics of Plant Fiber Building H.Q. Cai, R.S. Bai and J. Sun	638
Symbiosis Equilibrium Stable Range Analysis of Multi-Owner Cascade Hydro Plants L. Mo, C. Wang, P. Lu and J.Z. Zhou	642
Retrospect and Prospect of China's Low Carbon Road Research Y.G. Yang, Y. Shen, S.G. Shao and X.F. Li	646
Adaptability Analysis of Passive Building Energy Efficiency Technology in Hot Summer and Cold Winter Region Q.G. Tong	651
Analysis on Market Problem of Residential Building Energy-Saving in Hot Summer and Cold Winter Zone K.W. Jiang and J. Su	655
The Path Selection of Low Carbon Building Development X.W. Wu	660
Research on the Application of Photo-Thermal Solar Energy Technology in Wooden Structure Z.H. Bian, T.C. Wang, S.Y. Zhao and S.J. Fu	664

Experimental Study of Air Distribution Characteristics in Room of Stratum Ventilation under Two Kinds of Air Change Times Y.M. Xu, J. Tang, J. Han and C.Q. Lin	668
Static Planning for Micro-Grid Power Source Based on Multi-Energy Source Hybrid Power Supply with the Minimum Operating Cost Z.J. Liu, X.J. Huo, H. Cheng and Y.N. Li	673
Feasibility Synthetic Evaluation Index Research for Autonomous Wind-Solar Power Generation System M. Lin, B.T. Xu, D.X. Niu and C.X. Liu	680
The Model Research of LCA Economic Evaluation of Building Exterior Wall Z.X. Zou and Y.B. Deng	684
Application of an Improved Noise Prediction Model Based on FHWA in Environmental Impact Assessment of Shang Zhou to Dan Feng Expressway L.N. Cao and W.S. Guan	688
Comparative Study of Microclimate Diversity and Transition Characteristics Focused on the Living Environment in the Cold-Winter and Hot-Summer Area of China Z.K. Lei and Z.Q. Gao	695
Prediction of the Sound Pressure Level in a Small Room X.F. Huang and Z.X. Yang	699
PSO Applied to Reduce the Cost of Energy in Water Supply Networks B. Melo Brentan, E. Luvizotto Jr. and L.C.L.J. Ribeiro	703
Psychological Characteristics Analysis of Spatial Environment of College Students' Dormitory — Taking the Chang'an Campus of Northwestern Polytechnical University as an Example Z.X. Yang, T. Ma, Y.D. Zhu and Y.X. Ai	707

Chapter 5: Landscape Planning and Design

Historic District Based on AHP Method to Evaluate the Effect of Landscape Transformation Y. Xiang and W. Li	715
On the Cost of Sustainable Landscape in Real Estate Development N. Yu	719
Research on Constituent Elements of Landscape in Residential Area Based on Image Analysis — A Case Study of Hefei Golden Pond Housing X.G. Shan and Z. Li	724
The Expression of Genius Loci in Urban Wetland Planning and Design J. Liang, L.W. Guo, J.W. Li, L.D. Huang, W.Y. Zhao, X.L. Xu and M. Ge	730
Ecological Education Community Landscape Planning Strategies S. Feng and F.F. Zhou	734
Preliminary Discussion on Methods of Sculpture Design in Urban Landscape Environment T.H. Yang and Y. Chen	738
Artistic Conception Expression of Water Spray Pattern in Environment Design: A Case Study of Chinese Meishan Cultural Eco-Garden S. Chen, F.H. Chen and T. Tan	742
Wenchuan and Lushan Earthquake Warning to Sichuan Traditional Garden Protection L.L. Jia and D.P. Zhao	746
The Research on the Present Land Utilization Maps Downsizing Based on ArcGIS J.J. Xu, S.J. Zhou, P. Meng, Y.P. Wang, P.F. Wang, K.K. Liu and Q.S. Wan	750
An Analysis of the Problems in the Landscape Design for the Contemporary Urban Residential Areas in China Y. Zhang	754
The Interpretation of the Rules of Formal Beauty in Landscape Design Y. Zhang	758
Study on the Reconstruction and Reutilization of the Deserted Industrial Zone X.X. Jia and H.B. Yang	762

