

Table of Contents

Preface and Organizing Committees

Chapter 1: Environmental Chemistry and Biology

Ferrooxidans's Isolation and Purification L.H. Lv, J.C. Ren, T.H. Sun and J.Q. Dai	3
Effects of the Different Organic Materials on the Structure and Elemental Composition of Humus in Black Soil J.M. Li and J.G. Wu	8
Analyzing on Comprehensive Treatment Measures and Origin of Qianjiangping Landslide in Three Gorges Reservoir Area S.H. Yu, L.P. He and J.S. Qi	14
Theoretical Study of the $^1\text{CHCl} + ^3\text{O}_2$ Reaction C.Y. Shi, X.Z. Liu, D.X. Xu and Z.G. Zhan	20
Enhanced Biodegradation of Aniline under Anoxic Condition J.Y. Shen, C. Zhang, X.Y. Sun, J.S. Li and L.J. Wang	25
Theoretical Study of the Mechanism of the $^1\text{CBr}_2 + ^3\text{O}_2$ Reaction C.Y. Shi, J. Zhang and X.Z. Liu	31
Sorption and pH Effect on Selected Antibiotics in Soils Y. Wu, D.H. Chen and M.H. Huang	35
Physiological Response to Zinc Pollution of Rape (<i>Brassica chinensis</i> L) in Paddy Soil Ecosystem H.F. Yang, J. Zhang and J.L. Li	39
Optimization of Phenol Biodegradation by a Novel 2,3-Dimethylphenol-Degrading <i>Pseudomonas</i> Isolate Z.J. Xiao, F.F. Huo, R.Q. Qi and Y.L. Huang	44
Investigation of Hydrogen Bonding Interaction between Bolaform Schiff Bases with Barbituric Acid by HPLC Q. Tong and T.F. Jiao	48
Competition Absorption and Desorption Dynamic Character of Cadmium, Lead and Zinc by Soil in North-East of China S. Chen, L. Chao, L.N. Sun and T.H. Sun	52
Planktonic Algae and Epilithic Algae in Typical Rivers of Danjinkou Reservoir Y.Y. Li, J.Z. Li, Z.A. Liang, W. Yin, L.Q. Hu, J.W. Shi and Y. Wang	59
Effects of Three Salts to Oilseed Rape (<i>Brassica napus</i>) Accumulating Cadmium in Cd-Contaminated Soil L.P. Yi and Z.W. Wang	63
Hydrolysis and Hydrolysis Pathways of Composite of Copper (II) and Cypermethrin P.L. Wang, J.M. Xie, J. Liu and X.J. Wei	70
The Characteristic Research of Two Kinds of Block Polymer Q.B. Yu, X.H. Li, Y.L. Tao and G.J. Cheng	74
Study on the Treatment of Cold Rolling Wastewater by Using Bio-Fluidized Bed H.Q. Song, S.Q. Li and X.L. Min	78
QSPR Study on n-Octanol/Water Partition Coefficient of PCDD/Fs by Three-Dimensional Holographic Vector of Atomic Interaction Field S. Qiao, K. Xie, C. Fu and J. Pan	83
Estimation of Solid Vapor Pressure of PCDD/Fs by Three-Dimensional Holographic Vector of Atomic Interaction Field K. Xie, S. Qiao, C. Fu and J.S. Qi	89
QSPR Study on Aqueous Solubility of PCDD/Fs by Three-Dimensional Holographic Vector of Atomic Interaction Field K. Xie, S. Qiao, C. Fu and C. Cheng	95
Human Interference of the Soil Nematodes Community and Flora Influence H. Tang and Q.D. Ji Ya	101

Hypochlorous and Urea Modifications on Carbon Fiber Surface and Effects on Microorganism Immobilization Y.L. Bao, G.Z. Dai and C. Jiang	106
Research the Relationship between the RNA Structure and Thermal Stability by Quantitative Analysis J.M. Wang, Y.H. Wang, B.B. Wang, R.H. Fan, W.D. Shen and B. Li	110
Heavy Metal Pollution of Soil around the Gangue Hill: A Case Study from Zhuxiangzhuang Coal Mine, Northern Anhui Province, China X.H. Liu, L.H. Sun and S. Chen	114
Nickel Induced Oxidative Stress and the Responses of SOD Isoenzymes in <i>Microcystis aeruginosa</i> FACHB-905 L.J. Huang, X.X. Chang and C. Wu	119
Study on Temperature Regulation of Lactic Acid Bacteria Using Metabolic Flux Analysis X.J. Xiong and Y.F. Li	127
Study on the Membrane Flux of Membrane Reactor and Fouling Control of PVA Membrane Y.Y. Liu and W.L. Zhang	133
Acute and Subacute Toxicity of Bisphenol A on Zebrafish (<i>Danio rerio</i>) X.N. Chen, X.M. Hang, W.B. Ke, Z.Y. Ma and Y.Q. Sun	138
Combination of Chlorogenic Acid and Bamboo Charcoal Particles Improve Husbandry Performance and Environment J.H. Wang, D.M. Liu, Y.L. Liu, C.L. Li, F.X. Wang, X.H. Li and Y. Li	142
Effects of Dimethylhydantoin and Carbohydrate on Growth and Immunity of <i>Litopenaeus vannamei</i> X.Q. Wang	146
Mechanisms for Tetracycline Adsorption on Graphite J. Chen, J.P. Wang, Z.H. Fei and G.C. Zhang	152
The Speciation Transformation of Cd, Pb in Sludge Biology Leaching J.Z. Huo, Z.Z. Wang and C. Zhang	157
Corrosion Behaviors of 0Cr18Ni9 Stainless Steel under the Combination Action of Sulfate-Reducing Bacteria and <i>V. natriegens</i> C.X. Gu, X.M. Zhao, Y.S. Yin and G.J. Ji	161
Research on the Bioavailability of Cd in Ilex kudingcha C. J. Tseng Soil Z.Y. Jia, S.X. Luo, H. Yan, Y.J. Wang, Y.Y. He and J. Wang	165
Isolation and Identification of a Low Density Polyethylene Degradable Bacterium Y.L. Song, J. Yang, H. Pan, J.W. Li, J.B. Zhu, X.Y. Deng, S.V. Khizhnyak and Y.L. Gurevich	172
Studies on Electrochemical Dechlorination Reaction of 2,4-Dichlorobenzoic Acid on Pd/Ti Electrode C.A. Ma, N.N. You and L.M. Chao	178
Studies on Electrochemical Hydrodeiodination Mechanism of 2-Iodobenzoic Acid on Cu Electrode by in-Situ FTIR Spectroscopy S.X. Hong, L.M. Chao and Z.J. Na	182
Study on the Aerobic Degradation Kinetics of 2,4-DNP and 2,6-DNP Z.L. She, T. Xie, L.L. Li, Y.J. Zhu, G.F. Tang and Y.G. Zhao	186
Effect of Surfactants on the Adsorption of Fluazinam in Soils A.L. Luo and X.J. Liu	190
Extraction of Gatifloxacin in Water by Use of Ionic Liquid–Salt Aqueous Two-Phase System W.Y. Zhao, J. Zhang, X. Ge, Y. Lu and R.S. Hu	195
Zooplankton Diversity in the Water Resource Area of the Mid-Line Project of South to North Water Division Y.Y. Li, Z.T. Zhang, W. Yin, L.Q. Hu, Z.A. Liang, F. Wang and G.M. Lei	199
Treatment of K-2BP Wastewater by Photocatalytic Oxidation and Fenton Reagent X.C. Wang, J. Li and H. Zhu	204
Adsorption of Aniline from Aqueous Solution by KSF Montmorillonite J.Y. Zhang, J. Xu, Y. Zhang, L. Li, Y. Zhang and J.J. Zhang	208
Prediction on Subcooled Liquid Vapor Pressures of PCDD/Fs S. Qiao, K. Xie and C. Fu	217

