

Table of Contents

Preface, Conference Organization and Sponsors

Chapter 1: Environmental Chemistry, Biology and Technology

Screening of a Microbial Flocculant Producing Silicate Bacteria MT5-2 and its Flocculating Activity	
M.Y. Yang, F. Han, J. Tian, C. Sun, X. Cui and M.R. Han	3
Study on the Preparation of Polymer Gel System with Oilfield Wastewater	
Y.K. Liu, X. Wan, J.Q. Zhi and X. Wang	9
Characterization of Organic Acids with Different Atmospheric Particle Sizes	
X. He, F. Qian and Y. Li	14
Effects of Long-Term Fertilization Regimes on N₂-Fixing Bacteria in a Luvisol Soil of Northeast China	
L.J. Cai, Y.G. Xu and W.T. Yu	23
A Comparative Research on Different Preparation Methods of Furfural Hydrogenation Non-Chromium Catalysts	
Z.Z. Li, G.M. Wang and W.J. Li	27
Seasonal Change of the Soil Physical, Chemical and Biological Properties of the VGCG Slope	
Z.C. Zhao, Z.Y. Xia, M.Y. Li, B. Wu and W.N. Xu	32
A Novel Way of Catalyst-Free-Esterification of Ethyl Cellulose with Phthalic Anhydride	
J. Xu, C. Zhang, Y. Zhou, P. Qu, H.M. Han and J. Wang	36
Determination of Reduce of Arsenic (III) Toxicity to <i>Pseudomonas fluorescens</i> Using Iron by Combined Methods	
F. Wang, J. Yao and H.L. Chen	40
Study on Preparation of TiO₂ Nanoparticle by Sol-Gel Method	
H.Y. Lin, J.L. Li and C.C. Wang	44
The Influence of Temperature on the Content of Liver Glycogen and Muscle Glycogen in Sparrow	
X.J. Xu, S.L. Shao, W.W. Zhang, W.Y. Wang, X.Y. Li, J.S. Liu, J.W. Lv, T. Li, H.Y. Li, T.F. Yu and Z.Q. Wang	48
Microbial Degradation of Nitrobenzene by Immobilized Cells of <i>Micrococcus luteus</i>	
Y. Qi, C.L. Zheng and Y.T. Zhang	52
Efficiency of Different Mass Transfer Modes in Electrochemical Oxidation Treatment for Landfill Leachate	
J.G. Dai, Q.W. Song and Q. Wu	60
Effects of Proliferation and Apoptosis in Human Gastric Cancer Cell Line SGC-7901 Induced by Zedoary Turmeric Oil	
S.L. Shao, W.J. Sui, S. Li, W.W. Zhang, W. Zhao and J.P. Song	67
Mitomycin Induced Apoptosis in Human Leukemia K562 Cells	
S.L. Shao, B. Zhao, W.W. Zhang, W. Zhao, G.H. Wu and J.P. Song	71
Study on Correlations between Sulfate-Reducing Bacteria and Geochemical Factors in Sediments from Baihua Lake	
W. Shen, J.W. Hu, X.F. Huang, J. Mei, L.Y. Fu, J.P. Zhang and J. Luo	76
Heavy Metals (Cu and Zn) Release Kinetics in a Sediment Sample from the Inlet of Baihua Lake, China	
J.P. Zhang, J.W. Hu, X.F. Huang, J. Mei, W. Shen and J. Luo	81
Preparation and Characterization of Magenetically Core-Shell Structure Carbon Based Solid Sulfonic Acid	
N. Liu, R.Y. Zheng, W.Y. Liu, J.X. Ma, X. Zheng, B. Li and Z. Wang	86
Release Kinetics of Phosphorus in Sediments from Baihua Lake	
J. Mei, J.W. Hu, X.F. Huang, L.Y. Fu, J. Luo, M. Jia and C. Liu	91
Determination of Ni(II) in Water Using Nanometer Attapulgite Adsorption via FAAS	
Y.M. Hou, X.J. Zhao and J.M. Xie	96