Study on Cultural Landscape and its Research Path of Cultural Geography: A Case Study of Tibetan Buddhist Cultural Landscape W.T. Xu and J.Q. Lin	767
Preliminary Study of Heritage Corridor Landscape Quality Based on Visual Evaluation — Take Nanjing Qinhuai River from Shuixi Gate to Hanzhong Gate as an Example X. Jin and J.G. Wang	774
The Effect of Water Stress on the Physiology of <i>Vinca major</i> 'Variegata' F.Y. Liao, Y. Xie and H. Jiang	782
Research on the Changes of Vegetation Coverage in Turks County Based on NDVI J.B. Wu, J. Matan, Y.F. Wei, K.Z. Guo and X.W. Lian	788
Towards the Emerging Paradigm of Artificial Nature: From Ecological Design to Designed Ecology J. Zhai	795
Application of Rainwater Garden in Economical Ecological Urban Landscape X.Y. Xuan and H.X. Zhang	800
Measurement, Calculation and Analysis of the Cooling Effect Field of the Green Space in Erqi Square Center, Zhengzhou Y. Tan, Z. Zhang and Q.S. Yao	806

Chapter 6: Urban Planning and Design

Urban Revitalization by Integrating Underground Space into City Space: Urban Design for Commercial District of Xiguan Cross in Lanzhou X.L. Bi and B.T. Liu	813
Economic Analysis of Regulatory Detailed Planning M.M. Yu	818
Research on the Urbanization Process and Dynamic Mechanism in Ningxia Hui Autonomous Region D.M. Ma	822
Study on Natural Disaster Prevention Countermeasures for Western Valley City from the Perspective of City Planning: A Case of Lanzhou City X.H. Zhang, C.F. Lei and H.F. Li	827
Research on the Spatial Morphology of City Central District of Single Core Structure J. Li, Y. Su and J.Y. Yang	833

Chapter 6: Urban Planning and Design

The Study of Spatial Form Evolution and Remodeling of Old Industrial Area — The Case of Inner Mongolia Baotou H. Su and J. Lei	847
Boundary of Space Research Based on the "Edge Effect" of the City's Public Space B. Xia, X.L. Liu and F. Kong	851
Comparative Study on Space Morphology of Modern Colonial Style Center Districts, China X.Y. Hu, Y. Shi and J.Y. Yang	855
Research of Station Zone Spatial Circle and Internal Mechanism in TOD Pattern: Taking Nanjing Metro Line 2 Jiqingmen Station as Example Y. Shi, X.Y. Hu and J.Y. Yang	861
Driving Force Differences of Urban Construction Land Changes among Urban Agglomerations Y.G. Cao, Z.Z. Du, Y.Q. Lu and X.J. Song	867
Affordable Housing Problems and Corresponding Measures at the Present Stage H. Wei and J. Yi	875
Update Strategy Research Implementation Oriented in the Streets of a City with Baotou Steel Street and AErDing Street the Case Y.Q. Zhao, Y. Gao and L. Zhao	879
Analysis on Building Readable Image of Urban Public Spaces B.X. Zhao and C.L. Meng	883