Study on the Biodegradability of Hyperbranched Surfactant X.C. Wang, Y.Q. Fu, L.F. Ren and T.T. Qiang	223
Chromosome Aberrations Induced by 5-Azacytine in the Root Tips of Wheat Carrying the Gametocidal Chromosome 3C C.H. Guo, W.Y. Su, W.W. Cong, L. Wu and D. Wang	228
Effects of <i>GFP</i> Transplastomic Tobacco on Soil Enzyme Activities C.H. Guo, Q.G. Liu and Y.P. Lv	232
Study on Chromosome Aberrations of Crosses Between 3E Disomic Addition Line and 2C Addition Line C.H. Guo, L. Yang and C.Y. Liu	236
Isolation of ACC Deaminase-Containing Plant Growth-Promoting Rhizobacteria from <i>Potamogeton</i> Rhizosphere Soil C.H. Guo, X.H. Shi and J.L. Liu	240
Isolation of ACC Deaminase-Containing Plant Growth-Promoting Rhizobacteria from Petroleum Contaminated Soil C.H. Guo, F. Fang and J.L. Liu	244
Influence of AMF on Oat Used to Phytoremediation in Petroleum Contaminated Soil C.H. Guo, R. Dong, P. Guan and F.F. Xun	248
Adsorption of Phenol on Natural Sediment from Liaohe River, China Y. Zhang, J. Xu, Y. Zhang, L. Li and J.Y. Zhang	252
Concentration of Cadmium in Different Rice Cultivars J.G. Liu, X.M. Zhong and M.X. Wang	259
Toxic Effect of Cadmium on <i>Azolla Imbricata</i> (Roxb.) Nakai Y. Gao, G.L. Song and H. Wu	263
Tenebrio Small-Scale Ecological Farming Feasibility Study H.C. Wang, H.Y. Liao and H.L. Chen	267
Effect of Aqueous Extracts of Cultured <i>Cordyceps militaris</i> on <i>Bombyx mori</i> Ovary Cell Lines W.Y. Wang, W.X. Sun, G.D. Peng, L.Y. Dai, L.H. Liu and B. Li	271
Microwave Synthesis of Nanosilver Colloidal Suspension for Anti-Bacterial Coating H.C. Yang, J.P. Wang and C.T. Hsieh	277
Photosynthetic Responses of Energy Plant Maize under Cadmium Contamination Stress L.Y. Zhang, H.Y. Zhang, W. Guo, Y.L. Tian, Z.S. Chen and X.F. Wei	283
Cadmium Tolerance and Accumulation in <i>Vitex negundo</i> var. <i>heterophylla</i> in Pot Experiment Y.L. Tian, H.Y. Zhang, W. Guo, L.Y. Zhang, X.J. Yu and Z.S. Chen	287
Ultrasound Enhanced Coagulation to Remove Organic Matter in Low Temperature and Low Turbidity Studies J.W. Li, X. Li, X.H. Xu and D.B. Wang	291
Adsorption of 4-Chlorophenol onto Hypercrosslinked Resins S.H. Tang, J.P. Wang, Y.F. Sun and N.N. Dai	298
Influence of pH and Nitrate on Perchlorate Biological Reduction R. Wang, F. Liu and L.H. Qin	303
Kinetic Studies for the Inhibition Effect of Pentachlorophenol on Alkaline Phosphatase Activity <i>In Vitro</i> Q.Y. Liu	309
Study on the Photocatalytic Degradation of Wastewater under the Optimal Preparation of the Activated Carbon Supported TiO₂ Thin Film K.S. Yao, J.J. Hsu and C.Y. Chang	313
Research on if <i>Nasturtium officinale</i> Can Be Used on Eutrophicated Waterbody Restoration at Low Temperature G.L. Song, Q.H. Wang, W.H. Hou, Y. Gao and H. Wu	318

Chapter 2: Environmental Materials

Study on Adsorption Properties of Lignocellulose/ Organic Montmorillonite Nanocomposites M.M. Wang, L. Wang and A.Q. Wang	325
---	-----

Study on the Preparation and Photocatalytic Property of N, Fe, Zn Nano-TiO₂ Loaded on Active Carbon	331
C.T. Hou, X. He, Y. Wang and W.J. Nie	
Simultaneous Removal of SO₂ and NO_x from Flue Gas on NiMgAlO Catalyst in the Presence of O₂	335
M.X. Yu, M.D. Zheng, X.J. He, X.H. Li and L.F. Wang	
QSAR Models to Predict Effect of Concentration on the Adsorption of Phenolic Compounds onto XAD-4 and ZH-01	340
Y.L. Gu, Z.X. Li, Z.H. Fei and G.C. Zhang	
Solvothermal Synthesis of TiO₂ Hollow Microsphere and Its Photocatalytic Properties	345
J.G. Wang, J. Zhu, X. Li and H.X. Li	
Advances in Studies on the Adsorption of Dyes in Wastewater Using Mesoporous Materials	349
X.X. Gu, Y. Han, J.J. Chen and J.R. Chen	
Study on Kinetics and Thermodynamic in Bamboo Charcoal Adsorb Ammonia Nitrogen in Wastewater	355
W.H. Wei, M.N. Liang, Z.Q. Zhu, H.D. Qin and Y.N. Zhu	
An Improved Non-Formaldehyde Tissue Preservative	360
K.Q. Shi, S.X. Shao and W.G. Yin	
Alumina Sol-Gel Films and Alodine Films on Al 2024 Alloy	364
Q. Zhou, X. Xiao, D.L. Zhao and E.J. Song	
Study on the Adsorption of Livestock Wastewater by Bentonite Coated Chitosan	368
H. Shao and D. Zhang	
Salicylidene Schiff Base Assembled with Mesoporous Silica SBA-15 for Cu (II) Removal in Aqueous Media	373
J. Huang, M. Ye, R. Chen and Q.Z. He	
Influence of Carbonization Temperature on the Microstructure and Properties of Woodoceramics	382
W.H. Zhou, Y.S. Yu and X.L. Xiong	
Superior Adsorption Properties of Dyeing Wastewater on PDMDAAC Modified Bentonite	386
H. Shao and N. Cao	
Synthesis of Coal Fly Ash Zeolite with Copper Oxide Load for Acid Red GR Wastewater Treatment	391
B.Q. Jiang and Z.Q. Xiao	
Preparation of Copper Oxide Loaded Activated Carbon by Waste Sawdust for Acid Red GR Wastewater Treatment	395
B.Q. Jiang and Z.Q. Xiao	
A Single-Step Synthesis of Rutile TiO₂ Dendrite Crystal with Sonication	399
X.K. Wang, W.L. Guo and C. Wang	
Sonochemical Synthesis of Nitrogen Doped TiO₂ at a Low Temperature	403
X.K. Wang, C. Wang and W.L. Guo	
Preparation of Recyclable Pd(II) Organometal Catalyst with Bicontinuous Cubic Ia3d Mesostructure for Water-Medium Organic Reaction	407
D.D. Yang, F.X. Zhu and H.X. Li	
Effects of MgO and Calcining Temperature on the Structure of Aluminum Titanate Synthesized from Industrial Waste	411
H.X. Liu, G.D. Zhang and X.D. Luo	
Research on the Application of Photocatalytic Coating Material with Function of Decomposing Vehicle Exhaust on Road Collision Wall	415
H.M. Xu, L.P. Liu and L.J. Sun	
Removal of Arsenic(III) from Water by Using a New Class of Zero-Valent Iron Modified Mesoporous Silica Molecular Sieves SBA-15	423
M. Ye, J. Huang, R. Chen and Q.Z. He	
Use of Microcrystalline Cellulose Prepared from Cotton Fabric Waste to Prepare Poly(<i>butylene succinate</i>) Composites	430
P. Chaiwutthinan, Z.H. Song and T. Leejarkpai	
Studies on the Preparation and Properties of Sheet Ni-Doped ZnO	435
L. Cao, D.Z. An, Y.X. Wang, S.S. He and C.J. Dong	

