Table of Contents

Preface and Conference Organization

Chapter 1: Environmental Materials and Processing Technology

Preparation and Photocatalytic Performance of SO ₄ ²⁻ / CeO ₂ - TiO ₂ / HTLC R.J. Xue, C.Y. Chen, S.F. Cheng and M. Zhou	3
Preparation of Nano-Titanium Dioxide by Microemulsion Method B. Huang, L. Li, Y.P. Jiang and S.X. Hao	8
The Mechanical and Aging Properties of the Natural Rubber/Polyvinyl Alcohol (NR/PVA) Blends	
K. Chen and R. Wang	12
Adsorptive Removal of Reactive Dyes from Aqueous Solution by Cationic Polyelectrolyte Modified Bentonite R. Fang and W.J. Chen	16
Precipitation Behaviour of Chromium in CaO-MgO-SiO ₂ -Al ₂ O ₃ -Cr ₂ O ₃ -Fe ₂ O ₃ Slag System X.R. Wu, B. Ma, H.H. Lü, L.S. Li and X.M. Shen	21
Research Progress of Adsorption Properties of Hydroxyapatite H.L. Fan, Z.X. Hou, S.H. Wang, M.H. Wang and X.D. Hu	28
Fast Adsorption of Erythromycin on the Conjugated Microporous Polymers C.L. Zheng, M.M. Du and Y.Z. Rong	32
Hydrothermal Conversion of CO ₂ into Formic Acid with Zinc and Copper Powders under Low Temperature	
L.Y. Wang, G.D. Yao, Z.Z. Jing and F.M. Jin	39
Improvements of the Tensile Strength of Phenolic Resin Adhesive by Surface-Modified	
Nanocrystalline Cellulose H. Zhang, X.C. Li, M. Zhu, L. Hong and G.L. Chu	43
Preparation of Cu₂O/TiO₂ Heterostructure with High Visible-Light Photocatalytic Activity Q.L. Yang, Y.W. Fang, Y.B. Song, S.S. Jia, Y.L. Lu, D.K. Yu and M.L. Fu	47
Research on deNO _x -SCR over Pd/TiO ₂ /Al ₂ O ₃ under Simulated Post Euro-IV Diesel Exhaust Conditions Y.H. Li, F. Zhao, J.Y. Zou, H. Liu and Y. Zhang	52
Research on Preparation and Performance of Environment Friendly Polybasic Non-Phosphate Scale and Corrosion Inhibitor M.F. Yan, Z.F. Liu, H.H. Li and L.H. Zhang	56
The Influences of Compression Temperature on the Fiber Structure and Tensile Properties of Hemp Reinforced Polypropylene Composites X.H. Zhang, X.L. Gong and G. Montay	62
Study on Modification of Hitec Molten Salt and its Properties Tests W. Zhai, G.M. Liu, F. Yu and Y.K. Wang	66
Low Temperature Softening Modification of Ramie Fabrics Q.R. Jiang, C. Yan, Y. Xie, M.W. Shi and Y.P. Qiu	73
The Effect of Nano-ZnO on the Photosynthetic Capacity and Survival of <i>Anabaena sp.</i> and <i>M. aeruginosa</i>	
J.F. Du, Y.L. Tang and Q. Li	77
Adsorption of Creatinine on Pine Nut Shell-Based High Surface Area Activated Carbon C.Y. Xi, X.B. Chu, M.Y. Xi, L.K. Zhao, Y.Z. Sun, H.B. Xie and W.Y. Zhang	81
A Comparative Study of Electron Beam Radiation Treatment of Quinestrol, Norethindrone and Dienestrol from Wastewater and Toxicity Test M.H. Wu, J.L. Li, X.X. He, Y.F. Sun, G. Xu, P.J. Xu, R.Y. Guo, N. Liu and W.Y. Shi	86
Adsorption of Ni(II) from Aqueous Solution by Sulfuric Acid and Thermally Treated Attapulgite	2-
J. Ren, X.W. Song, D. Xu, D.D. Gou and L. Tao	90
Soil Mechanized Compaction Influenced on Soil Environment Y.L. Zhou	95

Chapter 2: Environmental Chemistry and Biology

C.H. Wang and C.P. Li	101
Direct Superoxide Anion Scavenging Effect of Lycopene from <i>Blakeslea trispora</i> by EPR Spectroscopy X.L. Zhang	106
Distribution of Acidophiles around Zijinshan Bioheapleaching Plant: Dispersal or Not? X.Y. Liu, B.W. Chen and J.K. Wen	110
Effect of Nitric Oxide on the Secondary Metabolites of <i>Taxus chinensis</i> var. <i>mairei</i> under UV-B Exposure D.W. Li, M.L. Li, Y. Liu and Y.G. Zu	114
Effects of Phosphorus Stress on Photosynthetic Pigments in Sagittaria sagittifolia Q.Q. He, Z.L. Liu, W. Chen, L. Hao, J.J. Qin, Q. Zhang, C. Meng and X.Y. He	114
MAE-HPLC Determination of Bioactive Compounds in <i>Gardenia jasminoides</i> Ellis Q. Yang	122
Optimization and Modelling of Denitrification and Methanogenic Activity in Start up of Mixotrophic Anammox Reactor D.T. Shu, Y.L. He, Q.Y. Wang and W. Li	127
Preparation of Polyacrylamide Using In Situ Polymerization G.Z. Lu, N.N. Zheng, Z.X. Sun, Y.Y. Zhang, H.W. Wang, X.T. Jiang, J.S. Zhang, Z.J. Lv and C.Y. Yan	136
Study of Uranium Accumulation Mechanism and Physiological Responses of <i>Eichhornia</i> crassipes and <i>Pistia stratiotes</i> S.Y. Li, Q.P. Wei, S.B. Xie, Y.J. Liu and Z. Yan	142
The Effects of Pb ²⁺ Stress on the Growth and Physiological Characteristics of <i>Chlorella pyrenoidosa</i> Z.N. Zhang and J.S. Cui	147
The Research Progress of N_2O Emission Regularity in Wetlands and the Nitrogen Interaction on its Emission	
W.X. Xie, Y.Q. Cui, H.N. Du, J.L. Chen and K.J. Zhu Applications of Chemical Factors in Steroid Bioconversion	154
X.J. Li, X.J. Wang and Y.Z. Ji	159
The Influence of Fluid Mixed State on Microorganisms: A Test Case with <i>Bacillus subtilis</i> Q. Liu, W.J. Zhang and J. Shi	165
Autotoxic Effects of the Leachates from the Invasive <i>Eupatorium adenophorum In Vitro</i> and in Soil	170
X.Z. Zhu, H.B. Han and Q. Li Development of Bacterial Consortia and Biodegradation Ability under Different PAH	172
Stresses J. Ma, S.L. Zhang, J.F. Qu, A.H. Yan and F. Chen	176
Comparative Study of Eight Strains of Lactic Acid Bacteria In Vitro Antioxidant Activity Y.Q. Wang, Y.Y. Wu, L.H. Li, X.C. Wang, Q.X. Cai and X.Q. Yang	183
Effect of Biofilm Constituents on Cd ²⁺ Adsorption onto Sediments from Yellow River X.L. Wang, W. Wang and Y.G. Wu	189
Effect of pH on the Desorption of Trace Metals by Different LMWOAs from a Field Soil Y.S. Li, Y.X. Hou, X.Y. Song, L.Q. Sun, S. Li, Q. Guo and X.J. Hu	193
Flow Injection On-Line Distillation Method for Determination of Cyanide in Water J.M. Zhao, H.C. Bi, Y. Li and H.C. Bi	197
Preparation and Characterization of H ₃ PW ₁₂ O ₄₀ /TiO ₂ -M (M=Fe, Co, Ni, Zn) and Photocatalytic Activity for Methyl Orange Decomposition S.J. Chen, Q. Gan, H.R. Shang and X. Liu	202
Rugao Area <i>Pterocarya stenoptera</i> Leaves Tannin Extraction Technology Research H.L. Zhang, Z.W. Wang and P.F. Xia	210
The Influence of Amendment to the Red Mud and the Effects of Rehabilitated Red Mud on Sweet Sorghum Seedlings	0
C.J. Ma, R. Naidu and H. Ming	216

The Nitrogen Mineralization of Five Forest Types Soil in Eastern Slope of Gaoligongshan Mountains	
M.Q. Yu, G.T. Meng, L.P. He, N.Y. Li, G.X. Li and Y. Chai	222
The Phylogenetic Analysis and Identification of a Novel Remorin Member from Rice(<i>Oryza sativa</i> L) by Proteomics under Salt Stress Y.W. Cheng, A.Q. Feng, Z.B. Zhang, Y.Z. Zhang and J.M. Han	229
Physiological Responses on Sedum yvesii under Water Stress H. Zeng, L.Q. Yang and X.Q. Zhu	233
A Survey of Soy Protein as a Novel Dry Strength Agent for Papermaking Z.J. Xu, Y. Liu and Z. Wang	239
Effect of Roxithromycin on the Activity of Enzyme ERND in the Kidney of Mollusk (Cipangopaludina chinensis)	244
H.W. Wang, Y.Z. Qiao, J. Zhang, D.B. Cai, R. Yin, L.L. Kong, J.J. Yang and D.Y. Dou Effects of Different Water Managements on Yield and Cadmium Accumulation in Rice Y.F. Lv, Y.F. Ren, D. Liu, Y.C. Zhang and J.Y. He	244248
Effects of Nonylphenol on the Enzyme Activity of ERND in Gastropods (Cipangopaludina chinensis)	240
H.W. Wang, W.B. Zhao, J. Zhang, D.B. Cai, R. Yin, L.L. Zhang, S.S. Lu and F.K. Yang	253
Effects of Nonylphenol on the Enzyme Activity of SOD in Shrimp (<i>Neocaridina heteropoda</i>) H.W. Wang, Q.C. Xing, J. Zhang, R. Yin, D.B. Cai, X.N. Cui, Y.N. Wang and G.F. Yuan	256
Extraction of Polyphenols from Dry Roselle Calyx and its Antioxidant Activity S.N. Zhang, D.X. Ma and J. Zhang	259
Sorption of Phthalate Esters on Surficial Sediment of the Yangtze River, China C.X. Wang, X.L. Shao and X.Y. Wu	263
Tissue Distribution of Dechlorane Plus in Mugil Soiuy (<i>Liza haematochella</i>) from Liaodong Bay, China	260
L. Wang, X.J. Liu, L. Zhang, J.N. Xiao and L.N. Zheng Exploration of the Biological Pole of Nitrie Oxide in Sedum alfredii Honor under Heavy	268
Exploration of the Biological Role of Nitric Oxide in <i>Sedum alfredii</i> Hance under Heavy Metal Treatment X.L. Zhang	274
Toxicity of Nano-ZnO and Nano-TiO₂ to M. aeruginosa Z.H. Xue, Y.L. Tang and Y.H. Sun	278
Effects of Polar Aprotic Solvents on Dissolving Cellulose in Ionic Liquid X.D. Li, A. Lan, J.W. Tang, Y. Zhang, M.E. Gibril and M.H. Yu	282
Optimization of Fermentation Conditions for Blue Pigment Production by Bacterial Strain T2013	206
Y. Zuo, P. Jiang, X.L. Wang, B. Fu, X.L. Yang and B.X. Ye	286
Properties of IA/SAS Copolymer and Itaconic Acid Homopolymer H.H. Li, Z.F. Liu, R.H. Guo and M.F. Yan Effects of Academy Metabolisms of Academic A	292
Effects of Acetate on Metabolism of Anaerobic Ammonium-Oxidizing Bacteria J.J. Sun, L. Zhang, L. Wang and X.B. Chen	297
Scenario Planning of Substitution of Wind Power for Coal-Fired Power: A Case Study from the Coastal Zone of Laizhou Bay, China X.Z. Fan, G.J. Yang, Z.R. Jia, Q.F. Zhao, X.B. Liu and N. Sun	301
Study on the Carbon-Thermal Reaction Mechanism of <i>Potassium feldspar</i> and	301
Phosphogypsum C.Q. Yang and J.P. Xia	308
Applications of Physical Factors in Steroid Bioconversion X.J. Li, Y.Z. Ji and X.J. Wang	314
Self-Assembly Behavior of ABC Triblock Copolymer under Special Solvation Conditions: A Monte Carlo Study	210
J.J. Fan, Z.D. Pan and M.F. Shi	319
Analysis of Physicochemical Properties of Hevea Brasiliensis Seed Oil into Lubricating Base Oil M.S. Lin and Y.Q. Wang	323
Study on Derivatising Condition of Cadaverine with Dansyl Chloride as Pre-Column	
Derivatising Agent X.Y. Wang, J.S. Feng, H. Guo and X.Y. Tang	327