Design and Implementation of Urban 3D Visualization System Based on ArcGis Engine F. Yan, L.S. Chen, C. Yuan and M.Q. Duan	887
The Research on Evolve of Idea on Urban Space Construction in China Y. Peng and B. He	891
Study on Color Planning in Urban Overall Design Stage — Taking Dalian Urban Center as an Example Z.D. Wu and H.Y. Liu	896
The City-Building-Complex and the Shaping of Urban Form S.N. Xu, Y.B. Liu and L.L. Chen	900
Study on Planning Strategies of Small Tourist Town Resource Integration — Take the Example of Hongshi Town, Jilin Province S.N. Xu, L.L. Chen and Y.B. Liu	904
A Study on Urban and Rural Planning Suited to the Requirements of New Type of Urbanization Y.J. Huo and Z. Wu	908
The Issue of Industrial Transformation in Shenyang City since 1990s L.J. Dong	912
A Research on the Spatial Development Pattern of County Territory Small Town Agglomeration in Gully Region of the Loess Plateau - A Case Study of Lingtai City, Gansu Province L.L. Liu	917
Exploration of Regulatory Plan Making in the Context of Urban and Rural Planning Act X.J. Yi	921
Inspiration for Nonlinear Theory of Urban Planning and Design J. Liang, J.W. Li, X.L. Xu, W.Y. Zhao, L.W. Guo, L.D. Huang and M. Ge	925
Building NMT Community in the Urban NMT System J. Liang, W.Y. Zhao, X.L. Xu, L.W. Guo, J.W. Li, L.D. Huang and M. Ge	929
Impact of Mega-Events on Uses of City Squares - Post-Occupancy Evaluation of Guangzhou Flower City Square Y. Huang and S.X. Wu	933
A Preliminary Study of Color Survey Method in Drum Backstreet's Historical and Cultural District in Yu County L.M. Long, Y. Liu and H.J. Zhao	941
The Research of Dong Xi Ancient Town in Chongqing, China Y. Pan, Q. Yan and T.J. Zhou	945
Information Modeling of Urban Planning Development P.B. Kagan and V.G. Kulikov	951
Conservation Study on Xiaoling Mausoleum Sacred-Way from the Perspective of Historic Landscape Q. Liu and B. Jia	955
Research on Territoriality of Urban Color in Yichang G.Y. Li, Y. Li and H.X. Xie	960
Study on Semantic Structure of Public Service Facilities Based on Internet Advertising of Residential Quarters in China: A Case Study of HEFEI B.B. Hou, Z. Li and J. Shao	966
The Transfer of Development Rights for the Regeneration of Brownfield Sites P. Morano and F. Tajani	971
Research on City Image Building of Singapore under the Guidance of Urban Planning Z. Yang and K.S. Chen	979
Chinese Urbanization Issues Y. Cao and N. Cao	986
An Analysis on the Urban Flood Control X.Y. Yi	991
Alternative Solutions for Sustainable Urban Drainage Systems Integrating Areas of Irregular Urban Growth with the Formal City M.G. Míguez, A.P. Verol and R.B. Santos	996
Weighting of Performance Index by Analytic Hierarchy Process for Water Supply Enterprises W. Sun, J.L. Wang, C.M. Feng, P. Cao and W. Han	1004

Urban Annual Water Consumption Prediction Using Artificial Neural Network B. Liang	1008
Design of Large Closed Loop Control Structure for Urban Drainage Systems in the Whole Optimizing Running Process F.Z. Wang, B.H. Xu, C.M. Li, J.L. Qiu, C. Liu and L.Z. Xu	1012
Evolvement and Characteristic of Urban Spatial Structure in Baotou X.D. Qin and D.P. Liu	1017
The Influences of the High-Rise Buildings to Urban Space Morphology in Chongqing S.Y. Gan	1021
Correlation Study of Urban Plaza Environment and Behavior Based on GPS P. Ye, X.Y. Xu and S.S. Lin	1026
China's Streets Lighting Environment Impact Factors Analysis X.M. Su, M.Y. Zhang and Z.G. Hao	1036
Current Development Problems and Spatial Development Strategy of Urban RBD Taking Jing'an Temple RBD, Shanghai as Example X.Y. Hu, Y. Shi and W. Tang	1040