Comparison Study on Support Effect of Co-Series Compound Oxide Catalysts Supported Rare Earth	
X. Li, R.S. Hu, J.N. Hu and Y.Q. Bai	439
The Preparation and Characterization of a New High Polymeric Flocculant-Polymeric Aluminum Ferric Sulfate Chloride	
L.T. Pan, W.L. Wang, B. Yu and Y.B. Shu	445
Biomorphic Ceramics Based on Biological Structures	
Q. Wang and Y.H. Zhang	451
A Novel Magnetically Separable Photocatalyst Silver Vanadate@ SiO₂/Fe₃O₄	
L.H. Nie, Y.P. Meng, B.R. Yang, Z.Q. Xiao, L. Fang and S.H. Li	455
Mixture of Walnut Shell and Sand Used to Nitrate Removal in Groundwater	
H.G. Feng, H.L. Wang and L.X. Jing	459
Water Storage and Controlled-Release Film(WSCF) Materials Used in Tree Planting in Desert Regions	
G.Q. Han, Z.X. Han, D.E. Zhang and Z.Z. Zhang	467
Photodegradation of 2-Naphthalenesulfonate in Aqueous Catalyzed by N-Doped TiO₂ under Irradiation of Simulated Solarlight	
G.Q. Liu, L. Chen, Y.P. Wang and P.Y. Peng	471
Influence of Dispersants on Dispersion Stability of TiO₂ Suspensions	
Y. Mou, K.M. Lü and D.M. Gao	476
New Preparative Method of Zinc Oxide Nanofibers Grafted the Expanded Graphite	
J.H. Dong, Y.H. Zhao, M.C. Zhu, D.X. Li and Y.C. Zhang	480
Effect of Micro-Organism on the Process of Water Storage and Controlled-Release Film'Degradation	
G.Q. Han, Z.X. Han, D.E. Zhang, C. Cui and Z.Z. Zhang	484
Sorption of Ag⁺, Cu²⁺ on Thiol-Functionalized Poly (Acrylic Acid)/SiO₂ Composite Nanofiber Membranes	
R. Xu, M. Jia and F.T. Li	488
Research on Influence Factors of Bamboo Charcoal Adsorb Ammonia Nitrogen in Wastewater	
Z.N. Li, Z.Q. Zhu, M.N. Liang, H.D. Qin and Y.N. Zhu	493
Preparation of a New Adsorption Material and its Application in Wastewater Treatment	
W.J. Jin, F.C. Zeng, H. Xue and Y. Wang	498
The Removal of Phosphorus in Wastewater by Modified 4A Zeolite	
Y.Y. Zhang, L.P. Wang, E.D. Du and Y.Z. Chen	502
Preparation of Ag/AgCl/TiO_{2-x}C_x Plasmonic Photo-Catalyst with Enhanced Visible-Light Photocatalytic Activity	
L.H. Nie, B. Hu and J.X. Jiang	506
Preparation and Characterization of Biomass Carbon Adsorbent from Rice Husk and its Adsorption Properties on <i>p</i>-Chlorophenol	
G.X. Quan, J.L. Yan and C. Ding	510
Preparation and Microwave Absorption Property of the Core-Nanoshell Composite Materials Doped with Sm	
R.X. Che, B. Yu, C.X. Wang and L.Q. Wei	514
Preparation of Polyaniline-ZnO Photocatalyst and its Photocatalytic Property	
H.C. Ma, Y. Zhang, Y.H. Fu, C.L. Yu, Y. Song, C. Ma and X.L. Dong	519
Preparation of Polyaniline Supported TiO₂ Photocatalyst and its Photocatalytic Property	
C.L. Yu, R.X. Wu, Y.H. Fu, X.L. Dong and H.C. Ma	524
Research of SO₂ Resistance of MnOx Catalyst Modified by Ce for Low Temperature SCR with NH₃	
Y. Wang, L. Yang, W.P. Liao and F. Wang	529
Microstructures, Growth Mechanism of ZnS Nanomaterials Fabricated by Physical Vapor Deposition	
J.F. Gong, C.Y. Lan, B. Zhang, W.H. Zhu and M.Y. Liu	533
Sorption Profile of Hg(II) onto Mixed Phase of Copper Sulphide and Copper Sulphate	
Y.L. Au Yoong, P.L. Yap, M.G. Kuty, O. Timpe, M. Behrens, S.B.A. Hamid and R. Schlögl	537
Application of Activated Carbon Fiber Coated with Cobalt Oxide in Mercury Removal from Simulated Flue Gas	
Y.F. Diao, J.D. Ding, W.X. Yu, Y. Zou and W.H. Hao	547

Characterization and Application of Expanded Graphite Coated by Fe₃O₄ Nanoparticles C. Jin, J.H. Dong, D.X. Li, M.C. Zhu and Y.C. Zhang	554
Preparation and Photocatalytic Activity Research of Hollow Cubic TiO₂ Particles X.W. Yuan, X. Guo, D.D. Yang, L.J. Wang, M.L. Cheng and Q. Liu	558
Methanol Sensing Properties of Electrospun SnO₂-ZnO Nanofibers S.H. Wei, M.H. Zhou and W.P. Du	565
The Effect of Water Sources and Treatment Technics on the Urban Water Supply S.H. Li, J. Li and D.S. Dai	569
Effects of Substrates Made of Noncrystal and Polycrystal on Photocatalytic Degradation of Basic Crystal Violet X.J. Li, G.J. Qiao and J.R. Ni	574

Chapter 3: Environmental Safety and Health

Study on Treating Isophthalonitrile Wastewater Using Immobilized Efficiently Coupling Microorganism L. Zhang, X.J. Wan, W.Q. Han and L.J. Wang	581
Health Effect Valuation of Ground-Level Ozone Control in Beijing and its Surrounding Areas, China W. Wan, X.X. Xie and S.Q. Zhang	585
Non-Carcinogenic Risks Induced by Metals in Drinking Source Groundwater of North Jiangsu (China) Q.Y. Zhu, N. Liu, X. Qian, L. Yang, M.Z. Dai, X.Q. Jiang, N. Li, L. Sun, Z.C. Liu and G.F. Lu	590
Numerical Analysis of Lightning Electromagnetic Environment inside a Typical Telecommunication Building X.H. Huang and Q.B. Zhou	597
Acute Toxicity Effect of PFOS on Zebrafish Embryo G.H. Ding, J. Zhang, Y.H. Chen, G.Y. Luo and C.H. Mao	603
The Influence of ±800 KV Cirque Grounding Electrode Circuit Commissioning on Soil Temperature and Physicochemical Properties X.D. Wang	607
Radiolysis of 2,2',3,3',4,4',5,5',6,6'-Bromdiphenyl Ether Solutions by UV and Electron Beams W.Y. Shi, J.Z. Gu, W.J. Wu, Y.F. Sun, R.Y. Guo, G. Xu, G.Y. Hu, J.Q. Lei and M.H. Wu	614
Degradation of Persistent Organic Pollutants Mechanism Summary R.Q. Wang	620
Risk Assessment of Organochlorine Compounds in Water and Surface Sediments from Taihu Lake and Nanjing Section of Changjiang, China X.Y. Yuan, Q. Liu, J.Z. Li, J.F. Ji and C.P. Mao	624
Spatial Distribution and Potential Ecological Risk Assessment of Heavy Metals in Roadside Soils on Different Operated Times along the Lianyungang-Horgas Highway L. Gu, B. Song, Z.Q. Tong and J.H. Ma	630
Application of Fault Tree Analysis on Environmental Pollution Caused by Chemical Fire Overflow L. Gao	636
Application of Grey Relational Analysis in Hydrochemical Composition Characteristics of Shallow Groundwater in Poyang Lake Area W.B. Zhou, C.H. Hu, N.F. Zhao, P. Zhang and Q. Lou	641
Leaching Characteristics of Heavy Metals by TCLP Method in the Urban Soils of Quanzhou City R.L. Yu, P.P. Mao and G.R. Hu	647
Point Sources Pollution of Nutrient Situation and Prediction of Gan River Basin M. Li, C.H. Hu, M. Zhao, S.L. Huang and P. Zhang	651
Discussion on Precautionary Policy for EMF by Power Transmission and Transformation Project N. Li, X. Wu and C.M. Pei	657
The Accident Process Research of Gas Explosion Based on Situation Cognition L.H. Cheng, S.G. Li and H.F. Lin	666

Indoor Airborne Particle Level in the Animal Biosafety Level 3 Laboratory of Shanghai T.T. Cheng, Z.Q. Zhu, D.W. Hu, Z.G. Song and W.J. Wu	671
Bacterial Degradation of Chlorpyrifos by <i>Bacillus cereus</i> Z.Y. Liu, X. Chen, Y. Shi and Z.C. Su	676
Inhibition of Cytochrome P450 3A1/2 by Organotin Compound Di-N-Butyl-(4-chlorobenzohydroxamato)tin (IV) Chloride in Rat Liver and BRL Cells Y.X. Zhang, Y.L. Li and Q.S. Li	681
Research on 3S Integration Technology in the Tailings Pond Monitoring X.Y. Wan, L.H. Sun, H.M. Tian, Z.F. Huang and H. Yang	688
Analysis for the Impact Factors of River Health W.H. Yang	693
The Effect of Thermal Treatment on the Structure of Palygorskite Used for Flue Gas SO₂ Removal X.L. Zhang, W.P. Jiang, X.P. Wu, B.W. Shi, B.J. Yang, X.B. Jia and C.P. Zhang	698

Chapter 4: Environmental Planning and Assessment

Adsorption of Hydrogen Sulfide, Carbondioxide and Methane by Zeolite (Ferrierite; H-FER): Computational Chemistry Method N. Suthanyawatchai and U. Onthong	707
Simulation of Sulfur Deposition from Power Plants in Henan Province, China H.W. Tian, W. Deng and L.M. Ye	712
Sustainability Assessment Tool for Façade Cladding J. Orondo and C. Bedoya	717
The Study of the Classification System for Travel Rubbish C. Zhang	722
Soil Environmental Quality Assessment on an Abandoned Industrial Land J. Liu, S.G. Liao, B. Xiang and S.T. Zhang	726
Assessment of Soil Heavy Metal Cu, Zn and Cd Pollution in Beijing, China L.Y. Yang and S.T. Wu	730
Devolving Resources Environmental Carrying Capacity Indicator System Based on Resource Environmental Problem Identification Y.N. Tian, H.Q. Wang and Z.Q. Hou	734
Performance Evaluation on Credit Rating System of Corporate Environmental Behavior in Hangzhou, China S.Y. Sun, W.D. Kong and R.Q. Luo	738
Harmonious Degree Evaluation of the Sustainable Development in Wu'an City J. Tao, M.C. Fu, J.J. Zhang and D. Xu	743
Temporal and Spatial Evaluation of Regional Ecosystem Service Value - A Case of Fengnan District in Tangshan City D. Xu, M.C. Fu, J.J. Zhang and J. Tao	747
Ecological Footprint Calculation Model Parameters - For Example in Beijing Urban Y. Li, T.T. Guo and Q.Y. Zhao	752
Study on Ecological Footprint Calculation of Beijing's Urban Domestic Garbage Y. Li, T.T. Guo and P.P. Li	756
Study on Ecological Footprint Calculation of Beijing Urban Animal Waste Y. Li, T.T. Guo and P.P. Li	761
A Comparative Study of Various Turbulence Models for Simulating Pollutant Dispersion within an Isolated Street Canyon Y.D. Huang, Y.J. Peng, J.W. Jiang, Z.H. Zhou and J. Gu	766
Study on the Risk Pattern of Non-Point Source Pollution Using GIS Technology in the Dianchi Lake Watershed C. Wu, G.C. Deng, Y. Li, Z.Y. Li and S.H. Yang	771
The PSAT Technique for SO₂ Study in Beijing Q. Huang and S.Y. Cheng	777
Vertical Distribution and Ecological Risk Evaluation of Heavy Metals in West-Branch-Way of Yalu River Estuary Y. Cheng, Y. Liu, C.P. Zhang, F.X. Li, J.W. Liu and L. Zhang	781