Seasonal Variations of Heavy Metals in the <i>Bivalve's mollusks</i> from Ta-Peng Bay Lagoon in Southwestern Taiwan	
M.F. Shue, J.J. Chen, L.H. Tseng and W.L. Lai	100
Study on the Dispersion of Nanometer TiO₂ Powder by Sol-Gel Method	
F. Zhao, Y.Q. Zhao, Y.Y. Li and G. Ni	104
Effects of Chlorine Dioxide on the Bioactivity of Planktonic and Attached Bacteria Grown in Annular Reactor System	
M.F. Shue, L.F. Chen, J.J. Chen, L.H. Tseng, B.M. Yang and W.L. Lai	108
Study on Alkylation of Catechol with Ethanol by Al-P-Ti-O Oxides	
X.M. Zhu, B. Sun and C. Huo	114
Activity of <i>Deinococcus radiodurans</i> on Chromium Ions	
Y.X. He and X.M. Chen	118
Microbial Activity in Soils of Vegetation-Growing Concrete Slopes	
C.H. Zhang, T.T. Song, J. Liu, H.J. Xia and J.Z. Wang	124
The Effect of the Chemical Osmosis on the Solute Transport in Geosynthetic Clay Liner	
L. Lei, S.C. Xu, J.S. Li and Y. Zhao	128
Isolation of Endophytic Fungi from <i>Xylocarpus granatum</i> and Study of Antimicrobial Activities	
X.P. Su, X. Wang, L.L. Huo, J. Wu, K. Zou and D.C. Gong	132
Influence of Carbon Dioxide Concentration on Microalgal Growth in a Bubble Column Photobioreactor	
S.W. Li, S.J. Luo and R.B. Guo	137
Influence of Lead (Pb) on the Antioxidation System of Dishlia	
Q.H. Zhu and H.X. Xia	141
Time-Dependent Growth of Hematite (α-Fe₂O₃) Nanotube Arrays Produced by Iron Anodizing in Ethylene Glycol Solution	
G. Yue, H.W. Ni, R.S. Chen, Y.W. Li and J.H. Li	145
Correlate the Toxicity of PAHs with Physical and Chemical Propertie QSAR Descriptors by PCR Method	
X.L. Li, X.P. Li and Y. Li	151
Correlate Toxicity Order Numbers with Metal Ion Characteristics through the Ridge Regression (RR) Method	
X.L. Li, L. Wang and Y. Li	155
Agricultural Nitrogen Budget in the Yangtze River Basin from 1990 to 2000	
X. Bao, G.W. Ma and Y.Y. Wang	159
Effect of Pyrite Cinder on Calla Lily Antioxidation	
H.X. Xia and Q.H. Zhu	168

Chapter 2: Environmental Analysis: Planning, Management and Assessment

Eco-Efficiency-Based Evaluation of the Resource and Environmental Performances of Jiangxi Province, China	
H.P. Huang	175
Environmental Risk Assessment for Offshore E&P Activities in Brazil	
P. Maggi and C. Morgado	182
Online Monitoring of Trace Copper (II) in Environmental Waters	
L. Wei and Y.C. Dai	188
Simulation of Structural Features of Atmospheric Boundary Layer of Chengdu Urban Agglomeration	
W.Y. Wang, X.J. Ma and G.P. Fu	192
The All-Wind-Direction Computer Simulation on the Outdoor Wind Environment	
H.X. Tai, Y.L. Yang and F. Liu	202
Study on the Environmental Impact Assessment Index of Traffic Engineering Based on the Low Carbon Economy Perspective	
Q. Guo, D. Li and Q. Fang	206