Chapter 7: Transportation Planning, Traffic Control and Logistics Engineering

The Characteristics of Traffic Accident Perpetrators in China and Countermeasure Analysis J.J. Zou and C.J. Sun	1047
Accident Characteristics and Safety Countermeasures for Continuous Downgrade Highway on Gobi Desert J. Zhou, Q.X. Liu and J. Xie	1053
Study on Related Technique Standard of Road Traffic Signals J. Lu, D.B. Liu, J.G. Gu and L.L. Dai	1057
Study on Bi-Level Programming Model and Algorithm of Distribution Center Location Based on Inventory Strategy F. Wei and C.L. Ge	1067
Short-Time Fluctuation Characteristic and Combined Forecasting of High-Speed Railway Passenger Flow Based on EEMD X.S. Jiang, R.F. Zhang and L. Pan	1071
Simulating Impacts of Variable Accident Sites on Freeway Weaving Section Traffic Flow in Cellular Automation Model L.P. Kong and X.G. Li	1075
Analysis Research of Delay of Signalized Intersection Based on VISSIM Simulation Software X.H. Xu, Z.Y. Ge and C. Gao	1081
Simulation of the Head-On Collision between Heavy Truck and Rigid Guardrail S.Y. Wang, Y.P. Zhang, Y. Wei and Y.L. Zhang	1085
Research on the Optimization of Inventory Routing Problem Based on VMI-TPL Mode W.Y. Zhao and B. Zhang	1089
The Flow of Logistics Information Service Platform for Industrial Clusters Modeling Based on IDEF B. Zhang and W.Y. Zhao	1093
The Forecast of Transportation Flows under Certain and Uncertain Trends: The Application of Combined Grey System Models J.H. Zheng	1098
Identify Safety Climate Factors of Express Items Based on Factor Analysis B. Hu, H.Y. Feng and X.Y. Zhang	1102
Research on the Relationship between Three Industries' Structure and Transport Structure in China Based on Input-Output Table R.X. Wang	1106
Traffic Guiding Method Based on Actuated Control and Phase Jump L.F. Bai, D. Xing, C.L. Fu, L.Z. Zhu and M. Zhu	1110

Design of Traffic Organization Refer to Variable Lanes at the Intersection G.B. Jia, Z.Z. Yuan and Y.H. Li	1118
Influence of Roundabout Inscribed Circle Diameter to the Traffic Safety I. Mahdalova, V. Krivda and V. Skvain	1122
Study on the Grading System of Highway Freight Terminals Y.B. Liu	1126
Agent-Based Simulation Model of Passenger Flow Distribution in Urban Railway Network Q. Zhang and C.Y. Yi	1131
Evacuation Time of the Facilities in Rail Transit Study and Simulation Z.J. Li	1137
An Improved Expert Intelligent PID Control in Maglev Transportation System with Different Track Irregularities R.R. Song, W.H. Ma and Z.L. Chen	1141
Mechanism and Pattern of Developing Rural Logistics Y. Xu, B.Y. Yang and H.R. Shi	1147
The Establishment of Restraining Factors System in the Development of Public Bicycle Y. Yang and Z.Z. Yuan	1154
Research on the Traffic Pattern in City Residential Area in View of "Compact City" Concept M. Song	1158
Proposals of AHP-Type of Disaggregate Logit Model and Improved AHP Model in Modal Choice Y. Kajita	1166
Evaluation Framework Design of Highway Traffic Safety Maintenance S.X. Zhu and M. Yu	1173
Research on the Value and Comprehensive Development of Adjacent Land of Urban Rail Transit Z.Y. Li, S.C. Cao and W. Su	1178
Method of Traffic Zone Division Based on Trip Distance S.M. Wu, G.Z. Cheng and Y.L. Pei	1184
An Integrated Hub Location and Multi-Depot Vehicle Routing Problem J.U. Sun	1188
Study on Public Transport Development Strategy of Satellite Cities in China Y. Zhu, X. Li and C. Li	1193
Study on the Ship Arrival Pattern of Container Terminals P.C. Du, W.Y. Wang, G.L. Tang and Z.J. Guo	1197
Comparison Research on Operating Mode of Global Public Bicycle Systems D.X. Liu, C.X. Shi and H.Z. Dong	1204
Characteristic Parameters Identification of Macro Traffic Flow on Urban Expressway D.S. Chen	1209
Research on the Flight Delay Model and Calculation of the Airport's Punctuality Rate X.S. Sun, X. Zhang and J.F. Han	1213
Study on Interaction Land Use and Road Traffic of Zhongyuan Urban Agglomerations L.H. Li and C.C. Su	1217
Research on the Layout of the Integrative Urban Rail Transit Line Station Z. Lv, D. He, H.F. Jia and C.B. Li	1222
Research on Integration of Urban and Rural Bus Line Network Planning Model J. Wu, J. Wang and K. Yang	1230
The Substitutability Model of Transport Demand and the Share Ratio Analysis of Passenger Transport Products Y.W. You, J.F. Jia and J.G. Wu	1236
Evaluation of Satisfaction Degree for Public Transportation Based on Matter Element Model Y. Jie and W. Tong	1243
Application of Interval Multiple Attribute Decision-Making Method to Standard Instrument Departure Procedure Design' Scheme C. Ken	1248
The Economy Analysis of Sailing in the Arctic Northeast Passage Y.P. Song and A.F. Zhang	1253