The Study on Prevent and Improve Ship Pollute Marine Environmental Emergency Response Capacity Building Planning	786
H. Geng, X. Tian, Y. Jiang and X.Y. Wang	
Coastal Vulnerability Applied on Prevention and Management under Climate Change Impact	791
L.K. Chien, W.C. Tseng, S.Y. Chiu, C.H. Hsu and W.P. Hwang	
A Case Study on Strategic Environmental Assessment of the 11th Five-Year Plan for National Economic and Social Development of Wuhan City in China	801
L.L. Tian and J. Wu	
Variation in Ecosystem Services Value in a Typical Mountain Town, Liaohe Watershed, China	808
X.F. Zhao, C. Zhang, L.M. Dai, D.B. Lian, N. Wang, D.P. Yu, L. Zhou and W.M. Zhou	
Research on Aircraft Noise Comprehensive Assessment Scheme in the Vicinity of Airport	813
X. Wang, Q. Zhang and W.J. Yuan	
Research on GIS-Based Risk Assessment Method of Groundwater Pollution and its Application	819
L.P. Bai, Y.Y. Wang and F.S. Li	
Study on Evaluation System of Aircraft Carbon Emissions for China Civil Aviation	825
J. Peng, L.Z. Shi and F. Wang	
Application of Geographic Information System to Habitat Evaluation of Chinese Sturgeon <i>Acipenser sinensis</i> gray in Yangtze River Estuary China	830
H. Yang, J. Ding, C.F. Wang, J.H. Chen, J.H. Wu, J. Chen and C.X. Liu	
Evaluation Indicators for Integrated Coastal Management (ICM) in China: Lessons Learned from Xiamen	840
X.Y. Zhang and X.Z. Xue	
Fuzzy Hierarchy Comprehensive Evaluation of Water Quality in Different Lake Regions of Taihu Lake	844
L. Gu, Z.L. Hua, B. Hong, Y.W. Li and Y. Gen	

Chapter 5: Environmental Analysis and Monitoring

The Photocatalytic Properties of Fe³⁺ and N Co-Doped TiO₂ Micro/Nanofiber Film for Dye Waste Water Decomposition	853
Q.Z. Yu, X.J. Jin, S.Y. Li, L. Wang and K.L. Liang	
Wavelet Analysis on Suspended Sediment Concentration Variations over a Tidal Cycle in the Lianyungang Nearshore Area, China	857
C.Y. Zhang	
Numerical Simulations of Biological Droplet Transport in an Indoor Environment	862
X.Y. Li, B. Liu, S.Z. Li and S.S. Liu	
Research on Water Environmental Capacity of Urban River: A Case Study of Tuohe River in Suzhou City, Northern Anhui Province	867
S.L. Huang, Y. Zhang, Q. Li and D.S. Xu	
Speciation of Pb in Waste Rocks of Xinqiao Pyrite Mine in Tongling, China	871
L.W. Chen, X.C. Xu, Q.Q. Xie and J.Y. Huang	
Calculation on Friction Pressure Gradient of Gas-Liquid Stratified Flows in Condensate Natural Gas Pipeline	875
R.G. Xiao, B.Q. Wei and G. Chen	
Estimating Nitrogen Yield for a Catchment of Lake Taihu Based on Distributed Hydrological Modelling	881
Q. Zhang, L.M. Jin, X.H. Li, H.P. Li and M. Shao	
Study on the Pollution Characteristics of Pb and Zn in Atmospheric Particulate	886
X.C. Wang, S. Zhang and L. Zhou	
Chemical Fractionation and Bioavailability of Cd, Ni, Cu, Zn and Pb in Sewage-Irrigated Soils from Xiaoqing River, Zhangqiu Area, China	891
S.P. Feng, X.L. Du, Y.L. Liu, N.N. Zhang and H. Lin	
Ecological Risk Assessment of Heavy Metals in Sediments from Aha Lake, China	896
X.F. Huang, J.W. Hu, C.X. Li, J.J. Deng, F.X. Qin and C.H. Jiang	

Construction of an Indicator System for Integrated Assessment of Environmental Quality of the Dianchi Basin	
A.J. Li, Y.Y. Guo, F. He and R.J. Yuan	903
Investigation of PCDD/Fs, Dioxin-Like PCBs and Metal Element in Honey from Taiwan and Mainland China	
Y.H. Wang, D.M. Xu, C.H. Hung, S.R. Cheng, J.Y. Yu, M.S. Lee, P.P. Yu and G.P. Chang-Chien	908
The Sedimentary Environment of Current Estuary and Abandoned Estuary at the Modern Yellow River Delta	
X.Y. Chen, D.H. Liu and J. Lu	914
Spectrophotometric Determination of Trace Cetyltrimethyl Ammonium Bromide by Nanosilver	
G.Q. Wen, Y.M. Ma and Z.L. Jiang	920
Research on Influencing Factors of Water Environment in the Typical Western of Taihu Lake Based on the Principal Component Analysis - A Case Study of Tianmuhu Lake and Gehu Lake in Jiangsu Province	
C.F. Zeng, L.C. Wang, W.Y. Huang and W. Wang	924
State Prediction of Algae Reproduction Based on Learning Algorithm of Fuzzy Nearest Neighbor Clustering	
Y. Zhang	929
Migration of Trace Elements in Fushun Oil Shale during Self-Combustion and its Environmental Significance	
L.P. Zhang, Q.H. Deng, R.S. Zeng, N. Jiang and J. Liang	933
Determination of Chromium(VI) in Waste Water by Reversed Flow Injection Spectrophotometry	
L. Su and H.S. Xie	939
Influence of Inorganic Salts on Concentration of Different Cd Forms in the Soil	
P.Y. Liang, Y.J. Tan, L.J. Chen and W.K. Li	943
Determination of the Odorous Compounds in the Source of Drinking Water by Solid-Phase Microextraction and Gas Chromatography-Mass Spectrometry	
N. Xu, J. Liu, J.G. Liu, N. Wang and F. Lu	951
Progress in Pre-Treatment Techniques and Chromatography Detection Methods of Microcystins in Environmental Water	
J.P. Ma, C.J. Rui, Y.H. Liu, J.H. Ge, Z.W. Song and J. Li	955
Correlation between Chlorophyll-a Concentration and Environmental Factors in Jihongtan Reservoir	
J.P. Ma, C.J. Rui, J.H. Ge, Y.H. Liu, Z.W. Song and J. Li	959
An Investigation of the Effects of Environmental Factors on Secondary Organic Aerosol (SOA) Formation	
X.Y. Liu, Y.J. Yang, Z.Y. Wang and W.J. Zhang	963
Nitro-Polycyclic Aromatic Hydrocarbons in Particulate Matter in Dongguan	
D. Yang, S.H. Lan and X.W. Wu	968
A Novel MnO_x Supported Palygorskite SCR Catalyst for Lower Temperature NO Removal from Flue Gases	
X.L. Zhang, B.W. Shi, X.P. Wu, W.P. Jiang, B.J. Yang and C.P. Zhang	974
Analyzing the Factors and Variables of Heat Island Effect in Comprehensive High-Rise Residential Quarter of Mountain City	
J. Lu, C.D. Li, L. Wang, Y.L. Chen and X.H. Zhang	980
Pollutants Characterization of Spinning Effluents Containing Dimethyl Formamide from Dry-Spun Acrylic Fiber Manufacturing by Multi Scale Membrane Filtration	
B. Cai, Q. Zhang, Y.J. Liu and C.M. Chen	986
Analyses on Hydrophily and Lipophilicity of Dust in Shanghai Different Traffic Concentration Areas	
J.X. Yan, H.R. Wang and D.F. Li	990
Accumulation and Distribution of Heavy Metals in <i>Phragmites australis</i> in the Wetland of Liaohe River Estuary	
Y.X. Hou, Y. Wang, H.Y. Li, X.X. Li and X.J. Hu	994
Correlation between PCDD/F, PCB and PCBz Formed by De Novo Synthesis	
K. Shao, X.D. Li, Y.L. Wei and J.S. Liu	998