Effects of Cleaner Papermaking Additives WEC on Sizing Degrees in Neutral Papermaking with Mechanical Pulp	
G.H. Huang, Y.Q. Zhu, W.H. Xia, P. Cao and Z.J. Zhang	332
Optimum Conditions of Ag/BiVO ₄ Photocatalytic Performance on Degradation of Paracetamol by Response Surface Methodology T.Q. Li, H. Wang, Y.Q. Zhu and Z.Y. Bian	336
Effects of Thiourea on Metals Availability and Maize Physiological Characteristics in Acid Soils from South China	
S. Luo, W. Wang, X.H. Zhou and Q.R. Zeng	340
Chapter 3: Environmental Safety and Health	
Determination of Citrinin in Red Yeast Rice by High Performance Liquid Chromatography with Immuno-Affinity Column W. Meng, L.X. Zhu, X.M. Guo, K.H. Li and R.R. Liu	353
Development of a High-Throughput Immunoassay for Rapid Detection of Multiple Antibiotic Residues in Cosmetics	357
Y.P. Xun, H. Yan, J. Liu, L.L. Shi, P. Chen and H.W. Du Health Risk Assessment of Arsenic in Soils of School Playgrounds and Residential Areas,	33/
Central China	2.60
Y.Z. Liu, J.W. Ma, C.Y. Lin, X.T. Liu, H.X. Yan and Y.Q. Ren Identification and Epidemic Analysis on NTM of Cattle and Pigs in Jilin Province	362
S.M. Ge, S.H. Zhang, Y.J. Chen and A.D. Qian	367
Influence of Ventilation Mode on Exhaust of Propellant Vapor in a Confined Space J.Z. Chen, Y.X. Zhang and C. Ning	374
Investigating Potential Tourists' Perception of Haze Pollution's Impacts on Tourism Experience as to Beijing, China A.P. Zhang, L.S. Zhong and Y. Xu	378
Numerical Simulation on Influences of Wind Speed to Leaking Diffusion of Liquid Ammonia W. Xu, C.J. Dong and D.S. Li	383
Prediction of Regional Global Horizontal Irradiance Combining Ground-Based Cloud Observation and Numerical Weather Prediction F. Cui, R.R. Ju, Y.Y. Ding, H. Ding and X. Cheng	388
Zoning and Prevention Measures for Geo-Hazard of Youyu County, Shanxi Province W.X. Hao, F. Ding, L.J. Wang and E.M. Wang	395
Regional Vulnerability Evaluation Index System of Environmental Emergencies in Petrochemical Industry H. Tian and J. Zhang	400
The Evaluation of Water Quality and Investigation of Benthic Macroinvertebrates in Stone-	100
Horse River of Dongjiang (China) H.W. Wang, L.F. Li, J. Zhang, R. Yin, D.B. Cai, Q.L. Li, R. Huo and D. Li	405
Protection of Laborers Occupational Safety Rights from the Perspective of Human Rights Law	
F.H. Lu	408
Study on Effects of Smoking on Indoor Particle Characteristics in an Office Environment Z.Z. Zhao, Y.F. Gao and G.Z. Zheng	412
Chiral Separation of Cypermethrin Enantiomers by High Performance Liquid Chromatography S.S. Fan, J. Shi, L. Yuan, L. Zhou and Z.P. Xu	417
Research on the Optimal Safety Level and the Related Mechanism of the Manufacturer	Ŧ1 /
Based on the Economics Equilibrium Analysis W. Liu, C.Y. Liu and C.J. Liu	423
Chapter 4: Environmental Planning and Assessment	
Ecological Costs Internalization in Ultimate Pit Optimization X.W. Gu, X.C. Xu, Q. Wang and J.P. Liu	433

The Ecological Security Research of the Northern Slope of Qinling Mountains Based on the DPSIR Model	
S.D. Liu, B.R. Xue and J. Gao	438
Water Resource Assessment Based on Ecological Footprint in Beijing City, China L.P. Xu, L. Wang and J.L. Li	445
Empirical Analysis of China's Comprehensive Environmental Quality Y.Z. Zhao	450
Fuzzy Evaluation of the Impact of the Open-Pit Limestone Mining on Geological Environment	454
H.R. Liu, S.Q. Chen and S. Li Assessment Air Quality Using ES-SOFM Hybrid Model in Xi'an, China	454
L.N. Zhang Comprehensive Evaluation of Mine Geological Environment in Jilin K. Wang, Y.S. Zhu and Y.H. Cao	460 466
Economic Assessment of Construction Project Environmental Impact Based on Cost-Benefit Analysis Method L. Zhu and W. Zhang	470
Environment Design of Sustainable Development X.J. Liu	474
Point-Centred Quadrangle Method: A Novel Distance Method for Density Estimation X.Z. Zhu, T. Gao and J.T. Zhang	479
Assessment of Economic Losses on Agricultural Non-Point Source Pollution by Abuse of Fertilizer in Manasi River Basin of China Z.H. Cheng and F. Luo	484
Sorption of Phenanthrene by Dissolved Organic Matters and their Complex with Iron Oxide Nanoparticles C.X. Wei and N. Liang	489
Evaluating the Environmental Cost Internalization Based on the Fuzzy Neural Network X.S. Meng and Y.Y. Zhu	495
The Evaluation of Heavy Metals in Seawater of the Oil Spill Area in Bohai Bay (China) during the Summer	500
H.W. Wang, D.B. Cai, R. Yin, Y.J. Dong, X. Liu, H.Q. Gao, W. Zhao and N. Zhu Water Quality Assessment and Nitrogen Pollution Sources Analysis of the West Lake,	500
Hangzhou, China Z.F. Jin, X. Qin, L.X. Chen and F.L. Li	504
Chapter 5: Environmental Analysis, Detection and Monitoring	
Analysis of the Characteristics of Haze and its Pollutants in Wuhan Y.Y. Yue and X.L. Wang	513
Investigation and Analysis on Heavy Metal Pollution Status in a Southern Landfill Site of Dredged Sediment	
M.Y. Sun Optimization Monitoring Points of Urban Road Traffic Noise in Binzhou City	517
F.G. Zhao Research on Environmental Master Factors Discrimination of Sea Area in Tianjin Port	522
H. Yu The Design of Intelligent Monitoring System on Tropical Greenhouse Crop Production Environment	526
L.L. Wang, H.X. Luo, J.H. Cao, K. Lu, J.H. Fang and S. Chen Variability in δ^{13} C and δ^{15} N Stable Isotope Signatures in Mangrove Ecosystem of Hainan,	530
China M. Wang, L.A. Nuamah, Y. Zhang and J.Y. Huang	535
Analysis of Contaminants Found from Soils in the Abandoned Railroad Sites H.J. Lim, S.M. Yun, K. Gillan and H.S. Kim	541
Analysis of Discharge Characteristics of Typical Rural Domestic Wastewater along the Tuojiang River B. Li, J.F. Yang, Y. Zhou and J.M. Chen	545
D. D., v.i. 1 ung, 1. Zhou und v.ivi. Chon	575

Application of Internet of Things in Air Pollution Monitoring J. Li	554
Determination of the Common Phenolic Endocrine Disrupting Chemicals in the Water X.N. Ji, Y. Zuo, Q.K. Ren, X.H. Zhang and D.J. Bian	558
Discussion on Determination of Non-Methane Hydrocarbons Z.M. Li	562
Distribution and Forms of Phosphorus in the Buffer Zone Sediments of Erhai Lake W.T. Zhang, Y. Xing and S.Y. Lu	567
Investigation on Simultaneous Determination of Deltamethrin, Carbaryl, Microcystin-LR and Benzo[a]pyrene by Online SPE-HPLC Method F. Peng, H.H. Xue, W.C. Chen and Z.Q. Li	575
The Environmental and Economic Impact of Reclaimed Water Utilization in Beijng-Based on the Dynamic Optimal Simulation Method X. Li, J.H. Sha, J.J. Yan and G.F. Zhang	579
The Investigation of Biosensor for Tetrodotoxin Monitoring J. Chen and Z. Yang	584
Environmental Monitoring and Analysis on Air Pollution Issue in China V.N. Zykov, A.I. Kurbatova, N.A. Chernyh and N.N. Savkova	588
An Approach and Case Study on Determination of the Sulfur Deposition Radius in High Sulfur Gas Reservoir	
P. Luo, Y.M. Luo, K. Ma, B. Zhang and S.S. Song	592
Fabrication and Characterization of Ferrocene-Derived Sensor for Hydrogen Peroxide Detection Q.D. Chen, T. Xia, F. Wu and X.D. Lv	597
Live Detection Method for Metal Oxide Arrester and its Application	391
J.J. Wang and B. Yan	601
Spectrophotometry Determination Method of Chlorine Dioxide with Acid Green B M.S. Wu, X.Y. Xu, X. Xu and X.T. Wang	607
Improved Retrieval of Reflectivity Factor for Airborne Weather Radar T.S. Xiang, Y. Li, D. Wu and L. He	611
The Research of Ecological Floating Bed in Oil Degradation of Inland Water Z.X. Wang, W. Shen and W. He	615
Spatial Variation of Soil Organic Matter in Gully Bed with the Seabuckthorn Flexible Dam: A Case Study of EG1 in Zhun-Ge-Er County of Inner Mongolia, China F.S. Yang, S.Z. Su, J.J. Zhang and C.F. Bi	619
How Inoculation with Arbuscular Mycorrhizal Fungi Impact on Soil Respiration? F. Ma, S.J. Zhang, L. Wang, D. Shan, X.F. Jiang, X. Zhang and Z. Li	628
Soil Organic Carbon Change of Different Land Use Classes in TBNA from 1995 to 2012 X.M. Li and G.J. Hao	632
Effects of Aridity and Salinization on Soil Microbial Biomass C in a Desert Ecosystem H.Y. Guan and X. Zhao	638
Soil Nitrogen Forms and Availability in Paddy Soil under Different Fertilization Methods J. Wang, M.J. Fu, Y.J. Liang, Z.Y. Guan and J.D. Li	643
The Rapid Detecting Technology on Heavy Metal Pollution in Soil H. Lin and J.C. Kang	648
Numerical Simulation of Migration and Transformation of Petroleum Hydrocarbons in Soils	
W.C. Ma, X.Y. You, X.X. Wang and Y. Chen	653
Chapter 6: Environmental Restoration Engineering	
Research Progresses in Soil Phytoremediation Polluted by Cadmium L.M. Zhou, J.X. Chen, J.M. Zhou, H. Guo and B. Liu	659
Isolation and Characterization of a Styrene Trimer Degrading Microorganism G.C. Li, C.X. Piao, K. Saido and S.Y. Chung	666
Soil Pollution of Cu, Cr, Pb and Cd in Traffic Trunk Roadsides in Xi'an R.Y. Jia, N. Li, J. Tong and W.Y. Zhu	672