An Optimal Model for Low-Carbon Urban Agglomeration Based on Energy Structure Reduction under Uncertainty	
L. Wang, Z. Sun, J.Y. Wen, Z. Li, W.J. Zhao and Y. Li	211
SWOT Analysis of Development and Utilization of Ecological-Cultural Holiday Tourism Resources in Yesanguan of West Hubei Province	
L. Li, H.L. Liu, K.P. Dong and R.Q. Li	216
Numerical Estimation of Corrosion Environment by Airborne Sea Salt Particles	
C.C. Liu and M. Obata	220
Environmental Evaluation of Sanitary Landfills Establishment: Malaysian Case Studies	
C. Zhang, S. Santha and F.S. Hamid	224
Eutrophication Assessment of Reservoir Based on Matter-Element and Extension	
J. Pan, Y. Liu, C.H. Li and J. Wang	229
Analysis on Built Environment in Underground Shopping Malls in Chongqing in P.R. China	
W.J. Li, X.X. Liao, G.Y. Miao and X.Z. Zhou	233
Assessment of the Klang River Quality Using the Water Quality Indices	
F. Othman and M.E. Alaa Eldin	237
Experimental Research on Human Metabolism in Hot Environment	
Y.P. Sun and N. Zhu	241
Zoning Evaluation of Geological Hazard in YuLin Coal Mining Area	
J.L. Yan, J. Wang, S.J. Song and Z.H. Zhao	245
T-RFLP Analysis of Soil Microbial Community from Shandong Province for Forensic Science	
J.J. Wang, Y.M. Li, Z.W. Zhao, Q. Li, Y.Z. Liu, C.J. Ye, D.K. Hao, Y.H. Qu, Q.Q. Zhang and J.F. Li	250
Shipping Oil Spill Environmental Damage Risk Assessment Methods: A Literature Review	
X.B. Yu, M.H. Zhu and C.F. Niu	254
Cause Analysis of Rainy Fog and Radiation Fog in Chongqing	
Y. Han, D. Liu, H. Wang and F.H. Min	261
The New Rural Green Residential Energy Conservation Mode Design -Energy-Saving Articles	
Q.F. Hu, H.F. Deng, F. Sun, J. Wei and K.P. Yu	268
Assessment of the Underground Water Contaminated by the Leachate of Waste Dump of Open Pit Coal Mine Based on RBF Neural Network	
Z.B. Liu and X.W. Yang	272
Three Parallel Rivers World Natural Heritage Site Ecological Safety Protection Research	
H. Li, W.J. Yao, S.Q. Wang, P.F. Su, Q.C. Duan, W.X. Wang, J. Wang and G.Y. Li	278
Research into the Application of New Eco-Friendly Materials in Children Product Design	
P.T. Hao and Z. Yang	282

Chapter 3: Environmental Cleaner Production, Pollution Control and Ecological Restoration

Effects of Adding Nitrifying Bacteria on Microbial Communities and Nitrification in a Laboratory-Scale a/O Reactor Treating Leather-Tanning Wastewater	
Z. Wang, B. Liu and A.M. Li	289
The New Treatment Method of Hard-Degradation Wastewater	
W. Zhang and W. Han	295
Design of Leachate Treatment Project in Fan County Municipal Solid Waste Landfill Site	
W.J. Gong and Y. Liu	299
Removal of VOCs Using Sludge-Based Adsorbents	
P. Fang, C.P. Cen, H.T. Zhang, Z.J. Tang, D.S. Chen, Z.H. Chen and Z.L. Chen	305
Flow Pattern in Ceramic Filter System for Particle Removal	
H.X. Li and J. Wei	309
Experimental Research on the Advanced Treatment of Coking Wastewater by Patented Wastewater Treatment Equipment	
J. Wang, L.F. Fan and D. Fan	313