Models and Evaluation for Urban Traffic Carrying Capacity S.S. Gao and Z.Z. Yuan	1258
Emergency Rescue Resource Dispatch of Expressway Based on Potential Accidents and GA: Case Study of Henan, China J.Y. Pu, X.C. Guo, G. Chai and C.H. Zhu	1262
Research on Bus Dispatching Method Based on Goal Programming C.M. Zhang and L.L. Zhai	1269
Research on Urban Low-Carbon Transportation L. Huang and H.Q. Zhou	1273
Analysis of Rail Transit Station Passenger Capacity Based on System Dynamics X.H. Li, W.D. Zhang, F. Chen and Z.Q. Li	1277
The Application of Gray Relational Analysis Based on the OWA Operator in the Road Network Evaluation of Development Zone D.H. Lin and Z.Z. Yuan	1287
The Analysis of Demand Characteristics of Passenger Transportation Based on BP Neural Network Y. Liao and T. Wu	1292
Service Requirements Distribution Algorithms in Carpooling Problem S.X. Dong and Z.Z. Shao	1296
Chaotic Characteristics Identification on Terminal Departing Passenger Traffic Time Series Y.P. Zhang, Y.Y. Guo, Y. Wei, S.W. Cheng and Z.W. Xing	1303
Research of Vehicle Scheduling with Time Window Based on Genetic Algorithm X.R. Zhou, M.T. Song and Y.L. Zhang	1307
The Research of First and Last Trip Optimization under the Network of Urban Mass Transit Y.F. Shang, L.S. Zhou, L. Tong and C.J. Cai	1311
Forecasting the Section Passenger Flow of the Subway Based on Exponential Smoothing Y.H. Wang, J. Jin and M. Li	1315
Petri Net Modeling: Container Terminal Production Operation Processing System Analysis W.Z. Zhong, X.Q. Fu and Y.P. Wang	1320
The Toll Free Expressway Policy for Part of Vehicles on Major Holidays Choice of Compensation Basis S.L. Shen and G.J. Zhao	1325
Research on Safety Evaluation Indexes of the Road Transportation Enterprise of Dangerous Goods Q. Dong, D.L. Qian, C.H. Li and H.B. Fan	1330
Measuring Free-Flow Speed Considering Water Depth M.W. Liu, S.Q. Cao, L.Z. Zhang and T. Sumi	1335
Research on Second Ring Expressway Traffic Congestion in Beijing H. Mao and X.H. Xu	1339
Review on Emergency Traffic Control in Urban Area with Probe Data J. Yao	1343
Prediction Method for Freeway Wheelpath Distribution H.J. Cui, X.G. Xing, G.F. Liang and Y.P. Li	1347
A Parking Vehicle Detection Algorithm Using Magnetic Sensor Z.S. Zhang, H.Q. Yuan and L. Chen	1353
The Optimal Unit Green Extension — Considering Different Demand Patterns J. Cai, H.Y. Liu, L.H. Zhang and Z. Wang	1357
Study on Trip Generation of Residential Quarters in Suzhou X.Y. Li, Y.J. Zhu and C.Y. Li	1366
Network Cabling Problems in Highway Toll System Discussion X. Jia and Y.X. Liu	1370
Established Methods of Space between Expressway Work Zones Based on Delay of Expressway K.M. Wu and L.D. Zhong	1374
Detection Criteria and Reliability Analysis of Highway Closed Circuit Television Y.X. Liu	1379