Chapter 6: Environmental Engineering

Characterization of a <i>Rhizobium larrymoorei</i> FJ Exhibiting High Level Cr(VI) Reduction Potential J.H. Zhang	1009
Study on Operation Optimal Control of Double Impeller Underwater Aeration Machine W.B. Li and W.D. Shi	1015
Phytoremediation of Cadmium-Contaminated Farmland Soil with <i>Beta vulgaris var. cicla L.</i> X.Y. Song, H.Y. Li, Y. Wang and X.J. Hu	1019
Research on Residual Water Purification Treatment for Environmental Dredging of Taihu Lake B. Hu, M.M. Wang and L. Shao	1023
Research on Biostimulant in Scenic Water Bioremediation J. Du and Z. Lu	1029
Removal of Pollutants from High Polychlorinated Biphenyl Level Contaminated Soil at Different Thermal Treated Time H.L. Wu, S.Y. Lu, X.D. Li and J.H. Yan	1034
Operational Parameters and Back Propagation Neural Network (BPNN) Simulation Model of Integration Membrane Bioreactor (IMBR) Treating Sewage from Ship Y. Shi, L. Guo, J. Zhou, R. Bai, X. Li, P. Liu and X.X. Wang	1042
Partial Nitrification to Nitrite with Real-Time Aeration Duration Control in an SBR Treating Domestic Wastewater Y. Chen, J. Li, C.W. Wang, X.F. Zhao and B.H. Zhao	1046
Experimental Study of Desulfurization Performance of Spouted Bed with Porous Draft Tube L. He, S.F. Zhang and C.L. Li	1050
Effect of Hydraulic Loading on Removal Efficiency of the Folds Stable Surface Flow Wetland C.D. Wang and H.X. Fu	1055
Study on Arsenic Removal Efficiency and Mechanism of Titanium Modified Manganese Ore Y.B. Huang, X.Y. Liu, L.L. Wang, X.J. Li and S.X. Tu	1061
Degradation Kinetics and Mechanics of Methylene Blue by Complex Ultraviolet and Hydrogen Peroxide Process H. Xu, Q. Tang, Y.N. Liu, Y. Jiang and H.Y. Tang	1066
Catalytic CO₂ Reforming of Methane over Perovskite Noble Metals H. Arandiyani and J.H. Li	1070
Cadmium Stress on Wheat Morphology: Germination and Growth Z.S. Chen, H.Y. Zhang, W. Guo, L.Y. Zhang, Y.L. Tian and X.F. Wei	1075
A Novel PIV Interrogation Algorithm L.F. Xu and G. Chen	1079
Optimizing Immobilization of Horseradish Peroxidase in the Nano-Scale Porous Structural Inorganic Material J.A. Kim, J.S. Lim and H.S. Kim	1085
Decomposition of Chlorinated Hydrocarbons Using the Biocatalyst Immobilized by Clay Minerals S.H. Lee, J.S. Lim and H.S. Kim	1089
Removal of Chromium(VI) by Zero Valent Iron: Effects of Environmental Factors P.H. Rao, W.Q. Zhang, J. Zhao and X.Y. Dong	1093
Influence of Boiling Time on Purifying Sugar from Preserved Fruits Candied Liquid with Evaporation Method H. Li, L.S. Yang, Y.D. Ma, Z.Z. Huang, M.M. Zhou and S.Q. Lin	1097
Treatment of Preserved Wastewater with Activated Sludge Method Y.L. Zhang, W.T. Lin, B.J. Feng, H. Zhang, Y.Y. Ji and C.X. Yao	1101
Influence of Liquid Mass on Purifying Sugar from Candied Liquid of Preserved Fruits with Evaporation Method Q.Y. Wang, S.Q. Lin, L.S. Yang, Z.Z. Huang, M.M. Zhou and Y.D. Ma	1105

Modeling of PVA Modified Non-Woven for Submerged Membrane Bioreactor Treating Synthetic Wastewater C.H. Zhang, Y.Y. Dong and F.J. Zhang	1109
Simulation of Simultaneous Desulfurization and Denitrification of Flue Gas Using Pulsed Discharge Plasma Q. Zhou, Q. Yu, L.W. Li, W.X. Yu and G. Yu	1118
Experimental Study on the Phytoremediation of Manganese Contaminated Soil Using <i>Phytolacca acinosa</i> Roxb S.H. You, X.H. Zhang, X.Y. Lu and J. Liu	1122
Study on Effect of Heavy Metal and Rare Earth Metal on Soil Activities J.X. Nie, P. Huang and D.C. Zhang	1126
Thermal Desorption Remediation of Soil Highly Polluted by 1,2-Dichloroethane in China G.L. Gao and J.G. Jiang	1131
Kinetics for Sulfate Removal in Tannery Wastewater by Immobilized Activated Sludge C.Q. Zhao, Q.H. Yang and W.Y. Chen	1135
Experimental Study of Breakthrough Adsorption on Activated Carbon for CO₂ Capture Q.G. Cen, M.X. Fang, J.P. Xu and Z.Y. Luo	1139
EM Biodegrading Characteristics of Petroleum Hydrocarbon in Artificial Seawater Z. Zhang, S.Q. Ding, Y.S. Yang, X.J. Zuo and Y. Xu	1145
Isolation and Characterization of <i>Rhodopseudomonas</i> sp. S₉₋₁ Capable of Degrading Pyrazosulfuron-Ethyl L.B. Yin, Y. Liu, D.Y. Zhang and S.B. Zhang	1152
Construction and Application of Suspending Combination Ecological Filter Bed X.M. Liu and F.B. He	1164
Deposited Sediment Dredging to Reduce Internal Pollutant Loading for a Waterfront Shallow Lake in Zhenjiang of China H. Wang and Y. Pang	1170
Kinetic Calculations for the Calcination Reaction of Limestone Modified by Alkaline Industrial Wastes H.T. Liu, K.H. Han, S.L. Niu and C.M. Lu	1175
Studies on Effects of Several Wetland Plants on Eutrophic Water Purification W.T. Peng, L. Zou, J. Wang and Y.Z. Pan	1180
Removal of Nutrients from Saline Waste Sewage with Different Vertical-Flow Constructed Wetland Substrates C. Ma, H. Ding, Y.C. Sun and X.W. Deng	1189
Study of the Corrosion Rate of Three Contactors Materials Using the Electrochemical Technique of Tafel A. Salazar Peralta, R.H. Chavez, O. Olea Mejía and D.A. Solís-Casados	1195

Chapter 7: Pollution Control Project (Air, Water, Solid)

Development Status of Lignite Quality Improvement Technology W.Q. Wen, S.P. Jin, S.Y. Huang, S.L. Fang, X.L. Zhang, Q.L. Pei, B.Y. Gao and Z. Li	1205
Drawdown Cone Volume of Pumping Well in Non-Leaky Confined Aquifer J.M. Yang and J.J. Han	1211
A Study on Water Resources Carrying Capacity in Liaohe River Basin J. Zhang and J.S. He	1215
Analysis and Solution of the Influence of Mine Water on the Electric and Hydraulic Control System L.Z. Liu, X.N. Zhao and E.Q. Xie	1220
Inspection and Analysis for IAQ of Public Buildings in Lingui C. Huang, R. Wang and Z.P. Zhou	1225
Synthesis of 1-(4-Antipyrine)-3-(3-Nitroaniline)-Triazene and Study on Determination of Copper(II) in Water Samples by Spectrophotometry W.B. Chen	1229
Study on the Spectrophotometric Determination of Trace Cadmium after Flotation Separation with Ternary Association Complex System X.R. Wen and C.Q. Tu	1234