Treatability Evaluation of Domestic Wastewater for a Rational Selection of Treatment Processes for Wastewater Treatment and Reuse	
P.K. Jin, X.B. Wang and X.C. Wang	318
Kinetic Analysis on Rotating Biological Contactor Treatment of Organic Matter	
F. Li and Z.L. Qi	322
Study on the Influence of C/N Ratio on Denitrification Efficiency in CRI System	
J.M. Chen and Z.H. Sheng	326
Characteristic of Phthalates Adsorption on the Organic Medium	
J.J. Liu, H.Y. Chen, J.T. Liu, Y.X. Zhang, G.X. Huang and J.C. Sun	331
Comparison of Pre-Treatment Methods for Nanofiltration (NF) in Drinking Water Treatment Related with Organic Removal and Membrane Fouling Mitigation	
F.Y. Sun, W.Y. Dong and X. Guo	335
Improved Method of Data Processing for Flocculating Sedimentation Experiment	
Y. Lin, S.W. Guo and J.H. Lin	340
Indirect Anodic Oxidation Applied for the Treatment of Simulated Wastewater Containing Reactive Dyes	
B. Yang, D. Du, H. Xie and Y. Sun	344
Identification of the Pollution Source by Using a Semi-Discretization Approach	
W. Zhang, Z.W. Wang and T.W. Liu	348
The Adsorption of Pentachlorophenol (PCP) on Aerobic Granules	
H.X. Lan, X.F. Liu, R. Chen and H. Zhang	354
The Analysis of Bonding Shear Stress of Affixed Reinforced RC Beams	
D.S. Yu, T.Q. Yu and J.F. Shi	358
Lab-Scale Study on Removal of Phenol from Contaminated Groundwater by Chlorine Dioxide Oxidation Technology	
Q.S. Wang, Z. Xu, Y.W. Zeng, S.C. Yue and Y.R. Zhang	363
Environment Air Pollution Analysis of XiaoYang Barbecue Bar in Xi'an	
H. Guo, C. Liu, X.P. Zhao and Y.S. Wu	367
The Study of Cadmium Wastewater Disposal by Heavy Metal Flocculant Polyhydroximic Acid	
B. Wang	372
Study on the Rehabilitation of Eutrophic Water by Bacillus–Matrix–Plant Integrated System	
X.Z. Lu, J.C. Hao, H.F. Liu and X.P. Tian	378
Purification Efficiency Study of Biological Treatment of Iron and Manganese for Groundwater	
F.P. Hu, W. He, C.C. Tang and L. Zhong	383
Research on Low Concentration Municipal Wastewater Removal Rate with Chemical-Biological Flocculation and Suspended Medium Process	
X.Y. Bian, X.S. Kang, Y. Li, Y.L. Sun, M. Kong, Y.H. Zhang and Z.B. Zhang	387
Remove of Congo Red from Wastewater by Adsorption onto Eggshell Membrane	
J. Liu, X.Z. Cheng, P. Qin and M.Y. Pan	391
The Variations of Organic Fluorescent Property in the Effluents from Biotreatment Unit Followed by Constructed Wetland Process	
J.P. Hu, S.Y. Zhao, C.Y. Chiu, H.J. Ho, M.H. Tsai and W.L. Lai	395
A LCA Model for Cleaner Production Performance Measurement	
Z.Y. Cai, R.B. Xiao and J.H. Li	400
Modeling and Simulation of Sulfur Dioxide Abatement with Ammonia Absorbent in the Spray Scrubber	
Y. Jia	404
The Adsorption and Desorption Characteristics of a Novel Sorbent in Groundwater Remediation: Modified Oil Sludge	
Y.H. Li, Y.L. Liu, H. Deng and S.L. Zhang	412
Analysis on Water Pollution Characteristics of Typical Urban River-Taking the Zaohe River in Xi'an City as an Example	
J.K. Li, J. Yu, W. Dong and H.E. Li	418
Emergy Evaluation of Pollutants Emission in Coal Mine: A Case Study of DaLiuTa Mine in Northern Shaanxi Province, China.	
J. Zhang, B. Xiao, H.X. Du, L. Wang, B.Z. Ge and H. Shi	428