Acclimatization, Isolation and Identification of Two Tetrabromobisphenol A (TBBPA) Degradation Bacteria Isolated from an Anaerobic Sludge	
J.P. Wen, N. Li, L. Xu and X.Y. Sun	678
City River Ecological Restoration Technology and Application Study L. Zhao and H.P. Ma	683
Effects of Chinese Medicine Residue Vermicompost Application on Pakchoi Yield and	
Nutrient Content Y.W. Wang, D.W. Yang, Y.H. Duan, L.J. Yang and Y.J. Wang	689
Enhanced COD Removal Efficiency by Using an Electro-Shocking Biofilm Z.W. Ni, Y.M. Wang and W.P. Cao	693
Enhanced Humification of Soil Organic Matter by Microwave Irradiation and Hyperthermal Catalysts	
B.H. Kim, S.K. Son, H.J. Lim and H.S. Kim	696
Function Analysis of Chlorophenol Monooxygenase for Chlorophenol Degradation C.S. Kang and H.S. Kim	700
Sequential Soil Flushing for Remediation of Complex Contaminated Soils: A Pilot-Scale Test	
K. Gillan, S.M. Yun and H.S. Kim	704
Synergistic Effect of Nitric Acid Modified and Cu(II)-Loaded Activated Carbon on Catalytic Ozonation	
J. Zhang, Y.W. Du, X.J. Liu, Y.W. Zhou, C. Liu, J.L. Yang and L. Zhang	708
The Structure and its Applications of the Subsurface Wastewater Infiltration System X. Wang, S.M. Wang and H. Wang	712
Spatial Distribution and Assessment of Soil Heavy Metals in Rural Dumpsite of North	
China H.X. Yan, J.W. Ma, Y.Z. Liu and Y.Q. Ren	716
Effect of Heavy Metals Cu, Cd, Pb and Zn on Enzyme Activity and Microbial Biomass	
Carbon in Brown Soil L. Yu and J.M. Cheng	726
E. Tu dilu 3.1vi. Chong	720
Chapter 7: Pollution Control Engineering and Removal Technologies	
Application of Dry Fog Dust Suppression Technology in the Coal Conveyer Belt System of	
	733
Application of Dry Fog Dust Suppression Technology in the Coal Conveyer Belt System of Thermal Power Plants Y.F. Zhang Control Strategies of Low DO in Step-Feed Anoxic/Oxic Process Treating Domestic	733
Application of Dry Fog Dust Suppression Technology in the Coal Conveyer Belt System of Thermal Power Plants Y.F. Zhang Control Strategies of Low DO in Step-Feed Anoxic/Oxic Process Treating Domestic Wastewater for Filamentous Bulking Inhibition	
Application of Dry Fog Dust Suppression Technology in the Coal Conveyer Belt System of Thermal Power Plants Y.F. Zhang Control Strategies of Low DO in Step-Feed Anoxic/Oxic Process Treating Domestic Wastewater for Filamentous Bulking Inhibition W. Wang, Q. Chen, L.N. Liu, X. Zhang and C.H. Shao Experimental Study on Photocatalytic Mercury Removal by Titanium Dioxide	733 738 743
Application of Dry Fog Dust Suppression Technology in the Coal Conveyer Belt System of Thermal Power Plants Y.F. Zhang Control Strategies of Low DO in Step-Feed Anoxic/Oxic Process Treating Domestic Wastewater for Filamentous Bulking Inhibition W. Wang, Q. Chen, L.N. Liu, X. Zhang and C.H. Shao Experimental Study on Photocatalytic Mercury Removal by Titanium Dioxide X. Li, J. Wu, X.M. Qi, C.E. Li, C. Zhang, X.Y. Zhao and L.Y. Yang Responses of Sagittaria sagittifolia to Nitrogen Stress in Terms of Photosynthetic Pigments	738 743
Application of Dry Fog Dust Suppression Technology in the Coal Conveyer Belt System of Thermal Power Plants Y.F. Zhang Control Strategies of Low DO in Step-Feed Anoxic/Oxic Process Treating Domestic Wastewater for Filamentous Bulking Inhibition W. Wang, Q. Chen, L.N. Liu, X. Zhang and C.H. Shao Experimental Study on Photocatalytic Mercury Removal by Titanium Dioxide X. Li, J. Wu, X.M. Qi, C.E. Li, C. Zhang, X.Y. Zhao and L.Y. Yang Responses of Sagittaria sagittifolia to Nitrogen Stress in Terms of Photosynthetic Pigments J.J. Qin, Z.L. Liu, W. Chen, Y. Wang, Q.Q. He, C. Meng, Q. Zhang and X.Y. He Characteristics of Fouled and Chemically Cleaned Membrane	738 743 747
Application of Dry Fog Dust Suppression Technology in the Coal Conveyer Belt System of Thermal Power Plants Y.F. Zhang Control Strategies of Low DO in Step-Feed Anoxic/Oxic Process Treating Domestic Wastewater for Filamentous Bulking Inhibition W. Wang, Q. Chen, L.N. Liu, X. Zhang and C.H. Shao Experimental Study on Photocatalytic Mercury Removal by Titanium Dioxide X. Li, J. Wu, X.M. Qi, C.E. Li, C. Zhang, X.Y. Zhao and L.Y. Yang Responses of Sagittaria sagittifolia to Nitrogen Stress in Terms of Photosynthetic Pigments J.J. Qin, Z.L. Liu, W. Chen, Y. Wang, Q.Q. He, C. Meng, Q. Zhang and X.Y. He Characteristics of Fouled and Chemically Cleaned Membrane J.X. Liu, B.Z. Dong and W.W. Huang Effect of the Structure of Composite Ecological Floating Bed on Eutrophic Pollutants	738 743
Application of Dry Fog Dust Suppression Technology in the Coal Conveyer Belt System of Thermal Power Plants Y.F. Zhang Control Strategies of Low DO in Step-Feed Anoxic/Oxic Process Treating Domestic Wastewater for Filamentous Bulking Inhibition W. Wang, Q. Chen, L.N. Liu, X. Zhang and C.H. Shao Experimental Study on Photocatalytic Mercury Removal by Titanium Dioxide X. Li, J. Wu, X.M. Qi, C.E. Li, C. Zhang, X.Y. Zhao and L.Y. Yang Responses of Sagittaria sagittifolia to Nitrogen Stress in Terms of Photosynthetic Pigments J.J. Qin, Z.L. Liu, W. Chen, Y. Wang, Q.Q. He, C. Meng, Q. Zhang and X.Y. He Characteristics of Fouled and Chemically Cleaned Membrane J.X. Liu, B.Z. Dong and W.W. Huang	738 743 747
Application of Dry Fog Dust Suppression Technology in the Coal Conveyer Belt System of Thermal Power Plants Y.F. Zhang Control Strategies of Low DO in Step-Feed Anoxic/Oxic Process Treating Domestic Wastewater for Filamentous Bulking Inhibition W. Wang, Q. Chen, L.N. Liu, X. Zhang and C.H. Shao Experimental Study on Photocatalytic Mercury Removal by Titanium Dioxide X. Li, J. Wu, X.M. Qi, C.E. Li, C. Zhang, X.Y. Zhao and L.Y. Yang Responses of Sagittaria sagittifolia to Nitrogen Stress in Terms of Photosynthetic Pigments J.J. Qin, Z.L. Liu, W. Chen, Y. Wang, Q.Q. He, C. Meng, Q. Zhang and X.Y. He Characteristics of Fouled and Chemically Cleaned Membrane J.X. Liu, B.Z. Dong and W.W. Huang Effect of the Structure of Composite Ecological Floating Bed on Eutrophic Pollutants Removal in Water G.D. Xu, J.Z. Hu, T.M.L. Gang, R.N. Liu, M.Y. Wu and F.B. Wuang Research on the Simultaneous Desulfurization and Denitrification of Fumes by Combining Ozone Oxidation and the Double Alkali Method	738 743 747 751 755
Application of Dry Fog Dust Suppression Technology in the Coal Conveyer Belt System of Thermal Power Plants Y.F. Zhang Control Strategies of Low DO in Step-Feed Anoxic/Oxic Process Treating Domestic Wastewater for Filamentous Bulking Inhibition W. Wang, Q. Chen, L.N. Liu, X. Zhang and C.H. Shao Experimental Study on Photocatalytic Mercury Removal by Titanium Dioxide X. Li, J. Wu, X.M. Qi, C.E. Li, C. Zhang, X.Y. Zhao and L.Y. Yang Responses of Sagittaria sagittifolia to Nitrogen Stress in Terms of Photosynthetic Pigments J.J. Qin, Z.L. Liu, W. Chen, Y. Wang, Q.Q. He, C. Meng, Q. Zhang and X.Y. He Characteristics of Fouled and Chemically Cleaned Membrane J.X. Liu, B.Z. Dong and W.W. Huang Effect of the Structure of Composite Ecological Floating Bed on Eutrophic Pollutants Removal in Water G.D. Xu, J.Z. Hu, T.M.L. Gang, R.N. Liu, M.Y. Wu and F.B. Wuang Research on the Simultaneous Desulfurization and Denitrification of Fumes by Combining Ozone Oxidation and the Double Alkali Method M. Li, B.F. Peng, L.S. Wei, Z.J. Hu and M. Xu	738 743 747 751
Application of Dry Fog Dust Suppression Technology in the Coal Conveyer Belt System of Thermal Power Plants Y.F. Zhang Control Strategies of Low DO in Step-Feed Anoxic/Oxic Process Treating Domestic Wastewater for Filamentous Bulking Inhibition W. Wang, Q. Chen, L.N. Liu, X. Zhang and C.H. Shao Experimental Study on Photocatalytic Mercury Removal by Titanium Dioxide X. Li, J. Wu, X.M. Qi, C.E. Li, C. Zhang, X.Y. Zhao and L.Y. Yang Responses of Sagittaria sagittifolia to Nitrogen Stress in Terms of Photosynthetic Pigments J.J. Qin, Z.L. Liu, W. Chen, Y. Wang, Q.Q. He, C. Meng, Q. Zhang and X.Y. He Characteristics of Fouled and Chemically Cleaned Membrane J.X. Liu, B.Z. Dong and W.W. Huang Effect of the Structure of Composite Ecological Floating Bed on Eutrophic Pollutants Removal in Water G.D. Xu, J.Z. Hu, T.M.L. Gang, R.N. Liu, M.Y. Wu and F.B. Wuang Research on the Simultaneous Desulfurization and Denitrification of Fumes by Combining Ozone Oxidation and the Double Alkali Method	738 743 747 751 755
Application of Dry Fog Dust Suppression Technology in the Coal Conveyer Belt System of Thermal Power Plants Y.F. Zhang Control Strategies of Low DO in Step-Feed Anoxic/Oxic Process Treating Domestic Wastewater for Filamentous Bulking Inhibition W. Wang, Q. Chen, L.N. Liu, X. Zhang and C.H. Shao Experimental Study on Photocatalytic Mercury Removal by Titanium Dioxide X. Li, J. Wu, X.M. Qi, C.E. Li, C. Zhang, X.Y. Zhao and L.Y. Yang Responses of Sagittaria sagittifolia to Nitrogen Stress in Terms of Photosynthetic Pigments J.J. Qin, Z.L. Liu, W. Chen, Y. Wang, Q.Q. He, C. Meng, Q. Zhang and X.Y. He Characteristics of Fouled and Chemically Cleaned Membrane J.X. Liu, B.Z. Dong and W.W. Huang Effect of the Structure of Composite Ecological Floating Bed on Eutrophic Pollutants Removal in Water G.D. Xu, J.Z. Hu, T.M.L. Gang, R.N. Liu, M.Y. Wu and F.B. Wuang Research on the Simultaneous Desulfurization and Denitrification of Fumes by Combining Ozone Oxidation and the Double Alkali Method M. Li, B.F. Peng, L.S. Wei, Z.J. Hu and M. Xu Behavior of Oxidizing Substances on NO Gas Oxidation in Fenton System	738 743 747 751 755 759

Comparative Analysis of Nitrate Removal in Sub-Surface Flow Constructed Wetlands by Different External Carbon Sources P. Awhaybera and L.F. Zhao	779
Competitive Adsorption of Lead and Copper by Kaolin O.O. Anokye and C.L. Zhang	784
Effects of Montmorillonite Colloid on Ammonia Nitrogen Transport in Porous Media B. Wang and Z. Luo	791
Highly Active S-Doping MnFe ₂ O ₄ by Synthesis and Photo-Fenton Catalytic Property Research	,,,,
Y. Niu, F.Y. Li and R.Z. Wang	795
Laboratory Research of Distributed Domestic Sewage by Constructed Wetland Treatment Process	
Y.Q. Cui, W.X. Xie and Y. Li	799
Modeling Perchloroethylene Reduction in Zero-Valent Metal System Using Mathematical Method C.W. Ma, Q.M. Xian, H.Y. Xie, J. Guan and Z.G. Sun	804
	804
Preliminary Study of Photosynthetic Bacteria Treating Hydrothermal Liquefaction Wastewater G.Y. Yuan, H.F. Lu, S.W. Huang, Y.H. Zhang, B.M. Li and T.T. Zhang	810
Problems Existing in Advanced Treatment and Reuse of Coking Wastewater and	010
Improvement Measures Y.E. Ba and Z.F. Li	817
Study on Pretreatment of Azithromycin Wastewater Technology L.D. Wang and Y.R. Dong	821
Study on the Removal Effect of Chromium(VI) in Wastewater by Rice Husk X.M. Dai, S.N. Wang and X. Wang	825
The Development of Rural Domestic Wastewater Treatment in China F. Chen and Q. Yao	829
The Release Mechanism of Heavy Metals from Sulfide Tailings H.H. Zheng, H.L. Liu, Q.B. Huang and Q.H. Li	833
Basic Characteristics and Application of Basalt Fiber in the Water Pollution Control X. Jiang, C.D. Wu, Z.R. Wu and B. Zhang	838
Characteristics of Nitrous Oxide Emissions from Partial Nitrification Process Treating High Ammonium Wastewater M.C. Zhang, X. Gong and X.Y. Xu	844
Experiment Research on Performance of Step-Feed SBR Nitrogen and Phosphorus Removal	
X.B. Lv, Z.H. Yang, H.Z. Zhao and H.P. Chen	849
Improving Purification Filter Characteristics of Fine Dust Particles Based on Aramid 1313 Denier Technology Line Filter Characteristics of Fine Dust Particles Based on Aramid 1313	0.5.4
J.L. He, H.G. Shen, J.Z. Bi and H.J. Xin	854
Study on the Characteristics of Biological Phosphorus Removal Sludge in Different Operation Mode of Reactor J.N. Xiao, L. Zhang, L.N. Zheng, L. Wang, H.F. Wei and M. Zhang	860
The Development of the Water-Saving and Haze-Preventing Integrated System on Gantry Crane	
Z.N. Yao and Y. Zheng	866
Isolation and Characterization of Benzene-Degrading Heterotrophic Nitrifying Strain Y. Li, X.P. Yue, G.Y. Wang and H.Y. Li	870
Spatial Distribution Characteristics and Hourly Forecast of PM _{2.5} Pollution in Summer in Beijing	
L.S. Wang, J. Li, L.N. Zhang, Y.H. Chen, Y. Liu and Y.P. Chen	874
Research on Synergic Governance for Air Pollutants Emission of Thermal Power Sector in China	001
S.Y. Cui Application of Process on Furfural Wastewater Treatment	881
Y.R. Dong and L.D. Wang	885
Experimental Study of Cement on Heavy Metal Ion Removal Z.J. Fan, J.C. Gu, Y. Chen, Y.X. Jin, M. Yin and W. Zhao	889