Numerical Optimization Research on the Dielectric Barrier Discharge for NO_x Removal H.P. Xiao, X. Du and L. Wang	1238
Numerical Simulation of the Water-Leachate Migration in Landfill S.S. Su, D. He and L. Liao	1244
The Mechanism of Nitrogen Removal in Domestic Sewage of High Ammonia Nitrogen by Three-Step Series Constructed Rapid Infiltration System A.B. Kang, Y.Q. Yao and Y.L. Dong	1248
The Preparation of Cu-BiVO₄ and its Enhanced Photocatalytic Properties for Degradation of Phenol X.M. Gao, Y.F. Wu, J. Wang, F. Fu, L.P. Zhang and F.X. Niu	1253
A Numerical Sensitivity Analysis to Bentonite Parameters for a Long Term Geochemical Evolution of a HLW Repository in Clay Q.C. Yang, W. Lu and P. Li	1258
Numerical Simulation of Venturi Device in Flue-Gas Circulating Fluidized Bed Desulphurization Tower S.H. Li, G.C. Qi, G.X. Tang and H. Wang	1262
Research on Filamentous Bulking in Aerobic Granular Sludge F. Jiang, Y.L. Zhao, S.F. Chen and R. Liang	1267
Study on the Simultaneous Removal of SO₂ and NO by I₂ Solution F.N. Han and Q. Zhong	1272
Electrochemically Assisted Photocatalytic Degradation of Pesticide Wastewater by Using the Self-Made Pilot Plant T. Fang, C. Yang and L.X. Liao	1277
Research for Treating Avermectin Wastewater with UASB Technique Y.H. Chang, H.T. Feng, H. Luo and S.J. Ma	1281
Analysis of Acetone Extract From Shenfu by GC/MS and FTIR X.D. Ouyang, S.B. Dong, L.M. Hu and Z.M. Zong	1285
Rice Husk Active Carbon as a Potential Low-Cost Adsorbent for TNT Wastewater D. Fu, Y.H. Zhang, H.L. Wang and F.Z. Lv	1289
Numerical Simulation Investigation of Dust-Controlling Equipment of Main Fan Diffuser of Coal Mine S.Q. Chen, H.Q. Wang and J.L. Cheng	1293
Treatment of Petrochemical Malodorous Gases by Biofilter Packed with Complex Filler Q.D. Zhang, S.H. Guo, D.F. Zhao and M.J. Lv	1298
Adsorption of Cu²⁺ Ion in Wastewater by Using the Trass Ceramisite Coated by Metal Oxide M.Z. Hu, Y.C. Qu and F. Wang	1302
Effects of Mineral Transformations on the Reduction of PM_{2.5} during the Combustion of Coal Blends M.J. Ji, Y. Ninomiya, Z.B. Dong and Q.Y. Wang	1306
Efficient Removal of Cu²⁺ with Environmentally Friendly Cellulosic Resin B.X. Zhao, Y. Wei, L.N. Zheng, J. Shu and F. Yang	1315
Photocatalytic Degradation of 4-Chlorophenol with a Novel α-Ga₂O₃ B.X. Zhao, L.N. Zheng, Y. Wei and F. Yang	1319
Degradation of 4-Chlorophenol Using a Pd/MWNTs Gas Diffusion Electrode X.J. Wei, H. Wang, Z.Y. Bian and G. Lu	1323
Microbial Remediation of Atrazine-Contaminated Soil by <i>Rhizobium</i> sp DNS7 and <i>Acinetobacter</i> sp DNS32 Z.G. Wang, Y. Zhang, H.S. Guo, D.F. Meng and Y. Wang	1327
Integrated Treatment of Domestic Wastewater Using Anaerobic Filter-Constructed Wetland in Military Camps T. Lv, W.L. Zhang, X. Zhang and F. Xue	1331
Preparation of Modified Expanded Graphite and its Adsorption Characteristics for Pb (II) and Cr (VI) Y.H. Zhao, S.H. Xu, R.J. Su and D.X. Li	1335
The Adaptability of Three Local Legumes Species to Lead-Zinc Tailings B. Li, Z. Xiong, F.J. Miao, X.Y. Zhou, J.H. Wang, H. Sun and L.L. Zhu	1339

Abatement of CF₄ and Associated Gas (NO_x) with Combined Microwave Plasma and TiO₂ Catalyst	
X.M. Zhu, B. Sun, H.D. Xie, L.Z. Zhang and J.N. Zhao	1346
Research on the Preparation of Silver-Loaded Semi-Coke and its Adsorption Characteristics to Gas-Phase Hg⁰	
H.W. Zhang, S.S. Liu, J.T. Chen and L. Wang	1350
New Deodorization Technique in WWTP - WPD (Whole-Process Deodorization)	
Y.Q. Li, Y.J. Nie, E.J. Xue, J.K. Liu, X.H. Yan, Y.F. Zhang, J. Zhang and S.L. Xie	1356
Experimental Study on Separation of CO₂ by Using Hollow Fiber Membrane Contactors with Amino Acid Salts Solutions	
W.F. Zhang and Z.H. Lin	1362
Anodic Oxidation of Alkaline Sulfide Solution at a Low Potential	
N. Zhang, W.Q. Han and L.J. Wang	1367
Dissolution Rate of Paper White Mud at Constant pH	
J.L. Zhao, Z.Y. Fan, Y.J. Li, K.H. Han and C.M. Lu	1371
Experimental Study on the Load Characteristics of Diesel-LNG Hybrid Diesel Engines	
S.X. Wang, J. Zhang and S.Y. Jiang	1375
Experimental Study on the Catalytic Oxidation of SO₂ by V₂O₅	
W.G. Hao, D.N. Zhao and Y.F. Cui	1379
The Study on the Electrocatalytic Treatment of Dye Wastewater by ACF Cathode	
J.S. Hu, Y. Li and H. Wang	1386
Effect of a Bottom Gap on the Flow Characteristics behind Non-Planar Porous Fence	
Z.Y. Duan, W.X. Yang, T.S. Wang and J.M. Zhang	1391
Experimental Analysis of Controlling Pollutants by the Convergent Jet Air Curtain	
F.E. Shi, N. Zhu and K.X. Liu	1396
Application of Baffled-Submerged Bio-Film Process in the Treatment of Sewage Wastewater in a Small Town	
Y.F. Li, X.N. Zhang and X. Wang	1401
Treatment Measures on Scale Formation of ASP Flooding	
L.L. Yu, B.H. Wang and X.R. Sun	1406
Experimental Study of Different Material Corona Electrode Absorption with Dusts in Electrostatic Precipitator on the Condition of Low Voltage	
M.H. Bai, Z.M. Zhang, Z.Q. Liu, J.J. Liu and J. Li	1410
Study on the Start-Up Characteristics of Internal Circulation Anaerobic Reactor	
L.F. Zhu, Y.P. Guo, Y. Wang, Y.Y. Wang, L.L. Liu, M. Cheng, N. Zhang and G.X. Chen	1414
Electrochemical Treatment of Wastewater Containing Chlorophenols Using Boron-Doped Diamond Film Electrodes	
J.G. Wang and X.M. Li	1418
Analysis on Practical Application Problems of SCR Technology In Coal- Fired Power Plants	
Q.Z. Liu, Y.J. Sun and F. Wan	1423
Removal of Arsenic from Landfill Leachate by Selected Low-Cost Sorbents: An Experimental Study at the Zixiaguan Landfill of Wuhan City, Central China	
Z.Y. Lu and Q.H. Guo	1427
Blasting Demolition with Cleanliness and Environmental Protection	
Q. Qi, X.R. Cui and Z.J. Li	1433
Copper Distribution in Shaxi River Sediments	
L.H. Zhang and C.S. Zheng	1440
A Preliminary Study on the Transport Behavior for a Potential Disposal Site of LILW in Southern China	
S.P. Yi, H.Y. Ma and H.A. Wang	1445
Effect of Supplemental Fructus Ligustri Lucidi Extract on Methane Production and Rumen Fermentation in Sheep	
G.H. Qiao, J.H. Li and Y. Li	1454
Mass Transfer Characteristics of Gypsum-Fly Ash Slurry for Wet Flue Gas Desulfurization	
D.P. Zhang, Q.J. Li and X.F. Liu	1461
The Adsorption of Copper Ions by Sodium Alginate Immobilized Bacillus Subtilis Body and Purify Copper of Mine Wastewater	
J.J. Guo and W.B. Chen	1469