Assessment of Heavy Metal Contamination in Paddy Soils from Daye Mining Area of Hubei Province, China	
C.Q. Yin, Q.B. Sun and X.Q. Zhao	434
Purification Effects of Artificial Vegetated Floating Bed on Polluted Water	
Y.Q. Li, Y.H. Jiang and Z.H. Li	441
A Research into the Distribution Characteristics & Natural Existing Condition of the Mercury in the Coal of Huainan City	
T. Ge	448
Research of Effect of Groundwater Table Fluctuation on Migration Law of Cadmium	
X. Li, S.G. Bai, B.D. Xi, Z.Y. Yuan and Y.Y. Wang	455
Heavy Metal Distribution and Sedimentary Control in the East Side of Pingtan Island	
Y. Hu, J. Chen and J. Xu	462
Characteristic of Competitive Adsorption of Dimethoate with a Variety of Pollutants on Surficial Sediments through Fractional Factorial Design	
M. Wang, X.L. Li and Y. Li	467
An Interval Optimization Model of Regional Pollutant Total Amount Control Based on a SEM Total Control Evaluation Index System	
J.Y. Wen, Y. Hu, Z. Sun, Z. Li and Y. Li	472
Application of Total Amount Control Optimization Model on Regional Atmospheric Pollutants Based on the Total Amount Control Evaluation Index System (The Evaluation Indicator Layer)	
J.Y. Wen, Y. Hu, C. Hui, Z. Li and Y. Li	476
Research Development of Fenton Oxidation and its Combined Technology in Coking Wastewater Treatment	
K. Xue, Y.L. Yang and J. Li	480
Pollution Characteristics of N-Alkanes and PAHs in Typical Road Tree Leaves in Chengdu City, China	
H.L. Yin, H.W. Yuan, Z.X. Ye, S.C. Yin, Y.C. Yang, M. Wang, C.W. Zou, X. Li, Q.Q. Li and T.T. Cai	484
Study on Sulfur Dioxide Atmospheric Environmental Capacity of Chengdu Urban Agglomeration	
W.Y. Wang, X.J. Ma and B.J. Ke	488
Comparative Study on the Treatment of Berberine Wastewater by Chemical- and Electro-Coagulation Processes: Zeta Potential Analysis	
S.H. Xiao, Y.H. Song, P. Zeng, J.F. Peng and D.S. Zhang	496
Adsorption Characteristics of Natural Zeolite on Ammonia Nitrogen	
W.P. Wang, W. Wang and Y.Q. Zhou	501
Modeling and Simulation of the Activated Sludge Process at a Full-Scale WWTP	
P.L. Lu and Z.L. Li	505
The Main WFGD Technologies and their Development Trend	
C.T. Qu, H.G. Su, J. Tian, X. Yang and X. Wang	510
The Study on Experiments of Oilfield Wastewater Treatment by Microwave-Assisted Demulsification	
H.M. Cui, L.F. Ke, H.B. Qi and L.Y. Chen	516
The Problems and Suggestions of the Desulfurization Wastewater Treatment System during the Operation	
X.F. Dong, G.F. Shen, X.X. Zhou, J.J. Guo, X.Y. Zhang and W.L. Wu	521
Research on Indoor Air Pollution Controll in China	
Y.G. Zhuo, J. Liu and Y.C. Zhang	525
Study on the Treatment Technology of Polluted Soil with Heavy Metal	
Z.Y. Zhang, D.Z. Wu and Q.M. Cai	529
Distribution, Enrichment, Accumulation, and Potential Ecological Effect of Lead in the Sediment of Jen-Gen River Estuary, Taiwan	
C.D. Dong, C.F. Chen and C.W. Chen	533
Mechanical Properties of Concrete Incorporating High Volume Palm Oil Fuel Ash	
I.A. Shehu and A.S.M.A. Awal	537