PM _{2.5} Emissions from Industrial Boilers and Control Technology J.Y. Liu and F.Z. Sun	894
The Influence Factors on Alkalization-Ceramic Flat Membranes Combination Crafts in Manganese Removal	
J.K. Zhang, Y. Ming and C. Zhang	898
Chapter 8: Waste Disposal and Recycling	
Effects of Increasing Alkali Catalysts Concentration on Hydrogen Gas Yield during the Supercritical Water Gasification of Food Waste B. Amuzu-Sefordzi and J.Y. Huang	905
Information Technology Based Municipal Solid Waste Management in Shanghai, China Y. An, G.M. Li, W.Q. Wu, W.Z. He and X. Shi	911
Influence of Na ₂ CO ₃ on Thermal Degradation Process of Waste Printed Circuit Board in Air Atmosphere	0.4.5
Q.P. Zhou and B. Wang	915
Treatment, Electricity Harvesting and Sulfur Recovery from Flue Gas Pre-Treatment Wastewater Using Microbial Fuel Cells with Sulfate Reduction Bacterial M.Y. Yin, X.J. Zhao, C.G. Li, H.D. Cui and J. Wang	920
A Dual Cathode Electro $Fe^{2^+}\!/S_2O8^{2^-}$ System Used for Pickle Sauerkraut Wastewater Degradation	
S.Y. Shi and H.H. Teng	924
Adjustment Analysis of AIG Spray Ammonia Denitration System Optimization in Coal- Fired Power Plant X.Y. Zhang and X.F. Dong	929
Characterization of Oily Sludge with Different Sources	, _ ,
X.Y. Zheng, B. Wang, Y. Chi and Y.Q. Jin	933
Enhancement of Waste Activated Sludge Dewaterability by Potassium Ferrate Pretreatment X.R. Kang and Y.L. Liu	937
Experimental Advancements of Wastewater Disposal in Coal Chemical Industry by Yeasts L.L. Wang and Q. Yang	941
Neutralization of Acid Wastewater and Magnesium Hydroxide Slurry from Seawater Electrolytic Pretreatment J. Nie and S.Z. Yi	949
Adsorption Kinetics of Lignite Activated Carbon in Treating Coal Gasification Wastewater R.Z. Li, H. Yang and X. Jin	955
Feasibility of Recycling Technology of Crumb Rubber Modified Asphalt J.G. Geng, M.N. Zheng and M.Q. Jin	960
Performance Evaluation of the Horizontal Subsurface Flow Constructed Wetland with	
Ipomoea Aquatica Plant for Rural Domestic Wastewater Treatment A.M. Osman and X.W. Lu	965
Preparation of N-Butyl Acetate from Dilute Acetic Acid Wastewater by Phase Transfer Catalyst CTMAB X.K. Li, P. Sun, Y.H. Zhou and W.H. Li	970
The Thermo-Gravimetric Characteristics of the Waste Game Printed Circuit Board under	970
Different Atmosphere R. Feng and B. Wang	975
The Thinking and Suggestion on Construction and Demolition Waste Recycle Supervision and Administration	001
Y. Li, J. Yue and C. Li Passayah on Treatment Ouzania Westa Limid of High Concentration Acid by Cavitation	981
Research on Treatment Organic Waste Liquid of High Concentration Acid by Cavitation Impinging - Micro Electrolytic Method F.B. Li, X.B. Li, H. Wu and S.Y. Xiao	986
Graphene/SnO ₂ /Citric Acid Nanocomposites as the Excellent Sorbent for Removal of	
Crystal Violet and Methylene Blue J.P. Song, Q. Ma, S.M. Shuang, Y. Guo and C. Dong	990

Pilot Scale Study on Advanced Treatment of Coking Wastewater with Biological Activated Carbon Technology	
J. Li, G.H. Wang, W.B. Li, Z. Zhu and Y.A. Zhu	995
Study on the Centrifugal Atomization Process of Molten Slag with the Coupled Algorithm of Three-Dimensional SPH-FEM	1000
X.X. Xu, M. Li, Y. Yang, B. Cai and H.B. Wei Effect of Intracellular Carbon Resource on Competition between PAOs and GAOs for	1000
Enhanced Biological Phosphorus Removal X.R. Kang and Y.L. Liu	1007
Application of Constructed Wetland to Rural Domestic Wastewater Treatment in China F. Chen and Q. Yao	1011
Chapter 9: Water Supply and Drainage	
The Construction of Evaluation System for the Initial Rainwater Reduction Facilities in Shanghai	
X.K. Wu, C.M. Ye, Y.L. Li and J. Wu	1017
Analysis of Security for Water Supply Network Based on the AHP Fuzzy Theory J. Wang and X. Zhang	1023
Research on Hydraulic Model Establishment of Water Supply Network X. Zhang, K. Zhang and R.Y. Wu	1027
Stormwater Detention Tanks for Sustainable Energy Management in Urban Environment G. Garofalo, M. Carbone and P. Piro	1031
Groundwater Quality Affected by Yellow River Irrigated Agriculture in Northern Suburb of Yinchuan, China H. Wu, J.W. Qi, H. Qian, J. Chen and X.D. Zhang	1035
Effectiveness of the Automation Selection of Water Treatment Technology in a Particular Water Source	
L. Boronina, P. Sadchikov, S. Tazhieva, A. Usynina and E. Moskvichiova	1039
Research for Sustainable Development about Decentralized Reclaimed Water Project at City	
Y.X. Ban and J.J. Quan	1043
Discussion on Simulation Rotational Speed of Coagulation Jar Test C.C. Tang, X. Ye, H.M. Chen and M. Liu	1047
Chapter 10: Forest Cultivation and Protection, Plants Protection	
A Simulated Study on the Effect of Acuatic Vegetation on Distibution of Metals under Hydtrodynamic Disturbance	1055
X. Qiao, P.F. Wang, J. Qian and J. Hou Expression Analysis of Salt Stress on Carotenoid Pathway Genes in Watermelon	1055
W.S. Cheng, D.L. Zeng, N. Zhang, H.X. Zeng, J. Ren, X.F. Shi, Y.H. Li and Y.H. Sun	1061
The Antibiosis of <i>Trichoderma asperellum</i> Resistance Plant Pathogenic Fungi P. Yang	1067
A Review on Major Types of Bamboo Communities in China W.Y. Liu, C.M. Hui, M. Shi and J.W. Deng	1071
Research on Forest Eco-Tourism Development in Jilin H.Y. Jin and Z.W. Zhu	1075
Stamen Movement and its Biological Significance in <i>Compositae</i> Plants J.S. Zeng, D.X. Wang, Y. Liu and X.P. Lu	1079
The Comparison of Branch and Leaf Joining Force for Two Plants P.F. Liu, J. Liu, M. Nao, F.Q. Liu and H.H. Zhu	1086
The Relationship between Soil Moisture and Root Density under Different Types Phyllostachys edulis Forests in Northern Fujian W.Y. Liu, S.H. Fan, G.L. Liu and F.Y. Guan	1090
Early Selection of <i>Larix principis-rupprechtii</i> G.J. Zhang, H.M. Cao, M.H. Zhao, X.Y. Jia and J.M. Yang	1095

Seedling Growth Characteristics of 24 Provenances of <i>Larix principis-rupprechtii</i> G.J. Zhang, C.H. Wang, M.H. Zhao, W.Q. Wang and J.M. Yang	1099
Breeding Forage Crop Meets the Needs of a Sustainable Agriculture H.D. Zhang, P. Chen, J. Zhang, J.D. Gao, J.L. Li and Y.M. Zhang	1104
Chlorophyll Fluorescence Measures of Emerged <i>Hippuris vulgaris</i> L.A. Gao	1108
Seed Germination and Seedling Growth Characteristics of Different Larix principis- rupprechtii Families G.Z. Yue, M.H. Zhao, G.J. Zhang, W.Q. Wang and J.M. Yang	1112
The Different Briquetting Factors and Nutritional Value Analysis in Four Southern Understory Forage Grass	
Y. Feng, L.L. Chen, X. Zhang, K. Ding, D.Q. Zhang and Y.S. Luo The Variation of Biomass and Photosynthesis of Different Maize Inbred Lines and Hybrids to Enhanced Ultraviolet-B Radiation	1117
C.C. Wang, H.J. Zhang, Y.Q. Huang, J.T. Chen, Y.F. Zhao, L.Y. Zhu and J.J. Guo Investigation and Analysis on Vegetation Characteristics of Roadside Slopes in Zigui County of Three Gorges Reservoir Area	1122
W. Yin, D. Zhu and J.S. Lei	1128
Characterization of 9 Newly Bred Peanut Genotypes for Seed Fatty Acid Profiles Suitable for Biodiesel Production Q.Y. Zhang, X.Z. Wang, Y.Y. Tang, Q. Wu, Q.X. Sun, P.W. Wang and C.T. Wang	1134
	1131
Chapter 11: Ecological Environment and Architectural Environment Protection	
Analysing the Ecological Environment Greening of the Poyang Lake by Using the Fuzzy Comprehensive Evaluation Method M. Xie and C.H. Li	1141
Landscape Assessment Analysis of City Road for Yingbin Avenue in Hong'an J.Y. Gao	1141
A Study on Building Interpretation System of National Forest Park Z. Zhu, M. Li and K. Zheng	1152
Analysis upon the Important Measures of Eco-Environmental System in Shanghai G.D. Yan and J.C. Kang	1157
Development and Evaluation of the Sustainable Management Index System for Fujian Coastal Shelterbelt	
L.Y. Lai Evaluation of the Eco-Environmental Quality and its Index-Induced Influencing Factors in	1162
the Yangtze River Delta Urban Agglomeration F. Yang, M. Liu, W.X. Jia, L. Lin and W.N. Xiang	1166
Research on Ecological Function Regionalization Based on the Ecological Service Function - Take Shenzhen River and Xinzhou River Estuarine Wetland for Example	1171
J.S. Lei, W. Yin and D. Zhu Species Coexistence in Ecosystems with Specialist Predation: Trophic Regulation in	1171
Gradients of Resource Productivity L. Zhao, H.Y. Zhang, W. Tian and F. Zhao	1178
Performance Appraisal of Eco-Environment Protection in Zhejiang Province Based on Entropy Weight Method H.S. Yu, J.B. Xue, K.J. Jia and F. Qi	1182
Evaluating the Impacts of Rapid Urbanization on the Ecosystem Services of Cities in Circum-Bohai Sea Region - A Case Study of Yantai City X.H. Ding, W.Z. Zhong, Y.L. Liao, S.X. Zhang and Y. Jiang	1188
Industrial Organization Pattern Based on Comprehensive Benefit of the Ecologically Fragile Region in the West of China	
S.H. Cai, W.J. Liu, J.J. Jiao and Y. Lu On Manufacturers' Strategies for Green Production an Example of the Copper Clad	1196
Laminate Industry T.S. Wu, A.B. Qi, S.B. Tsai and J.J. Guo	1203