Fatigue-Related Traffic Accidents in Heilongjiang Province Y.L. Pei and L.Z. Wang	1383
The Korteweg-De Vries Equation of a New Lattice Model with a Consideration of the Next-Nearest-Neighbor Site and its Numerical Simulation Y. Xu, Z.Z. Yuan and J.F. Tian	1387
Establishment and Validation of Mainline Driver Type Model at Expressway-Ramp Merging Area Y.L. Tan and H.F. Jia	1392
A Dynamic Algorithm of Partitioning Urban Road Network into Traffic Control Subareas B.W. Gong, Y.M. Bie and Z.Y. Liu	1398
A Quick Offset Optimization Method for Traffic Signal Coordination Y.M. Bie, L.H. Wang and Z.Y. Liu	1403
Research on Simulation of Pedestrian in Passenger Transfer Hub Based on Commuter B. Li and L. Zhang	1407
Improved Self-Adaptive Genetic Algorithm and its Application on the Dynamic Stochastic Shortest Path Problem H. Yang	1415
Study on Safety Evaluation of Flammable Solid Railway Transportation Based on the Bayesian Network F.X. Li and Y.F. Yang	1419
Detecting Research for Vehicles Track at Roundabout Based on Dual Data Source L. Jin, X.X. Liu, S.F. Fan and B.H. Liu	1423
Dynamic Planning Model for Port Iron Ore Inventory G.B. Xu, X. Zhao and X.T. Li	1429

Chapter 8: Transportation Machinery

Research of Semi-Step Walking Wheel Based on Vehicle-Terramechanics Y.B. Zhao, L. Guo, L.H. Li and M.H. Zhang	1435
The Analysis of Handling Stability and Virtual Reality Simulation of Four-Wheel-Steering Vehicle J.Q. Yang, L. Tang and Z.Q. Li	1441
Design of the Auxiliary Power Supply System of CRH2 EMU M. Peng	1445
Statistical Study and Cause Analysis on Car Fires J. Chen, L. Yi and W. Zhou	1449
The Preliminary Study for the Fault Diagnosis of EMU Based on Expert System L. Guo and Y.H. Wang	1453
The Calculation of Ship Wave in Shallow Water by Finite Difference Method D. Hui, Z.H. Zhang and J.N. Gu	1461
Effect of Trim on VLCC Resistance Based on CFD L.J. Yang and Y.H. Tao	1465
Thermal Comfort Assessment Model for Civil Cabin Environment L.P. Pang, Y.J. Wang and D.S. Yang	1470
Analysis and Improvements on the Body Heat Insulation Materials on the Basis of Cold-Chain Y. Tong	1474
The Effects of the Intake-Gas Temperature on the Energy-Efficient of the Urban Bus J. Zhang, K.Y. Lin and J. Liu	1480
Simulation Analysis of Influences of Anti-Roll Torsion Bar on Vehicle Dynamics Z.Y. He	1486
The Experimental and Analysis of Automobile Brake Groan X.J. Meng and R.F. Yuan	1492
Improvement and Lock Calculation of Electric Switch Machine of Railway Turnout J.M. Xu, P. Wang and H. Xu	1496
Human-Machine Collaborative Knowledge Modeling in Railway Location Intelligent Environment C.H. Han, Y. Zhu, W. Cheng and Y. Xu	1502

Research of Safety Interlock Monitoring System on Locomotive Service Field M. Peng	1509
--	------