Chapter 4: Waste Disposal and Recycling

Research on Sewage Treatment Technology of High Salt City in Tangshan Coastal Development Zone	
Y. Yong, X. Liu and Y.Z. Zhang	543
Experimental Study on the Permeability of Fresh Municipal Solid Waste	
Z.Y. Zhang, D.Z. Wu and Q.M. Cai	547
Study on the Production and Trend of the Electronic Waste in China Based on Grey Prediction Model	
Y.X. Zu, Z. Li, Y. Jia and S.S. Jia	551
Research on the Strata Behaviors and Technical Economical Effect of Gob-Side Entry Filling Retaining in Southwest Region	
W.Y. Lv and Z.H. Zhang	556
Analysis and Prediction of Waste Discharge in Liaoning Industrial Areas	
J.S. Li and H.M. Fan	560
The Comparison of Three Recycling Processes of Copper Chromite Spent Catalysts	
Z.X. Li, G.M. Wang and Q. Liang	566
The Effect of Temperature on Landfill Gas Production with Waste Degradation	
L. Liu, C. Yang, J.S. Li and Y. Tian	570
Study of the Production of Ceramsite Using Municipal Sewage Sludge	
X.J. Lu	574
Applications of Fuel Cell in Cogeneration Systems	
B.J. Chen and X.D. Xing	578
Influence of Cathodal Performance on Electricity Generation of Microbial Fuel Cell with Refinery Oil Wastewater as Fuel	
X. Guo, Y.L. Zhan, S.H. Guo, G.X. Yan, S.X. Sun, L.J. Zhao and R.M. Geng	582
Study on the Resource Comprehensive Utilization of Mine Solid Waste	
Y. Liu, J.T. Chen, S.Y. Yao and C.X. Zhang	586
On-Site Operation of a Composting-Type Eco-Toilet Using Beanstalk and Sawdust as Matrix	
N. Liu, W.Q. Li, X. Qian, H.Y. Fan, G.F. Lu and L.M. Gao	592
Characteristics and Mechanisms of Cu (II) Biosorption on Sludge in the Presence of Citrate	
P. Jia and M.H. Yu	598
Adsorption Kinetics and Isotherms Study of Cadmium Ions from Aqueous Solution on Tailings of Steel Slag	
Y.W. Hui and L.C. An	602
Nitrogen and Phosphorus Removal and Biomass Production by the Green Microalgae in Piggery Wastewater	
J.J. Chen, Y.R. Li, M.F. Shue, L.H. Tseng and W.L. Lai	608
Preparation and Characterization of Sewage Sludge-Based Activated Carbon	
Z.J. Tang, C.P. Cen, P. Fang and Y.M. Liang	614
Assessment of the Characteristics of Nyanza Landfill Leachate, Rwanda	
J.D.D. Bazimenyera, F. Qiang and T. Ntakirutimana	618
Research on Fault Identification of Sewage Treatment Based on PSO Clustering Algorithm	
R.N. Li, X.Y. Wang, Z.W. Liu, J.P. Xu and L.B. Wang	622
The Mathematical Model and Emperiences Algorithm of Activation Energy of Mixed Wastes	
D.C. Wang and X.Z. Liu	628
Advance in the study of Clean Straw as Energy	
L. Bing	635
Research of Stratified Compaction Process of Municipal Solid Waste	
Y.K. Wang, J.P. Yang and X.Y. Peng	640
The Feasibility Evaluation of Mine Drainage Utilization in Jiaozuo	
D.P. Xia and X.L. Liu	647
The New Rural Green Residential Energy Conservation Mode Design - Environmental Articles	
Q.F. Hu, H.F. Deng, F. Sun, J. Wei and K.P. Yu	651