Review of Venture Capital Investing in Clean-Tech Industry from the Perspective of Policy Preferences	
X.L. Wang, C.Y. Wu and H.Y. Lin	1208
Analysis of Observed and DNDC Modeled Soil Respiration of Winter Wheat in Guanzhong Plain	1016
X.L. Zhang, X. Yang, K.D. Tian, B. Shen and Q. Quan	1216
Research on Indoor Environment of University Gymnasiums J. Chen, Y.J. Liu and F. Chen	1222
Application of Water Quality Modeling in Land-Use and Land-Cover Change Z. Li, L. Wang, F. Ma, Y.N. Xu, X.F. Jiang and X.W. Liang	1226
Chapter 12: Green Building Engineering and Management, Energy- Efficient and Energy Saving Engineering	
Energy Efficiency Measures for a High-Tech Building with a Solar Roof Y.L. Lin, W. Yang and M.S. Liu	1233
Extend Building Life and Promote Building Energy Efficiency D.Q. Cui	1239
The Research of Energy-Saving Building's Cost-Benefit Based on the Stakeholders Q. Qi, Z.Y. Xun, Z. Zhang and T. Zhao	1244
Analysis of Influencing Factor on Green Building's Incremental Cost X. Wu, X.J. Li, J. Lu and L. Yang	1249
Development of Testing Platform for Building Shading Device P. Yue, H. Zhang, Y.Y. Ye and H.J. Sha	1254
A Case Study of Campus Building End Use of a University in Norway J. Guan, N. Nord and S.Q. Chen	1259
Insulation and Energy-Saving Technology for the External Wall of Residential Building F. Qian	1263
Integrating BIM Technology to Achieve Green Building's Sustainable Performance Y.H. Yang	1271
Research on the Application of Straw Bale Houses in Northwest Rural Area J.P. Li, X.Z. Li, N. Wang and J.Y. Han	1275
Investigating Skill Gaps in Green Building Skills for Energy Efficiency G.U. Aliagha, A.P.T. Goh, M.N. Abdullah, N.M. Jaafar and S.E. Eluwa	1282
Low Carbon Green Building Skills Requirements for Existing Buildings G.U. Aliagha, N.B. Adnan, M. Baba, H.M. Ali and S.E. Eluwa	1288
The Study on Eco-Folk House Design of Mountainous Village in Southern Shaanxi N. Wei, J. Wei and W. Wang	1293
Demand Evaluation and a Design Approach Transforming Duplex Housing into Green Building	1000
K.L. Wu, H.T. Lin and Z.C. Zou Research on the Implementation Effect of Renewable Energy Building Incentive Policies	1299
under the Low-Carbon Perspective H.W. Liu, Q.B. Xia and J. Li	1305
Formation Kinetics of Regenerated Cement Clinker Calcined by Using Wasted Recycling Concrete Powders as Raw Meals J. Zhang, Z.H. Zhou and X. Cheng	1309
Green Manufacture of Building Bricks by Carbonating Steel Slags G.L. Li, Z.H. Zhou and X. Cheng	1313
Chapter 13: Urban and Regional Planning, Land Resources Planning	
"Land Finance Division" of Urbanization Based on Clustering Analysis - A Case Study in Shandong Province	1210
X. Cai, W.D. Liu, H. Fan and T.G. Lv A Study of Concentration of Coastal Container Ports in China	1319
D. Li and W.X. Luan	1326

AHP-Based Fuzzy Comprehensive Evaluation for Urbanization of Mountainous Area in Xianning	1221
F. Han Co-Integration Analysis of Energy Consumption and Urbanization - An Empirical Study	1331
Based on Shandong Province Y. Ren	1337
Economic Growth Factor Detection of National-Level Economic and Technological Development Zones in China	1241
Y. Ding, J.M. Cai and Z.S. Yang Effectiveness Analysis of City Expansion in the Southeast of Changchun City to Economic	1341
Development Based on DEA D. Song and Q.G. Jiang	1348
Investigation and Study on the Reconstruction of Urban-Village in Xiaogan H. Hu, D.F. Yao and Z.J. Yang	1352
Study of the Taiwan Taoyuan Aerotropolis Sustainable Development Evaluation Indicator System	1270
A.P. Chang, T.J. Chu, C.L. Hwang and J.D. Lin The Cost-Benefit Analysis for the Evaluation of Public Infrastructure Projects - The Case of	1358
the Subway of Potenza B. Manganelli	1362
The Research of Green Ecological Wisdom City Construction - Taking Nanjing as an Example	
M.H. Li and H. Ni	1368
A Computational Method for the Solution of Optimizing Facility Location Problem in the Non-Convex Set T. Yang and J. Zhou	1376
Analysis of Sequential Characteristic of Coupling Coordination Degree between Urbanization and Resources-Environment in Hubei Province C.S. Song, Z. Chen and W.X. Zhai	1380
Coupling Coordination Analysis of Urban Land Intensive Use Benefits Based on TOPSIS Method in Xianning City Y.Q. Wang, C.S. Song and Z. Xiong	1387
Geological Tourism Resources Planning of the Shibalichangxia Nature Reserve in Hubei Province, China	
W. Luo, L. Huang and Z.W. Yan	1393
A Sustainable New Public Transport Mode - The Electric Car Sharing L. Sang, T. Wu, J. Zhang and J.N. Shi	1397
Comprehensive Evaluation of Urban Land Use in Wuhan City Z. Xiong, B. Tan and C.S. Song	1401
Distribution Feature of Soil Particles and Land Use Pattern on Platform Garden in South Fujian	
B.Y. Xiao, W.K. Zhang and X.L. Chen Dynamic Correlation Effects between Marine Economic Development and the	1407
Comprehensive Competitiveness of the Coastal Zone L.A. Du, W.X. Luan and D. Li	1411
Evaluating Cultural Routes for a Network of Competitive Cities in the Mediterranean Sea: The Eastern Monasticism in Western Mediterranean Area F. Calabrò, D. Campolo, G. Cassalia and C. Tramontana	1418
Study on Ecological Environment Problems in Green Urbanization of Jilin Province Z.J. Dou and Y. Wang	1423
The Effect of Urban Design on Outdoor Thermal Environment in a Central Business District Area in Singapore W. Yang, Y.L. Lin and N.H. Wong	1428
The Structure of Inbound Tourist Markets Based on the Shift-Share Analysis - A Case	
Study of Guangdong Province, China L. Li, J.M. Liu, T. Song and X. Zhang	1433
Transformation of Housing and Communal Services of Modern Russia E. Kargapolova, D. Anufriev, L. Boronina, V. Svintsov and R. Mukanov	1438

Analysis on Characteristics of Saline Soil in Yanqing New Town H.D. Wang, Y.H. Gu, Q.X. Lu and X. Huang	1442
A Regional Analysis on Chinese Urban-Rurual Residents' Income Disparity - Based on DEA and Multi-Regression Methods F.L. Niu	1447
A Study of Overall Plan of Circum-Lanzhou Urban Agglomeration Development Based on SWOT Analysis G.R. Wang, K.F. Wang and N. Wang	1453
A Study on the Influence Mechanism of Guizhou's Urban-Rural Digital Divide to the Urbanization J. Liu, J.J. Li and Y. He	1459
Analysis on Characteristics and Development Trends of Land Subsidence in Daxing Planning Area	
G. Yang, N.Q. Shen, G. Chen, X. Huang, H.B. Duan and M.H. Hu Analysis on Technical Innovation and Regional Sustainable Development of China J. Xiong and W.W. Zhang	1463 1468
Land-Use Ecological Assessment at County Level Based on Ecological Footprint Model- A Case Study of Yiwu City	
J.B. Xue, B. Zhang, K.J. Jia and F. Qi Study on Urban and Regional Planning with Multiple Object Programming of Low-Carbon Ecology and Economic Development	1472
Y. Liu and Z. Fan The Process and Characteristics of Urban Spatial Structure Research in China Y. Tian, Q. Zu and J.J. Yuan	1477 1482
The Study on the Scale of the Specialized Residential Area for Aged People in China Q. Zu, Y. Tian and W.D. Liu	1486
Urban Landscape Design Based on Ecology Theory J. Jing, R.R. Shen and J.N. Li	1490
Comprehensive Regionalization Based on Evaluation of Resources Carrying Capacity in Hubei S. Ma, J.F. Li and F.J. Wei	1494
Natural Potential and Sustainable Development of a Territory Y.V. Lebedev, V.P. Anufriev and E.I. Anufrieva	1499
Analysis of Ecological Ideas in City Square Design Y. Yan, X. Wu, Y.L. Xi and Y.F. Zhao	1503
Landscape Renovation of Shantytowns in Industrial and Mining Cities Based on Social Psychology - In the Case of Copper Mining Shantytown of Tongling in Anhui Province D.Z. Gu and J. Zhang	1508
Chapter 14: Engineering Management and Project Management	
Research on the System Model of Coupling Evolution Mechanism Y.M. Wang, S. Lin and Y.J. Sun	1521
The Study of Mining Human Resources Management of Yunnan Province C.Y. Li, H.B. Song and L.W. Liu	1525
A Research on Characteristics of Customer Value Formation Based on Markov Chain D.F. Hu, X.W. Li and Y.C. Yang	1529
Satisfaction Study within High-Tech Manufacturing Companies - Examining a Taiwan Solar Power Company C.Y. Huang and S.B. Tsai	1533
Some Application Researches on the Performance Evaluation of Manufacturing Supply Chain Collaboration L.Y. Wang and T.Y. Wang	1538
Research on the Connotation of Life Cycle of Ship L. Fang and P.J. Zhuang	1544

Chapter 15: Disaster Prevention and Mitigation

Modeling and Rationing Evacuation in Russia A.P. Parfenenko	1551
Seismic Mortality Estimation in China: A Comparison of Three Empirical Models J. Jin	1557
Fire Situation Forecasting Based on Support Vector Machine Optimized by Genetic Algorithm	1007
Y. Liang and H.X. Guo	1562
Study of the Dynamic Characteristics of Landslides Based on the DAN-W Model H.P. Shu, D.F. Liu, L.M. Tian, J.Z. Ma and G. Wang	1567
A Study on Oxygen Leak-Diffusion Process and Environmental Influence of High-Pressure Liquid of Spherical Tank	
J.W. Chen, J. Ding and P.F. Weng	1574
Chapter 16: Hydrology, Water Resources Engineering, Soil and Water Conservation	
A Study on Disastrous Law of Flood in Hubei Province Y. Zhou, Y.H. Zhou and L.M. Ye	1581
Cleaner Production Potential of Industries in Liao River Basin L.Z. Li, Z.Q. Fu and P. Shen	1587
Development and Application of Decision Support System for Agro-Technology Transfer DSSAT under Water Resources Management Y. Shi, Y.N. Li, C. Zhang, M.J. Bai and Y.K. Wang	1596
Experimental Study and Models Comparison for Solute Transport through Riparian Zones Z. Chen, J.G. Wang, W.Z. Zhang and J.H. Shi	1604
Modification Effect Analysis of Inconsistency Runoff Series B. Xu, G.C. Chen and P. Xie	1609
The Relationship of Debris Flow Hazards and Rainfall Erosivity in the Bailong River Basin of Southern Gansu Province, China P. Zhang, H.P. Shu, J.Z. Ma, G. Wang and L.M. Tian	1614
Effects of Water-Nitrogen Coupling on Dry Matter and Nutrient Accumulation of Flue-Cured Tobacco X.H. Shao, M.M. Hou, J.N. Chen, Y.B. Yuan and F.Z. Ding	1620
Experimental Analysis on Runoff and Sediment from Sloping Lands in Karst Region Y. Ma, H.H. Xie and C. Li	1624
Minimum Inter-Event Time to Identify Independent Rainfall Events in Urban Catchment Scale	
M. Carbone, M. Turco, G. Brunetti and P. Piro	1630
Prediction of Groundwater Inrush into Coal Mines from Aquifers Overlying the First Coal Seam in Eastern Ningxia Coalfield, China E.K. Hou, J. Feng, F. Yang and Y.J. Zhang	1634
Study on Cascade Energy Storage Operation Chart Optimization of Li Xianjiang Basin Based on Progressive Optimal Algorithm	
L.P. Wang, P. Sun, Z.Q. Jiang, B.Q. Wang and Y.K. Zhang	1641
The Recognition on the Source of Shaizhudong Spring in the Central of Weibei, Shaanxi Province, China Z.Y. Ma, L. Zheng and Y. Li	1651
Analysis of Evolvement for Confined Water Cone of Depression and its Influence on Groundwater Resource Sustainability in Yinchuan Area	
J. Chen, H. Wu, H. Qian and Q. Liu Benefits of Xin'an River Water Resources and Ecological Compensation	1656
F.R. Xu, B.L.G. Baiyin and J.W. Jia	1660
Groundwater Flow Field Analysis and 3D Visualization System Y.W. Zhao, X.Y. Li, S.L. Chen and K. Bian	1664