Comprehensive Utilization of Agricultural Bean Husk Powder (CA) Beads – The Research and Application of Using Immobilized Method to Adsorb and Purify Lead of Mine Wastewater	1475
G.X. Xu and W.B. Chen	
Treatment of Chromium-Containing Mine Wastewater with Layered Nanometer Co_3O_4 Hydroxide	1482
G.X. Xu and W.B. Chen	
The Technological Research and Application of the Adsorption and Purification of Heavy Metal Chromium in Mining Waste Water Using Microbial Immobilization Technology	1488
D.R. Yao and W.B. Chen	
The Concentration and the Abatement Strategy of Organic Contaminants in Sewage Sludge Dewatering	1495
J. Yu, G.D. Zheng and T.B. Chen	
Tolerance to Compound Lead-Zinc Stress of the Symbiosis of the Legume-Rhizobia in Huize Lead-Zinc Mining Tailings	1500
F.J. Miao, Z. Xiong, S.C. Li, B. Li and H. Sun	
Establishment of Typical Driving Patterns for Light-Duty Vehicles on Different Roads in Hsin-Chu Area of Taiwan	1505
M.Y. Hwa, T.Y. Yu, W.C. Hsu and C.A. Chen	
Research on the Effect of Sewage Concentration on Treatment Efficiency of Constructed Wetlands	1510
Z. Ling, J.R. Yang and Z.N. Lu	
The Experimental Research on Corrosion of Gas-Gas Heater (GGH)	1516
J. Wu, J.H. Zhang, W.F. Xu, Y.R. Cai, Y.H. Ouyang, C. Wang, Y.P. Jiang and G.J. Tong	
Numerical Simulation of Gas Purification by Filtration with Ceramic Filter	1520
H.X. Li and Z.X. Tie	
Kinetics of Phenol Adsorption onto Activated Carbon Fiber	1524
M. Li, Y. Luo, R.C. Wu, H.Y. Liang and S.F. Wang	
Preparation and Performance of Several Non-Precious Metal Oxides Catalysts for the Low Temperature SCR of NO_x with NH_3	1528
W.F. Dong	
Treatment of Cr(III) - Containing Wastewater by Continuous Foam Separation	1535
D.J. Wang, Y. Zhang and M.Z. Qin	
Study of Ballast Water Micro-Algae Inactivation Using High-Voltage Pulsed Discharge: Discharge Characteristics	1539
P.H. Su, D.L. Feng, D.X. Liao, Y.P. Ma and L.P. Xu	
Experimental Study on Factors for the Capability of Ca-Based Absorbent for CO_2-Capture	1546
H.W. Chen, R.G. Wei, J. Mei, J.Q. Gao and C.B. Wang	
Retardation Performance to Pollutants of Antiseepage Slurry for Waste Landfill Sites	1551
X.D. Jing, B. Yu and J.G. Xie	
Study on Mechanism of Flue Gas Desulfuration by Using Liquid-Phase Biochemical Method	1556
Z.A. Liu, Y. Chang, P. Wang, J.J. Jia and Q.W. Liu	
The Application of Contact Oxidation in Papermaking Wastewater Treatment	1561
K. Zhang, R.C. Ren and M.M. Deng	
Effects of EDTA and Organic Acids on Cd Desorption from Zhangshi Irrigation Area Soil	1566
H. Zhou, W. Yang, M. Liu, S.L. Li and Q.Q. Li	
Treatment of Waste Cutting Oil Emulsions by Leaching Solutions of White Mud	1570
T. Wu, D.J. Sun, Y.J. Li and G.C. Zhang	
The Depth of Phosphorus Removal by Three Coagulations	1575
K. Li, H.J. Xu and C. Gu	
Simultaneous Removal of Ammonium and Phosphate from Aqueous Solution by Calcium Chloride-Modified Zeolite	1581
Y.L. Sun, J.W. Lin, H. Huang, W.Y. Zhang and D.D. Ma	
Impacts of Multi-Scale Landscape Pattern on Stream Water Quality	1586
H.B. Hu, H.Y. Liu, J.F. Hao and J. An	
In Furnace Capture of Heavy Metals by Sorbents during Simulated MSW Incineration	1590
X.Y. Wang, Y.J. Huang, Z.P. Zhong, Y.X. Wang and L.L. Xu	
Multi-System Phytoremediation on Oil-Contaminated Alkaline Soil in Daqing Oilfield	1597
C.L. Dai, L.S. Chen, X.Y. Liu, Y. Hu and S.S. Liu	

Removal of Hydrogen Sulfide Using a Compost-Based Biofilter C. Wongwutthi and W. Limpaseni	1601
Numerical Simulation of NSP Cement NO_x Formation and Control Technology Z.B. Chen, F. Ye and C. Gao	1605
Non-Linear Description for the Calcined Product of Ca-Based Absorbent R.G. Wei, J. Mei, H.W. Chen, J.Q. Gao and C.B. Wang	1609
Woven Fabric Bioreactor (WFBR) as the Filter Material for Wastewater Treatment Q. Yang, Z.H. Liu and X. Sheng	1613
A Fuzzy Comprehensive Assessment System for Agricultural Soil Pollution Based on GIS Z.W. Zou, L.Q. Zhang and J.M. Chen	1618
Treatment of Pharmaceutical Wastewater by Micro-Electrolysis and Fenton Oxidation Process C.H. Huang, M.X. Cao, J.H. Luo and C. Zhang	1622
Numerical Calculation & Experiment of Effects of Additive on NO Discharge in Fluidized Bed Boiler S.Q. Wang and K.L. Jiao	1626
Formation and Characteristics of Aerobic Granular Sludge for Simultaneous Phosphorus and Nitrogen Removal in a SBR G.J. Yang, X.M. Li, Q. Yang and K. Luo	1630
H₂O₂/FeC₂O₄/Resin System Catalyzed Wet Oxidation of C.I. Reactive Red 2BF under Solar Radiation X.W. Dong, X. Jiang and X.L. Dong	1637
Column Study on the Effect of Nitrate and Chloride on TCE Removal by Granular Iron X.Q. Zhu, B.P. Han, G.J. Wu and X.Q. Zhang	1642
Comparison of A²/O and Membrane Bioreactor Processes for Municipal Wastewater Treatment: Nutrient Removal Performance and Sludge Characteristics R.C. Wang, S.P. Si, D.H. Yang and J.F. Zhao	1647
NaNO₂/Fe³⁺/O₂ System Catalyzed Wet Air Oxidation of Reactive Brilliant Blue KN-R X.L. Dong, X.W. Dong, X.X. Zhang and H.C. Ma	1655
Removal of Gas-Phase Elemental Mercury by Bromine-Impregnated Activated Carbon J. Wu, J.H. Chen, S.B. Zhang, P. He, J.H. Fang and Y.C. Wu	1660
Experimental Study of the Effect of Fly Ash Particle Size on its Mercury Adsorption Capability in the Flue Gas J. Wu, P. Wang, L.L. He, W.G. Pan, J.X. Ren, P. He, Q. Wu and J.H. Zhang	1664
Optimization of Enhanced Flocculation for Treating Sediment Dredging Wastewater: Pollutant Removal Performance and Zeta Potential Analysis Y.F. Tang, R.C. Wang, L.M. Ma and J.F. Zhao	1668
Removal of Phenol by a New Emulsion Liquid Membrane System and its Heat-Induced Demulsification W. Peng and C.J. Xu	1675
Research Status and Influencing Factors for the Radon Emanation of Uranium Tailings Impoundment X.Y. Peng, Z.H. Liu, L. Yao, Q.F. Xie and F. Wan	1679
DO, ORP and PH as Control Parameters in an SBBR for Nitrogen Removal and Energy Saving T. Chen and J. Li	1684
Influence of Different Salts on the Degradation of Trichloroethylene under Reductive Condition F.N. Ma, Q.J. Meng, G.J. Wu and A.Q. Shan	1689
Polyethylene Destruction by the Mixed Culture of Microorganisms Y.L. Gurevich, M.I. Teremova, G.N. Bondarenko, V.F. Kargin, S.V. Khizhnyak, A.S. Romanchenko, J. Yang and Y.L. Song	1693
Study on the Solute Transport Modeling of Opencast Mine Groundwater C.A. Ma, K.M. Li and S.P. Zhao	1699
Batch Scale Study on the Treatment of Spinning Effluents Containing Dimethyl Formamide from Acrylic Fiber Manufacturing Y. Chen, B. Cai, X.L. Dai, C.M. Chen and S.H. Guo	1704

An Efficient Removal of Rhodamine B in Water by Targeted Adsorption on SnS₂ Nanosheets	
X. Li, J. Zhu, F.J. Lv, J.G. Wang, Z.L. Xie, M. Hoang and H.X. Li	1708
The DeNO_x Characteristics of V/Ti Plate SCR Catalysts	
Q. Lu, S.H. Su, S.Y. Fen, W.L. Cheng and C.Q. Dong	1712
Immobilization of Pb, Cu, and Zn in a Multi-Metal Contaminated Soil Amended with Triple Superphosphate Fertilizer and Phosphate Rock Tailing	
Y. Liang, X.C. Wang, X.D. Cao and L. Zhao	1716
Green Theory Research on Indoor Air Pollution by Overall Process Controlling	
J. Liu and Y.G. Zhuo	1719
Experimental Research on Flue Gas Desulfurization with Ethylenediamine	
L.Z. Zhai, Q. Zhong and X.R. Wang	1723
Immobilization of a Series of Homo/Heterobinuclear Metal (II) Phthalocyanine Hexasulphonates on Nanocrystalline TiO₂ Thin Films and their Application in the Degradation of Methylene Blue	
Y.Z. Yang, R.J. Sun, Y.C. Wu, L. Tao and C.W. Shi	1728
Behavior and Distribution of Nonylphenol Ethoxylates and their Metabolites in Sediments of Nansi Lake, China	
F. He, A. Obara, S.L. Wang and L.G. Wang	1733
Mathematical Model of Biofilm Reactor Treating Industrial Wastewater - A Review	
C.M. Guo, J.F. Chen, Z.Z. Zhang and L.J. Zhao	1739
Sol-Gel TiO₂ Thin Films Sensitized with the Natural Botanical Dyes	
C.H. Lin, Y.C. Lee, Y.H. Chien and W.M. Tseng	1743
Analysis of Fungal Diversity in the Composting by Sequencing of Cloned PCR-Amplified 18S rDNA and Denaturing Gradient Gel Electrophoresis	
W. Li, X.H. Xu, J.L. Xiao, B.X. Zhang, H.T. Li and Y.C. Lai	1747
Pyrolysis Behavior and Kinetics of Polyurethane Insulation Materials from Waste Refrigerators	
M. Xu, J. Guan and J.W. Wang	1752
Established the Evaluation Index System of Food Security in State Farms of Heilongjiang Province	
B.M. Sun	1759
A Novel Approach to Recycle the Waste Plastics by Bitumen Modification for Paving Application	
M. Naskar, T.K. Chaki and K.S. Reddy	1763
To Remove Phosphate from Municipal Wastewater with Insufficient Volatile Fatty Acids	
G.F. Chang, F. Zhang, C.Q. Liu, B. Zhang and X.J. Bi	1769
Features and Performance of Biological and Ecological Treatment Combination Process for Rural Sanitary Sewage	
Y.F. Zhang, G.C. Zhu and X.W. Lu	1773