Chapter 5: Hydrology and Water Resources Engineering

Experimental Research on the Dynamic Pore Water Pressure's Development Rules of the Silt in the Yellow River Delta, China X.J. Yang and T.S. Hou	659
Nearest Neighbor Search for Diagnosing Rain/Non-Rain Discrimination C.C. Wei and Y.H. Lu	664
Study on Adsorption and Desorption of Suspended Sediments to Phosphorus in Ganjiang River Q.L. Ouyang, G.Q. Gao, S.S. Liu, X.L. Shi and H.Y. Ju	669
Long-Term Trends of Water Quality in Upstream of Daling River in China H.X. Wu, C.L. Jiang and Z. Du	673
The Research of Xiaolangdi Reservoir Environmental Compensation Benefits Y.F. Zhang, Q.Q. Qi and Z.Z. Zhang	678
Study on the Division of Geohydrologic Unit Based on Hydrochemical Characters of Groundwater X.P. Yao, L.H. Yao and X.Y. Wang	682
Fuzzy Comprehensive Evaluation of Water Resources Carrying Capacity in Suzhou City of Anhui Province Y. Gao, H.M. Zhang, G.W. Xu and H.M. Su	686
Analysis of Time-Spatial Characteristics of Summer Precipitation in Chongqing Region during 45 a F.H. Min, B.C. Xia, D. Liu and Y. Han	690
Chemistry of Groundwater from Sandstone Aquifer in Wolonghu Coal Mine, Northern Anhui Province, China H.R. Gui	697
Water Demand Forecasting in Hubei Province with BP Neural Network Model Z.Q. Tang, G. Liu, W.N. Xu, Z.Y. Xia and H. Xiao	701
The Research on the Lake Eutrophication with CNOP Method B. Wang, Z.H. Huo, Q.Q. Qi and P.J. Zhang	705
Study on the Effect of Debris Flows from Guanba River on Qiong Lake, Sichuan, China X.L. Wei, Y.L. Qi, Q.G. Cheng and N.S. Chen	709
Longitudinal Velocity Distribution and Manning's 'n' Coefficient in Open Channel with Unsubmerged Vegetation W.P. Huang, H.Y. Zhang, W.G. Xu and Z.Y. Wang	716
Parameter Inversion of Field Pumping Test in Aquifer with Enclosed Impermeable Boundary H. Yuan and Y. Hong	720
Analysis of Groundwater Isotopes and Ions Characteristics Relationship in the Area of Seawater Intrusion Z. Du, H.X. Wu, Z.C. Dong and D.S. Sun	724
Study on the Flood Volume Investigation for Medium and Small River Z. Du, H.X. Wu, Z.C. Dong and D.S. Sun	728
Failure Mode of Karst Water under Inclined Coal Seam Mining in Hilly Area G.H. Yao, Z.H. Chen, C.P. Tu, X.Q. Xiang and S. Xu	732
Restoration of Natural Herbaceous Vegetation of Xiangxi River's Water-Level Fluctuation Zone after the Flooding in Three Gorges Reservoir Area C.H. Zhang, T.T. Song, J. Liu, H.J. Xia and J.Z. Wang	739
Water Resources Research in Henan Province Based on Ecological Footprint Model X. Luo and W.D. Zhou	744
Study on Sediment Characteristics in Artificial Wetland and Natural Wetland X.Y. Wang and A.M. Fu	748
Spatial and Temporal Change of Land Use and its Impact on Water Quality of Poyang Lake Region X.F. Yan, Z.M. Qiu, J.L. Wang, F. Liu and D.N. Liu	753
The Preliminary Study on the Effect of Debris Flow on the Tianchi Lake X.L. Wei, F.P. Xiao, N.S. Chen and Q.G. Cheng	757
Analysis Models of Storm Runoff Volumes from Small Watershed in Chongqing Metropolitan Area Q. He, Y. Zhi, W.T. Yan and S.M. Wang	762

Study on Risk Evaluation of Sand Inrush of Thick Coal Seam under Water-Bearing Unconsolidated Strata	
H. Fu, R.M. Feng and H. Yu	769
On the Assessment Method Based on Correlation Weighted Comprehensive Nutritional Index in the Three Gorges Reservoir	
J.L. Ruan, G.B. Chen, H. Lei, X.L. Yu, D.Y. Zhong and G.Q. Wang	773
Laboratory Measurement and Numerical Simulation of Evaporation Fluxes from a Thin Clay Layer	
Z. Hua, G. Kang and W.L. Hu	777
Research on Numerical Stimulation of Water Resources of Bang River by Finite Volume Method	
Q.X. Liu, H.Y. Yang and Q.H. Wang	781
Floodwater Utilization Integrated Risk Evaluation Model Based on D-S Evidential Theory	
Y.X. Zhao and Y.M. Zhang	787
Sandy Soil Consolidation and Water-Saving Process Design in the North China Plain	
Y.P. Cheng, J.K. Zhang and F.W. Zhang	795