Research on the Optimized Configuration of Water Resource in Shendong Mining Area B.F. Zhao	1669
Rheological Properties of Sandy Soils Z. Ter-Martirosyan, E. Sobolev and A. Ter-Martirosyan	1673
Studies on the Sustainable Utilization of Water Resources in Chifeng City Y.C. Liu and X.D. Bi	1680
Summary and Analysis of Transparent Soil Tests Technology X. Wang and P.S. Xi	1684
The Mechanical Properties of Soils with Uneven Grain-Size Distribution Z. Ter-Martirosyan, A. Mirnyy and A. Ter-Martirosyan	1689
River Flow Characteristics Numerical Simulation Z.S. Li, R.Q. Fan and D.P. Cheng	1697
Study of Regional Soil Water Resources Evaluation L.Z. Shi and Y.C. Zhou	1702
Liaoning Province Agricultural Water and Soil Resources Matching Analysis L.Z. Shi, Y.C. Zhou and L.J. Cui	1706
Study on Southern Indian Ocean Dipole and the Spring Rainfall over the Middle and Lower Yangzte River	
Y.J. Ren, L.C. Song and Y. Xiao	1710
A Coupled Model for Evaluating Surface and Subsurface Flow-MODHMS T.Y. Zou and J. Zhang	1716
Watershed Hydrological Model HSPF Based on BASINS and the Uncertainty Analysis X. Wang and J. Zhang	1720
Research on the Ladder Pricing Method of Reclaim Water Based on Cost-Plus X.J. Liu, S.R. Han and X. Luo	1724
Finite Element Analysis of Dam Foundation Seepage Effect on Cutoff Wall Depth of Guxue	
Concrete Gravity Dam N.N. Xi, F.G. Tong, G. Liu and T. Zhong	1729
Analysis of Design Flood LiuGou River in Yellow River of LanZhou W.S. He, J. Li and S.M. Zhao	1733
Windbreak and Soil-Reinforcement Benefit Evaluation for Wind Erosion Area F.Q. Liu, J. Liu, X. Zhang, R.P. Yin, M. Nao, P.F. Liu and H.H. Zhu	1738
Studies on Changes of Soil Carbon and Nitrogen Dynamics under Long-Term Fertilizer in the Black Soil Based on DSSAT Model W. Guo, Z.Q. Zhang, J.H. Liu, P. Zhu and J.M. Yang	1743
Simulation of Non-Point Source Pollution Based on SWAT Model - A Case Study of Ashi	1743
River Basin F. Ma, X.F. Jiang, L. Wang, D. Shan, X.W. Liang and Z. Li	1751
Determining the Extent and Condition of Riparian Zones in Alternative Drinking Water	1751
Supply of Xiquanyan Reservoir, China X.W. Liang, L. Wang, F. Ma, D. Shan, X.F. Jiang and Z. Li	1756
Variations of Water Vapor Transports in Three Rivers' Headstream during 1971-2010 B.T. Fu and X.F. Zeng	1760
Chapter 17: Agricultural Products Processing, Biological Pharmaceutical and Sustainable Agriculture	
Content Variations of ATP-Related Compounds and Quality Assessment of Tilapia Fillets during Iced Storage	
L.L. Sun, H. Huang, L.H. Li, X.Q. Yang, S.X. Hao, Y.F. Chen, Y. Wei, X. Hu and Y.Q. Zhao Effect of Processing on Biogenic Amines Formation in a Southern China Traditional Dried-	1767
Salted Hairtail Y.Y. Wu, Y.F. Chen, L.H. Li, X.Q. Yang, L.L. Sun, J.C. Deng and S.L. Yang	1776
Formulation Optimization of Cryoprotectant for Crisp Grass Carp by Response Surface Methodology	
X.Q. Yang, X.B. Ma, W.L. Lin and L.H. Li	1782
Optimization of Antioxidant Silk Fibroin Peptide Hydrolysis Process Z. Zhu, D.P. Wang, Y. Ma, X. Yang, X.J. Wang, H. Yin and Y. An	1789

Optimization of the Uncooked Oratosquilla Oratoria Curing Process via Response Surface Methodology	
Q.W. Mao, J.R. Wu and X.Q. Yue	1793
Application of Carboxymethyl Chitosan on Adsorbent Detoxification of Paralytic Shellfish Poisoning Toxins from <i>Chlamys nobilis</i> S.S. Zhang, J. Jin, Q.P. Li and Y.M. Ha	1798
The Process Conditions of Extracting Polysaccharides from <i>Dendrocalamus latiflorus</i> by Cellulase	
X. Ma, Y.S. Zhong and F.Z. Zhang	1804
Anti-Diabetic Activity of Polysaccharides from <i>Agaricus bisporus</i> Mycelia T.Y. Zhou, X.Y. Li, N.Y. Chen, Z.L. Wang, L.B. Yu, H.D. Yang and Y. Bi	1808
Antioxidant Properties of Tilapia Component Protein Hydrolysates and the Membrane Ultrafiltration Fractions X.X. Chen, X. Hu, L.H. Li, X.Q. Yang, Y.Y. Wu, W.L. Lin, Y.Q. Zhao, H.X. Ma and Y. Wei	1812
Effect of Thawing Methods on the Formaldehyde Level of Squid Y. Shen, Y.Y. Wu, H. Huang, X.Q. Yang, J.W. Čen and H.X. Ma	1818
Effects of Two Trypsin Inhibitors on Trypsin in Activity and Structure S.T. Dong, H. Zhang, N. Xu, P. Li, S.S. Xu and C.Y. Xi	1824
Research on Correlation between the Pressure and the Grain Moisture Content in the Rectangular Silo	
Y. Wang, W.F. Wu and Y.Q. Zhang	1828
Effects Different Processing Techniques for Flavonoids from Buckwheat and Antioxidative C.H. Piao, L.P. Liu, J.M. Liu, H.S. Yu, Y.H. Wang and Y.H. Hu	1832
A Study about Microwave-Assisted Extraction of Polysaccharides Form Medicinal Mushrooms Fomitopsis ulmaria (Sor.: For.) Bond. et Sing Y.T. Zhao, Y.Q. Tang, K.Z. Liu and Y. Zhang	1837
Effects of Dietary Selenium Supplements on the Superoxide Dismutase (SOD) Activity of Neocaridina heteropoda (Crustacea: Decapoda: Atyidae: Caridina) Exposed to Ambient Sodium Polyphosphate	1041
H.W. Wang, J.X. Wang, L.K. Yang, L. Liu, S.S. Lu, F.K. Yang and D.B. Cai	1841
Lipid Oxidation during Processing of Traditional Salting Fish of White Chinese Croaker(Argyrosomus amoyensis) Q.X. Cai, Y.Y. Wu, L.H. Li, X.Q. Yang, Y.Q. Zhao and Y.Q. Wang	1844
Nutritional Value Change during Processing Forage Block from Under-Forest Interplanting	
L.L. Chen, Y. Feng, D.Q. Zhang, Y.S. Luo, R. Chen and X.L. Zhang	1849
Temperature Monitoring for Grape Cold Chain Based on Temporal-Spatial Fusion Theory J. Liu and S.C. Du	1854
A New Method of Fermenting Northeast Sauerkraut Rapidly by Lactic Acid Bacteria L.W. Zhao, H. Sun, Z.Y. Yu, B. Lu, Y. Zhao, X.T. Wang and C.Y. Zhao	1858
Antioxidant Activity of Crocins from <i>Gardeniae jasminoides</i> Ellis Evaluated by UV-Vis-NIR X.L. Zhang	1863
Functional Study of <i>Deinococcus radiodurans</i> Carotenoid against Irradiation Y. Qiao	1867
Research on Intelligent Bait Casting Method Based on Machine Vision Technology Y.Y. Wei, D. Zheng, L.Y. Hu and J.M. Zhan	1871
Study on Facilities Agriculture Remote Monitor and Control System Based on Tri- Networks Convergence L.J. Shi, X.X. Yu, J. Zhao and Q.S. Du	1875
Chapter 18: Geographic Information Science and Remote Sensing	1013
Chapter 10. Geographic intormation science and Kemote Sensing	
lem:lem:lem:lem:lem:lem:lem:lem:lem:lem:	1881
Study on GIS Framework and Spatial Data Mining Model of China Highway Natural Regionalization H.Z. Zhou, D.X. Wei and H.Z. Yang	1886

A Review of Remote Sensing Drought Monitoring Method L. Qiao, H. Qian and A.D. Huo	1891
Analysis in Stability of Monitoring Network for Deep Foundation Pit Based on Mean Spacing Method	1007
X.L. Sun, W.C. Zhang and W.D. Li Study of Optional Bands Combination of Landsat Imagery for Extracting Information of	1895
Ice Shelves	1002
S. Liu, Q.G. Jiang, Y. Xiao and Y.F. Yu Environmental Impact Evaluation of Underground Mining Activities Using InSAR	1902
Technique Y.B. Sheng, Y. Shen and S.L. Xu	1907
High-Resolution Satellite Application in Land Cover Change Detection Y.L. Feng, J.J. Yang and X.H. Liu	1911
Modeling of Three-Dimensional Terrain Data for Intelligent Control of Unmanned Construction Machine in Deterministic Surfacing Process X.M. Shen, J.Z. Zhou and L.Q. Han	1917
Remote Sensing Image Quality Assessment Based on Engineering Quality and Spectral	
Quality Y. Li, C. Cui, Q.G. Jiang, H.J. Chen and X.Y. Zhu	1922
Research on 3D Tunnel Modeling Based on Close-Range Photogrammetry	1024
W.D. Li, N. Lin and X. Chen The Method on Statistic Spatial Gridding for the Sum Variable	1934
X.M. Zhang, Y. Wang, L.J. Sun, L. Wang, Z. Sun and J.Q. Liu	1941
Topological Relations between Rivers in Updating Increments L. Leng, G.D. Yang and Y. Zhang	1950
Model Establishment Based on Cultivated Land Quality of WebGIS Provincial Level	1930
Management Information System Evaluation T. Liu, T.X. Li, X.Z. Zhang, Y.D. Wang and Z.C. Zheng	1955
Study on the Intelligent Extraction Based on Hyper-Spectral Characteristics of Typical Vegetation	
J. Zhang, H.Y. Zhao and M.X. Zhang	1960
Study on Tourism Climate Comfort Level in East China Based on GIS M. Zhang	1965
The Intelligent Classifier's Building of Typical Vegetation Based on Hyper-Spectral Data J. Zhang, H.Y. Zhao and M.X. Zhang	1972
Design and Research of Multiple Data Channels in Solid State Recorder of the Satellite SJ- 10	
Q. Song, S. Li, Y. Zhu and J.S. An	1977
Coefficient Feature Extraction and Analysis on SAR Image with Non-Subsampled Contourlet Transform S.Q. Huang and H. You	1982
Dynamics of Rift-Opening Calving Dominant Ice Shelves and the Analysis of its Influencing	
Factors S. Liu, Q.G. Jiang, Y. Xiao and Y.F. Yu	1987
Chapter 19: Geology of Mineral Prospecting and Exploration	
Study on Degradation Mechanism of Stress in Generation Process of Coal-Bed Methane X.M. Li	1995
Application of High-Precision Magnetic Survey to the Investigation of Mineral Resources in Halaganlawusu Area, Inner Mongolia Q. Liu and R.M. Peng	2001
Carbon Isotope Fractionation Behavior of Secondary Biogenic Coalbed Methane Generated from Lignite Samples Based on Parent Methanogen	2005
A.K. Wang, Y. Qin and P. Shao Case-Based Reasoning with GIS to Oil-Gas Reservoir Comprehensive Mapping	2003
J.H. Chen, W.H. Wang and J.W. Li	2010