Chapter 9: Engineering Management and Engineering Education

Finance Mechanism of Industrial Risk Preventing Based on Knowledge Sharing: A Dissipative Theory Perspective X.M. Yan	1515
The Prediction Study of Bidding Control Price Based on GM Model D. Nie	1524
Solutions for Problems Related with Electronic Information Industry Development in Chongqing M.H. Zhang and X.Y. Xiang	1529
Evolution Mechanism of Public Psychology Amidst Food Safety Emergencies S.H. Zhang	1535
Resource Allocation Heuristics for Project Scheduling Y.X. Zhang, C. Chen and J.M. Shi	1539
The Study on the Barrier of Implementation of PPP Projects' Assessment System Based on VFM in China X. Qi, C. Yi and J. Li	1543
Study on Comprehensive Quality Evaluation System and Method of College Students Y. Yao, X. Meng and H.Y. Zhang	1547
On the China's Tourist Hotel Facilities and Equipment Preventive Management F.L. Liu	1551
Study on the Architectural Education Ponder Based on the Background of Low-Carbon — Illustrated by Lanzhou University of Technology X.W. Meng and M.H. Ye	1555
Research on Compatibility of Task Allocation and the Development Team for New Product Development X.B. Pei, T. Li and D.D. Huangfu	1560
Research of Scheduling Management in Warship Scheduled Repair Project S.L. Zhou, Y.F. Zheng, J. Zhang and M.Q. Duan	1564
Research of Expert System in Nuclear Power Plant X.W. Yan, Y.F. Zheng, C. Yuan and M.Q. Duan	1569
In Demand Side Management Based on Sensitivity Study Ladder-Type Electricity Price Program W. Xiong, Y. Zou and S.W. Su	1573
Evacuation Simulation in the Narrow Stair with Revised Social Force Model H. Wu, J. Huang, Z.L. Guo and Y.G. Hu	1577
Research on the Influence Mechanism of Disruptive Innovation on the Consumer Prices Q. Yang and C.Y. Liu	1583
Research of Disruptive Diversification Strategy and the Synergy Effect Q. Yang and Y. Zhang	1587

Chapter 10: Computer Applications and Information Technologies

A Research on the Optimization of Fuzzy Image X.F. Wu and Y. Fan	1593
Application of Web Mining in Electronic Commerce	1597
Discussing Variables Nature in Internet of Things Growth J.J. Li and N. Ma	1604
Study on the Software System Used in Simulated Control Module H. Dai, L.T. Xu and W.P. Chang	1608
A Novel Hybrid Particle Swarm Optimization Algorithm L. Chen	1611
Development of Pre-Processor for OpenSees Based on Patran Command Language Y.C. Gao, F. Jin, Y.J. Xu and J. Yang	1615

Application of Computer Simulation to Ensure Comprehensive Security of Buildings A. Volkov, P. Chelyshkov and A. Sedov	1620
Research on Extracurricular Teaching System Based on Twitter Mode Y. Xie and Y.L. Zhang	1624
The Study of Group Decision Based on Interval AHP X.C. Wang and Y.B. Jiang	1629
FFmpeg Technology Based on Media Asset Management System Design L.L. Deng	1633
A Study on Wireless Private Network Technology in an Integrated Automation System for Safety Monitoring of the South-to-North Water Diversion Project Y.H. Jiang, L.B. Li, Q. Zhang and Z.C. Lu	1638
An Application of Digital Rights Management in Network Learning System D.M. Yu	1644
A Calculating Method for the Fault Detection and Exclusion in the WAAS R.B. Zhao, R. Li, Z.G. Huang and B. Shao	1649
A Research for Image Defogging Algorithm Y. Fan and X.F. Wu	1653
An Algorithm of Searching the Best Receiving Point through the Side-Lobe of the Synchronous Communication Satellite X. Wang, Z.D. Li, Z. Zhang and L. Hu	1657
Analysis on Difference of Contaminated Normal Distribution PDF F.B. Zhou and Y.K. Guo	1661