Chapter 6: Soil and Water Conservation and Desertification Control

The Prediction Model Study of the Hydraulic Fill Elevation in Reclamation Project	
X.Q. Liu, W.B. Pei, Y.T. Zhang and Y.H. Yang	807
Study on Mechanical Property of Structural Damaged Expansive Soil with CT-Triaxial Shear Test	
L.J. Shi, X. Li, Z. Peng, S.J. Wang and F. Wu	811
Differences of Shear Strength between Undisturbed and Remolded Soils of Lands for Agriculture and Forestry in Menglianggu Watershed of Linyi City	
X.M. Zhang, Q.J. Liu and X.X. Yu	815
Effect of Water Table Rise on Migration and Transformation Law of Nitrate under the Condition of Rainfall in Saturated - Unsaturated Soil Layer	
S.G. Bai, X. Li, B.D. Xi, Z.Y. Yuan, Y.Y. Wang and Y.W. Tong	820
Influence to Three Gorges Reservoir for Implementation of Soil and Water Conservation Project in Jialing River	
Y. Quan	827
Field Experimental Study on Saline and Alkaline Soil Amelioration through Combining Chemical Method and Under-Mulch Drip Irrigation	
C.X. Wang, Q.J. Wang and Z. Liang	832
Construction of Evaluating Indexes System of Soil Conservation Benefit in Small Watershed	
Y. Zhang, X.G. Zhao, A.H. Zhang and Y. Yang	838
Evaluation Research of Land Intensive Use Based on Extension Theory in Xi'an	
M.S. Yang, H.L. Li and J.Z. Wang	843
Analysis of Soil Fertility in the Preliminary Stage of Ecological Slope Protection in Guandi Hydropower Station	
M.Y. Li, G. Liu, W.N. Xu, K.L. Wei and Z.C. Zhao	847
The Application of CNOP in the Management of the Desert Ecosystem	
B. Wang, X.H. Cai and S. Wu	851
Tracing Soil Erosion from Watershed Using Rare Earth Elements	
H. Xiao, G. Liu, W.N. Xu, Z.Y. Xia, Z.Q. Tang and P. Yang	855
Soil Quality Change during Reversal of Desertification in Agro-Pastoral Transition Zone of Northern China	
J. Zhang and P. Hou	859
Enzyme Activities of Soils during the Reversal of Desertification	
J. Zhang and P. Hou	865
Seasonal Changes in Various Soil Organic Carbon Pools with Different Soil Amendments	
H. Zhou, W.T. Yu and Q. Ma	870

Chapter 7: Ecological and Environmental Protection

The Natural Restoration Capability of Vegetation in Different Site Types along the Expressway 25, Lu-Su Section, China Y.Y. Li, F.Y. Zhao, L. Wang, F. Liu, J. Wang and C.D. Zhu	877
Analysis on the Electromagnetic Environmental Factors of 500kV Double Circuit Transmission Line J.Z. Qi and J.Y. Li	884
Technical Method to Study Climatic Environmental Change in Desert Region by <i>Tamarix</i> Cones H. Wang, J. Zeng, J. Zhang, Z.Y. Sun and Y.J. Zhao	888
Study on Features & Hazards of Harmful Aquatic Plants in Three Gorges Reservoir Area P. Ning and H.M. Wang	894
On the Impact of Timber Consumption on Environment due to Wooden Architecture Construction in the Tang Dynasty in Chang'an T.H. Wang	898
The Environmental Problems and Protection Measures of Big Trees Transplanting R. Ning, G.X. Chen and X.A. Ning	902

Chapter 8: Land Resources Environment and Planning

Tourism Development and Exploration of Abandoned Mine - Taking National Mine Park of Jianghe Coal Mine in Chongqing as an Example L. Yang, M.L. Zhou, R.N. Lu and Y.P. Liao	909
The Research and Evaluation Study of Intensive Land Use of Industrial Park Based on RS and GIS Technology P. Ren, J.M. Zhou and B.T. Hong	915
Based on the Matter-Element Theory for the Construction of Small Towns Evaluation Model and Application T. Wang and M.S. Yang	924
Highways Construction and Optimal and Intensive Land Use G.Z. Luo, C.G. Xi and J.S. Fu	929
Dynamic Change Analysis of Grain Yield and Factors Based on Gray System in Northern Anhui Province H.M. Su and A.X. He	934
Monthly Resolution Analysis of Vegetation Response to Climatic Changes in the Upper Reaches of the Yellow River Basin J.Q. Du, C.C. Liu, C. Xu, Y. Guo, L.X. Wang and Y.C. Li	938
The Marshlands Degradation and the Urban Spatial Transformation: A Case Study of "Town" and "Market" in Jingzhou City Y. Chen, H. Bing and L.G. Zhang	943