Geochemical Characteristics and Genesis Discussion with Rock Metallogenic Belt of Geza Island Arc, Yunnan X.L. Liu, N. Zhang, P. Wang and F.C. Yang	2015
Integrated Fracture Delineation in Volcanics, Junggar Basin, China F.F. Wu, J.C. Zhang, H. Zhang and J.L. Wu	2019
Introduction to the Recovery and Technology of Palaeogeomorphology in Sedimentary Basins	
J. Wu, H. Yang and D. Xu	202:
Palaeotopography and its Constraint on the Development of Depositional Facies Period of Early Cretaceous in Tabei G.F. Xu, C.S. Lin, G. Wang and Q. Sun	203
Research on 3D Visualization and Data Management Integration Modeling of Digital Mine: A Case Study of Eastern Gejiu Sn-Cu Deposit in Yunnan Province, China P.P. Yu, J.P. Chen, M. Yu, Z. Wu and D.Y. Chen	2030
Sedimentary Sequence of Different Salinization Stages Lower Es3-Upper Es4 in Jiyang Depression	
W.Q. Yang, Y. Yin and D.Y. Zhu	2042
Study on Stratigrafic Division and Correlation of Formation Yingcheng-Shahezi of Lishu Rift D.Y. Zhu, W. Xiong and T.X. An	2046
The Lead Isotope Characteristics and Tracing Significance of Ore Metallogenic Material in	2040
the Geza Arc, Yunnan X.L. Liu, N. Zhang and J. Kang	2054
Analysis of Sedimentary Characteristics of Deep-Water Fan H. Yang, B. Yu, Y.F. Wu and J. Wu	2058
Mineralogy and Tectonic Setting in Guihuachong Copper Deposit in Tongling, Anhui Province	207
Z.L. Yue, B. Liu and Q.H. Lv	206
Chapter 20: Technologies in Mining and Mineral Processing Industry	
Dynamic Phenomenon in Coal Mine Roadway Boundary and Supporting Adjustment in Bursting Condition P.B. Li, J.A. Wang and K. Lv	207
Enrichment and Separation of Coal Mine Ventilation Methane and Engineering Education T. Zhu, S.J. Du and X.X. He	2078
Roadway Anchor Support Design Method Based on the "Three Zones" of Roadway Roof Z.G. Wang, L.F. Zhang, D.Z. Zhang, T.B. Zhou and Z.H. Zhang	2082
The Influence of Different Fault Throws to the Height of Water-Flowing Fractured Zone Z.L. Fan	208
Analysis of the Possibility of Carbon Dioxide Storage in China's Underground Salt Caverns K. Zhang and L. Cao	2092
Experimental Study of Mechanical and Seepage Characteristics of Two Kinds of Coal Samples W.P. Li	2098
Flotation of Copper Oxide Minerals by Mixed Collectors J. Qi and L. Yang	2102
Micellization of a Zwitterionic Gemini Surfactant and its Interaction with Anionic Surfactant in Aqueous Medium	210
Y.C. Zheng, L.W. Yu, D. Pan, P. Mei and L. Lai	2100
Numerical Analysis for the Influence of Mining Deep Coal Seam on Oversize Normal Fault X.X. Zhai, S.W. Zhang, S.J. Ma and G.S. Li	2112
Analysis for Gas Control Technology of Coal Mine in Southwest Guizhou Q.S. Li, G.H. Li, X.W. Heng and S.J. Zhang	211
Mine Soft Rock Roadway Fine Blasting Application Technology P. Li, C. Zhang and H.L. Wang	212

Neural Network Prediction of Ground Surface Settlement under the Influence of Open Pit Mining	
L.G. Jia and K.H. Sun	2128
Simulation Experiment Study of Surrounding Rock Deformation and Surface Movement during Paste Filling Mining L.G. Jia	2135
Simulation Study on Microscopic Penetration of Coalbed Gas J.H. Zhao	2145
Study on a Sink and Float Test of a Lead-Zinc Ore from Yunnan W.J. Zhao and S. Jian	2149
The Application of TEM on Detecting Mine Goaf Y.J. Li, X.M. Li and T. Chen	2153
Utilization of Jinchuan Unclassified Tailings in Mine Filling Y.T. Wang, Z.Q. Yang, Q. Gao and M.H. Li	2158
The Mechanism Research of Collector and Hemimorphite K.K. Li, X.L. Zhang, S.M. Cao and D.W. Liu	2163
Influence of Coke Distribution on Reduction of Ferric Burden of the Lump Zone in Blast Furnace B.Y. Tuo, J.L. Wang, Y.L. Yao and J.J. Yang	2168
Study on Coal Mine Gas Monitoring System Based on Arduino H.C. Gao, C.J. Fan, J.W. Li and M.K. Luo	2173
Development and Application of Complex Flashing-Field Magnetic Cleaner W.L. Jiang, Y.M. Zhang, G.Q. Liang and X.W. Xia	2177
Discussion on Ways of Mine Gas Drainage and Extraction C.H. Li	2189
Chapter 21: Geology of Oil and Gas, Well Development Projects Application of Dynamic Temperature and Pressure Monitoring Technology in SAGD Production Well	
Y.L. Cheng Investigation on Circulating Path of Injected Water for High Water-Cut Oilfield S.T. Zhao, Q. Li, X.R. He, K.P. Song and J.C. Zhang	2197 2201
Numerical Simulation of Vibration Pressure on the Hydraulic Performance of Round-Flow Emitter	
W. Cao, J. Liu, Y.T. Zhu, Q.S. Wei and Y.S. Shi Practical Adjustment of Stratum Series for S Oilfield	2205
Y.B. Lan and Q. Li Predicting Reservoir Pressure with Soil-Water Characteristic Curve X.W. Li, Y. Wang and X.S. Jiang	2210 2215
Study on Extended Reach Horizontal Well Multistage Fracturing Techniques for Tight Oil X. Tan, T.T. He and F.Q. Wang	2219
Study on the Influential Factors of Shear Degradation of Polymer H.Y. Qiao, M. Xu, Q. Fan and Y.P. Wang	2223
Study on Wellbore Deposits Prevention and Removal Process for H Oilfield in Iraq X. Liu, Z.C. Qiu, C. Zhao and R. Yi	2227
The Experimental Research of P110 Casing Wear-Resisting Property in Oil Base Mud H.X. Mi, G.L. Li, X.Z. Wang, Y. Yu and Y.H. Dou	2231
Theoretical Solutions of Hoop Stress of Eccentric Worn Casing F.X. Zhang, X.T. Yang, X.Z. Wang, Y. Yu and Y.H. Dou	2235
Water Displacement Rule at Extra-High Water Cut Stage W.S. Zhou, X.R. He, Z.L. Geng and J.C. Zhang	2239
Experimental Research on Erosion of P110 Tubing during Perforating H. Sun, Z.J. Ning, Z.W. Wang, Z. Li and Z.G. Wang	2244
Priority Selection of Weak Gel Flooding Formula on Heterogeneous Reservoir W.X. Wu, X. Song, Y. Fu and P.F. Yuan	2248

Study on Stratigraphy Correlation of EPC Oilfield in Mexico Q.G. Qu and F.Y. Zhu	2252
Analysis of Temperature Field Based on Hollow Sucker Rod Hot Flushing Technology J.Y. Du, J. Xie, Y.Q. Zhao, L.P. Zhang and R.B. Zhu	2257
Application of Production Analysis Method in Qiang1-46-20 J. Zhu	2263
Atomic Force Microscope Manifestation of Heat-Resistant Polymer Thermal Stability T.P. Chen, B. Qiu, N. Wang and R. He	2267
Artificial Gas Cap Flooding Technology of Complex Fault Block Reservoir P.X. Diwu, C.Z. Sun, R. Liu and W.Y. Zhao	2272
Design and Implementation of Bohai Oil Spill Emergency Response Platform Based on Smart Client X.F. Jin, D.L. Guo, S. Wang, J. Huang, Y. Zhang and Y. Song	2276
Influence of Production Profile Engineering Design for Horizontal Well Testing Construction X.H. Wang	2282
Integrated Formation Evaluation of a Complex Tight Oil Reservoir in Junggar Basin, Northwest China F.F. Wu, J.C. Zhang, H. Zhang and J.L. Wu	2286
Modeling of the Calcareous Intercalation in WZ Oilfield Y.C. Lao, M. Li, X. Lei and M.Y. Dai	2292
Productivity Evaluation Study of Shale Gas Reservoirs P.X. Diwu, R. Liu, T.J. Liu and B. Jia	2296
Test and Analysis of Heat-Resistant Polymer Solution's Hydrolysis S.Y. Qi, T.P. Chen, Q. Li and R. He	2300
The Calculation of Apparent Permeability for Shale Gas Considering Adsorption and Flow Patterns	2205
W.X. She, J.B. Chen, J. Zhang, B. Wei, H.Q. Wang and R. Bai The Research and Evaluation of Finely Layered Water Injection Standard in Low- Permeability Reservoirs - A Case from Block A in one Low-Permeability Reservoir M.X. Wang, W.J. Luo and J. Ding	2305 2310
Water Injection Proposal for Block 5 Oilfield to Increase Oil Reserves B. Li and L. Zhao	2316
Water Temperature Modeling and Water Temperature Stratification Pattern of Reservoir Based on the Three-Dimensional Environment Fluid Dynamics Code Model F.F. Yan, L.X. Han, R.X. Chen, L. Zhang and Q.L. Chen	2321
A Study of Identification Marks of Sequence Boundary of GaoTaizi Reservoir in Qijia Area X.T. Yu and Y.F. Zhang	2327
Numerical Simulation of Hydrocarbon Migration and Accumulation Process C.C. Wang, J. Ding and P.F. Weng	2331
Physical Simulation Experiment Research of Air Foam Flooding in Da Gang Oilfield J.Y. Xie, L. Sun, W.F. Pu, F.Y. Jin and S. He	2335
Regularities of Artificial Boundary Water Development in Fault Block Reservoirs W.X. Liu and R. Liu	2345
Study on Three-Dimensional Geological Modeling of Reservoir in Hei46 Block N.N. Meng, G.X. Zhang, G.Q. Wei and X. Lv	2349
The Analysis of Oil Suppression by Aqueous Film Forming Foam through a Gas-Salt Layer of Water D.A. Korolchenko, A.F. Sharovarnikov and A.V. Byakov	2353
Chapter 22: Sustainable Development of Logistics and Transportation Networks	
Improved Method on Traffic Flow Optimization Ground Delay Program F. Li	2361
Research on the Carbon Footprint Drawing Method for Highway Freight Enterprises Y. Gao	2365

Research on the Interaction between Resource Logistics Industrial Cluster and Regional Economic	
X.Y. Zhou, Z. Wang and H. Sun	2372
Research on Traffic Flow Optimization of Flight Route and Ground Delay Program S.G. Liu	2377
A Route Planning Method Based on the Airspace Divided by Grid Method J.X. An, W.X. Wang, Z. Liu and J.Q. Zhang	2381
Comprehensive Thinking about the Last one Hundred Meters Issue of Express Delivery Industry L.M. Yuan	2385
Creative Distribution Mode Design of Terminal Logistics Based on New Technological Environment	
G. Zhu, Z.F. Zhu, J. Zhao and Y.Q. Zhu Economical Analysis of Cooperative Behavior of Transportation and Warehousing Company Based on Resource Integration	2390
T. Yang and J. Zhou Shipment Planning Based on the 4th Party Logistics Platform in a Dynamic Environment S. Wang, C.P. Tan, Y. Wang and F.F. Fu	2398 2402
The Bike-and-Ride Research Based on Low Carbon Consideration at Urban Rail Transit Station	
X. Zhao, J.C. Che and C.T. Chen Research on the Attracting Scope of the Logistics Park Based on Economic Relation and	2408
Breakpoint Models X. Zhang and S.P. Qin Emergency Backup Allocation of Grid Metering Resources among Provinces or Cities	2414
under the Horizon of Dynamic Logistics Alliance Q. Liu, S.Y. Zhou, W.X. Zhang, Z.X. Li and J.J. Yan	2420
Empirical Analysis on the Change of Factor Intensity of Auto Industry X. Chao	2428
Information Fusion Technology in Internet of Things: A Survey L.X. Zhang	2434
Study of Green Logistics Technology to Manufacturing Based on Green Supply Chain Theory X. Zou, W. Zhao and T.T. Zhang	2438
Study on Extract and Repair Traffic Performance Index Data of Beijing F. Zhang	2443
Intelligent Monitoring of MSW Collection and Transportation System J. Tang, W.J. Yao, M. Li, J. Xu, X.F. Gu, L.J. Zhang, X.Y. Liang and L. Zhang	2447
Chapter 23: Demand, Supply, Development, Management of Energy and Resources	
The Relationship between Economics Growth and Energy Consumption in China-A Empirical Analysis Based on Energy Kuznets Curve C.S. Li, Q.L. Li, Z.M. Lei, H. Yang and H.Q. Qu	2457
Energy Consumption, Carbon Emission and Financial Risk Assessment of Iron and Steel Enterprises in China W.D. He and C. Zhang	2462
Analysis of Energy Consumption for Protected Grape Production System in China D. Tian, J. Wang and J.Y. Feng	2468
Estimating the Marginal Abatement Cost of Carbon Emissions: A Non-Radial Efficiency Analysis L.W. Fan and X. Zhou	2473
Renewable Energy Strategies for Sustainable Development in Fujian Y.L. Zhang and Q.X. Guo	2473
Research on the Fiscal and Taxation Policies to Promote the Development of Renewable Energy	
Y.L. Wang and S. Shao	2483

Study on Evaluation System of the Agent's Capability Structure of International Energy Cooperation	
H.L. Yang, P. Li and X.L. Guo	2488
Study on the Measurement Index System of Green Development Degree in Coal Mining Area Based on Comprehensive Environmental Capacity S.J. Song, J.S. Zhang, W. Zhang and Y. Li	2493
Text Analysis of China's New Energy Vehicle Industry Policy Q. Xie and Z.L. Tian	2499
The Enlightenment on Beijing from Development Experience of Renewable Energy Sources in World Cities Y.F. Weng and Y.L. Wang	2503
What are the Driving Factors behind the Fluctuation of Crude Oil Prices? : An Independent Component Analysis H.P. Li, L.W. Fan and P. Zhou	2508
Industrial Regulation in Chinese New Energy Sector: Problems and Prospect L. Wei and J.G. Liu	2512
The Development of Countermeasure Research of New Energy Industry Based on Self-Organization Theory J.Y. Li, M.Q. Zhang and C.L. Zhang	2519
The Study and Measurement of the Evaluation Index System on Energy Industry Competitiveness Based on Evolution Mechanism of Self-Organization F.L. Niu	2523
Analysis the TMY Selecting by Different Meteorological Parameters Precision to the Impact of Building Energy Consumption H.L. Li, W.H. Zhang, X.Y. Xu, J.Q. Yu and L. Yang	2529
Chapter 24: Environmental Protection and Low Carbon Ideas in the Context of Sustainable Development	
Cost-Sharing Contract in Low Carbonization Supply Chain Based on Improving Demand for Low-Carbon Products Y.J. Zhou and Y.Q. Huang	2539
Decoupling Analysis of Economic Growth and Carbon Emissions in Henan Province S.L. Peng, H. Xie and G.Q. Zhao	2545
Low Carbon Marketing Strategy of Enterprise under the Condition of Low Carbon Economy Q. Shi and W. Bao	2549
Research on College Student Low-Carbon Consumption Behavior H.L. Meng	2553
Study on the Influence of Carbon Emission Constraint on Generation Right Trade D.N. Liu, Y.J. Xu, Y. Zhao and L. Li	2557
An Empirical Research on the Relationship between Environmental Quality and Energy Consumption in China Y.Z. Zhao	2562
Automobile Consumption and Ecological Civilization Construction	2567
Y.H. He and L. Zhang	
Y.H. He and L. Zhang A Composite Indicator for Evaluating the Low-Carbon Performance of Cities in Jiangsu Province	2572
Y.H. He and L. Zhang A Composite Indicator for Evaluating the Low-Carbon Performance of Cities in Jiangsu Province L.W. Fan and L.P. Zhang A Study on the Sustainability of Chinese Pasturing and Semi-Pasturing Grassland Based on Ecological Footprint Model	2572 2578
Y.H. He and L. Zhang A Composite Indicator for Evaluating the Low-Carbon Performance of Cities in Jiangsu Province L.W. Fan and L.P. Zhang A Study on the Sustainability of Chinese Pasturing and Semi-Pasturing Grassland Based on Ecological Footprint Model C. Yang, G.G. Wang and M.L. Wang An Empirical Research on Relationship between Economic Growth and New Energy Consumption in China	2578
Y.H. He and L. Zhang A Composite Indicator for Evaluating the Low-Carbon Performance of Cities in Jiangsu Province L.W. Fan and L.P. Zhang A Study on the Sustainability of Chinese Pasturing and Semi-Pasturing Grassland Based on Ecological Footprint Model C. Yang, G.G. Wang and M.L. Wang An Empirical Research on Relationship between Economic Growth and New Energy	

Correlation Study on Energy Consumption and Economic Sustainable Development of Liaoning	
Z.W. Wang, J. Zhang and X.Q. Luo	2591
Exploration and Practice in the Construction of Environmental Science Major of Pharmaceutical Universities R.X. Guo and J.Q. Chen	2598
Modern Region: The Problem of Sustainable Development E. Kargapolova, D. Anufriev, A. Aryasova and L. Boronina	2602
Pathways to Low-Carbon Transport – From Technical and Non-Technical Perspectives Z.J. Ren and X.L. Gao	2606
Review of the Evaluation of Urban Sustainable Development L. Zhang, L.P. Wang, L. He and H.C. Li	2610
The Research on Path of the New Type Resource-Based Urban Construction in China - Based on the Perspective of Low Carbon T.X. Liu, J.Y. Niu and J.S. Zhou	2614
Analysis of Carbon Emissions from Petroleum Energy Consumption in Heilongjiang Province Z.H. Wang and W.Q. Yuan	2620
Analysis and Quantitative Evaluation of Power Grid Corporation's Carbon Emission Reduction Potential	2020
X.X. Zhang, L. Ma, S. Yang and T. Cai	2624
Environmental Ethics in the Benefit of Sustainable Development A.S. Nasibulina	2630
LNG Distributed Energy Brings New Opportunity for Port Power Optimization in China J. Zhu and Q. Gu	2634
The Role of Value Foundations of Sustainable Development in the Solution of the Civilization's Crisis K.V. Gunzenova	2637
Grey Relational Analysis on the Relationship between Economic Development and Carbon Emissions in Hubei Province Y.W. Liu, Z. Chen and X. Zhou	2641
Exploring Ecological Land Reclamation to Promote the Ecological Civilization Construction in China G.Z. Huang, T. Zhu, J. Hu, T. Wen and Y.J. Ji	2648
Comparison and Analysis of Prediction Methods for Water Consumption per Ten Thousand Yuan Industrial Added Value	2652
Z.J. Yan, M.Y. Zhang, C.X. Xu, H.T. Zhao, Y.P. Tang and H.R. Wang Evaluation of Ecological Carrying Capacity in Beijing Mountainous Valley Areas – A Case Study of Lihuagou Valley Region	2653
C.H. Jiang and G.Y. Li The Competitive Strategies of a Green Energy Company	2659
L.J. Chen, S.B. Tsai and C.K. Wang	2664
Game Analysis of Environmental Regulation Performance of FDI Competition under Green Economy Perspective W.B. Sun and Z.Y. Wang	2669
Study on External Pressure, Firm Characteristics and the Quality of Environmental Information Disclosure of Listed Companies in China Y. Li and N. Li	2675
Mining Enterprises Rent-Seeking of Environmental Accounting Information Disclosure K. Peng and W.Q. Jiang	2679
Development of Low-Carbon Economy in Heilongjiang Province Tax Incentive Policy Analysis	2017
D.F. Cai, T.W. Wang and C.H. Ai	2683
Promotion of Financial Trust Services as Innovative Mode for the Financing of China's Environmental Protection Industry J.C. Chang	2687
Foreign Direct Investment, Trade Openness and CO ₂ Emissions: Taking Shandong Province as an Example	
Y.D. Xu	2691

Input-Output Analysis of Environmental Protection Industry L. Jiang, S.Z. Hu and X.X. Xu	2700
Research on Environmental Governance Effects of China's Taxation Policy Y. Zhang	2704
Capital Efficiency and Eco-Efficiency of Enterprise Operation T. Liu, D.P. Han and H. Zhou	2709
Study on the Investment and Financing Issue of Environmental Protection Industry in Yangtze River Delta G. Yang, X.C. Cai, L.J. Chao and S.Y. Lu	2714
The Evaluation of Air Pollutant Emission Reduction Effect of Port Handling and	2/17
Distributing Facilities B. Qiao, Y.C. Liu, W.J. He, Y.J. Tian, Y. Li and O.C. Cai	2719
Global Emission Inventory Research Trends J.W. Zhan, L.Z. Chen and S. Hong	2728
Several Research Topics of Carbon Footprint Order Quantity Z.Y. Tian and F. Zheng	2734
Simulation of Facility Agricultural Climate Resources Based on GIS in Sichuan Province J.J. Li, R.T. Wang and Y. Zhao	2740
Analysis of Industrial Carbon Emissions Assessment and Spatial Distribution X.F. Li, R. Peng and M.X. Yang	2745
Contributing Factors and the Control of Haze S.D. Zhang and Z.B. Zhang	2751
With Low-Carbon Resources' Constraint the Satisfactory Conditions for R&D Endogenous Growth Model	
D.F. Cai, R.Y. Dai and J. Cai	2755
Optimal Tax Policy Based on Endogenous Growth Model of Low Carbon Economy D.F. Cai, Y.K. Hao and J. Cai	2759
On Research of the Influence and the Countermeasures of Haze Weather Treatment on Automobile Industry Development A.Q. Huang	2763
Semi-Parametric Estimation for Urbanization and CO₂ Emissions in China T.G. Yu and X.W. Zhuang	2766
Low Carbon Strategies of Electric Power Sector in Shandong Province: Marginal Abatement Costs Analysis D.F. Yu, M.H. Ye and C. Wang	2770
Research on the Factors of China's Carbon Dioxide Emissions J.W. Xu and X.Z. Yang	2774
Research on Chinese Emissions Trading System Pilots S. Yang and T. Zhao	2779
Market and Potential of Small Hydro Power Plant's Certified Emission Reductions in Brazil	
G.L. Tiago Filho, L.J. da Silva, P.M. Duarte and R. Meira	2784
China Emission Trading Scheme: An Up-to-Date Analysis D. Chu, R. Guo and F.T. Li	2788
The Construction and Analysis about the Evaluation System of Low-Carbon Economy in Jiangsu Province F. Li	2791
Model of High-Tech Enterprises' Contribution to Low-Carbon Economy N. Chen and L. Shi	2796
Research on Ecological Tourism Competitiveness of Sustainable Development Strategy - A Case Study of Wanly Lake X.J. Hu	2802
Survey and Strategy Suggestions on Low Carbon Technology Innovation of Chinese Petrochemical Industry	
Y.N. Zhang, H.Y. Zhang, S. Hu and T. Zhang	2806
Research on the Sustainable Development Evaluation of Ecological Economy Based on AHP Y.Y. Zhai and F.C. Dong	2811

Green Meeting: A Sustainable Event M. Cai, J.N. Tang and K.M. Griese	2815
Hebei Province Low Carbon Economy SWOT Analysis Y.Q. Nie	2822
Measures of China's Transition to Low-Carbon Economy J.J. Zhang and B. Zhao	2826
Analysis on Economic Efficiency and Industrial Structure Adjustment of Some Counties Based on DEA Method L. Cao, Z.X. Ma and X.H. Qi	2831
The Optimal Growth under Catastrophic Climate Change of Far Distant Future M. Shen	2836
Evaluation of Development Level of Agricultural Circular Economy in China L. Xin	2843
Index System and Model of Evaluation to Implemented Performance of Patent Strategy from Perspective of Sustainable Development Z.J. Xu and Y.K. Song	2852
Chinese Mid-Long Term Energy Demand Analysis under the Environmental Constraints B.G. Shan, C.L. Zhang and Y.P. Wang	2857
Developing Circulation Economy Vigorously and Exploring the New Way to Scientific Development L. Wang and J. Chen	2863
The Research on Ecosystem and Agricultural Development in the Kyrgyzstan Republic H. Shen, L.Z. Zhang and W.Z. Su	2867
A Few Basis Points of the Ecological Economy S.J. Wang	2871
Factors Affecting Tourists' Involvement in Environmental Protection L.M. Wang	2875
On the Ecological Leisure Preference of Different Aged People K. Sun, G.P. Zhang and L.S. Zhong	2881
Social Risks of Anthropogenic Human-Caused Systems: Relevance and Prospects E. Kamensky and I. Shapovalova	2886
Application of Social Cognitive Theory on the Motivations and Expectations of Developers' and Investors' to Commit to Green Building Construction and Supply O. Iheanyichukwu Joachim, G.U. Aliagha, N. Kamarudin and K.J. Ufere	2890
Construction of Evaluation Index System of Low Carbon Economy L. Xia	2899