Chapter 8: Waste Disposal and Recycling

CO₂ Emission Assessment: A Perspective on Low-Carbon Manufacturing	
H. Meier and X.Q. Shi	1781
The Environmental Risk Assessment of Herbicide Anilofos on Various Chinese Cultivated Soils	
Y.H. Liu, F.B. Tang and G.N. Zhu	1786
Application of Scenario Analysis Management and Forecast of China's Soda Production Process, as Well as CO₂ Emissions from Energy Demand	
J.J. Guo and W.B. Chen	1790
Analysis in the Concentration, Determination and Comparison of some Mineral Elements in the Natural Salt-Licks Utilized by Elephants: Mt. Elgon National Park Case Study	
A.J. Sitienei, J.W. Ge, S.M. Ngene, M.J. De La Paix and F.K. Waweru	1796
Research on Methane Decomposition during Gas Reburning for NO_x Reduction	
H.P. Xiao, Q.J. Yu and L. Huang	1801
Mechanism and Structural Analysis of the Thermal Activation of Coal-Gangue	
C. Zhang, X.Y. Yang and Y.F. Li	1807

The Photocatalytic Degradation of Methylene Blue Wastewater with Nanoscale Ferric Oxide as Catalyst	
Y.R. Zhu, G.C. Li, Q.P. Zhang and C. Tang	1813
Construction of the Starter to Produce Lignocellulases via Solid State Fermentation of Rice Straw	
S.S. Du, L. Yang, J.Z. Lu, Q.Q. Li, J. Xu, C.W. Zhou, H. Ruan and G.Q. He	1819
Construction of the Starter to Produce Lignocellulases via Solid State Fermentation of Metropolis Lignocellulosic Waste Defoliation	
L. Yang, S.S. Du, J.Z. Lu, Q.Q. Li, J. Xu, C.W. Zhou, H. Ruan and G.Q. He	1823
Advanced Ship Recycling System – A Pilot Model Project in Muroran	
K. Shimizu, Y. Nakajo, X. Yaer, K. Kato, T. Kijima, I. Teraoka and H. Teramachi	1827
A Study on the Mechanism of Harmless and Resourceful Treatment of Oil Sludge with Microwave	
H.Y. Jiang, X. Wang, A.J. Wei, S.J. Zheng, F. Liu and C. Ji	1831
Problems and Countermeasures of Rural Medical Waste Management and Disposal in China	
Z.B. Bao, D.C. Jin and H.J. Teng	1835
The Comprehensive Utilization and Further Processing of Vegetable Oil Refining by-Products	
C.N. Gou and X.H. Hao	1839
Study on the Advanced Treatment and Reuse of Dyeing Wastewater Using Polyamide Nanofiltration Membrane	
J.Q. Ma, Q. Zhang, Q.L. Lu, X.B. Gan, J.H. Xia and Z.D. Shen	1843
Structure Optimum and Analysis of an Easily Hooking Garbage Sorting Equipment	
Z.X. Cui, H.J. Du, T. Yang, S.Q. Hou and Y.Z. Zhao	1847
New Investigation of Magnesium Slag as Desulfurizier	
B.G. Fan, Y. Jin, X.R. Zheng, X.L. Qiao and X.T. Wang	1853
Research on Recycling Method of Discarded PCB Based on Cost-Profit Model	
Y. Li, S.X. Song, G.F. Liu and T. Liu	1860
High Turbidity Mine Water Treated by Magnetic Flocculation	
J.D. Guo, X.D. Li, G.J. Wu, Z.C. Wang, J.K. Song and Q.Y. Feng	1867
The Technical Study on the Preparation of Lightweight Ceramsite Made from Sewage Sludge and Fly Ash	
Q. Shao, H. Xu, M.M. Tong and S. Li	1871
Study on Preparation of Water Treatment Ceramic Particles by Using Sludge and Fly Ash and the Ceramic Particles' Application	
H. Xu, Q. Shao, J. Zhou and X.C. Ma	1876
The Experimental Study of Molten Blast Slag Dry Granulation	
Y.M. Zhou, C. Li, L.L. Xu, S.Y. Luo and C.J. Yi	1882
Research in Key Technologies of Organic Solid Waste for Energy	
F.S. Meng and H.R. Yuan	1886
Study on Physical and Chemical Properties of Domestic and Imported Paper-Process Reconstituted Tobacco	
J. Wang, Y. Qiu and J. Liu	1894
Zeolite Synthesis from Brazilian Coal Fly Ash for Removal of Zn^{2+} and Cd^{2+} from Water	
J. De Carvalho Izidoro, D.A. Fungaro and S.B. Wang	1900
Degradation of Hydroquinone by Pulsed Corona Discharge Combined with Ozone Process	
H.A. Zheng, J.S. Liu and L.L. Pan	1909
Ultrasound Enhanced Biomass Energy Conversion Technology of Excess Sludge	
Y.X. Yan, J.L. Gao and J.P. Wu	1914
Steam and Autoclave Treatments on Structure Characteristics of Steel Slag	
Q.L. Zhao, J. Stark, E. Freyburg and M.K. Zhou	1919
An Economic Comparison of CO₂ Pipeline Transport Processes for Dongfang 1-1 Gas Field EGR Program	
S.L. Zhang, C.J. Li, J.C. Zhang and J. Li	1928
Efficiency-Led Office Waste Recycling System	
F. Sun and Y.B. Wang	1933
Study on Coking Wastewater Treatment by Iron-Carbon Internal Electrolysis Method	
S.J. Hao, W.F. Jiang, W. Tian and Y.Z. Zhang	1938

Study on Coking Wastewater Treatment by Fixed Bed of Metallization Pellets with High Carbon	
W.F. Jiang, S.J. Hao and Y.H. Ling	1942
Feasibility of Railway Washing Wastewater Disposal by Improved CRI	
S.C. Cao, Y.F. Li, Z.Y. Li, X.Y. Qian, L. Xia and W.L. Xu	1947
Study on the Solidification/Stabilization Treatment of Tannery Sludge	
Y. Tian, X.N. Ning, J.Y. Liu, J.B. Zhou, Z.Y. Yang and L. Li	1951
The Status, Causes and Strategies of the Waste Oil in China	
J. Wang	1955
Removal of Hexavalent Chromium-Contaminated Wastewater by Micro-Emulsion Liquid Membrane Method	
C.S. Zhu, L. Qiu, J. Song and Y.L. Yuan	1962
Study on Aerobic Process Treat Auto Manufacturing Wastewater	
X.G. Ma, C. Chen, J. Wen, T.S. Ming and W. Cui	1967
Utilization of Organic Materials as Soil Amendments for Cucumber Production in Greenhouse Cultivation	
Y.Q. Li and Y.S. Ao	1971
Treating Methods of Oily Sludge	
L.R. Kong, F.J. Xia and G.L. Jing	1981
Application of Cationic Starch Graft Copolymer in Flocculating of Wastewater from Bleaching	
Q.X. Liu, W.C. Xu and J.L. Li	1985
Study on Cationic Starch Graft Copolymer in Papermaking Wastewater Treatment	
Q.X. Liu and W.C. Xu	1990
Preparation of Foam Concrete from Graphite Tailing	
S.H. Wang	1994
Effects of a Biofertilizer from Domestic Waste on Pak Choi (<i>Brassica chinensis</i>) Cultivation	
J.C. Wu, G.R. Huang and W.C. Sun	1998
Research on Leaching Out of Hazardous Trace Elements from Coal Gangue in Acidic Medium	
G. Li, S.J. Cui and Z.M. Song	2003
A Feasibility Study of Wastewater Containing Pb(II) Recovery Using Electrodialysis Reversal	
J. Chen and Y.F. Jiang	2007
Study on Electrosorption Removal of Chloride Ion from Reclaimed Water	
C.X. Yang, G.L. Yang, Y.J. Shi and S.J. Chen	2015
Start-Up Performances of High-Solid Anaerobic Digestion of Sewage Sludge under Mesophilic Condition	
N.N. Duan, B. Dong, Q.B. He and X.H. Dai	2020
Study on Forced Aeration Composting of Digested Sludge and Sawdust under Low Ambient Temperature	
Z.C. Wang, M.C. Gao, Y. Tian, B.Y. Wang and M. Wang	2027
Study on the Reuse of Solid Waste from Coal-Fired Power Plants	
D.M. Li, X.F. Dong, Y. Guo, Y. Li and W.L. Wu	2031
Landfill Site Work Performance Based on Residents Perceptions of Environmental Impacts: Case Study in Malaysia	
N.N. Nik Daud and R. Aziz	2036
The Relationship between THMFP and the Variation of Fluorescence Characteristic of DOM among the Different Bio-Treatment Processes	
Y. Han and S.T. Ma	2042
Study of Pilotscale Experiment for Treatment of Piggery Wastewater by UASB-SBR	
C.J. Li, Y. Zhang, L.L. Yan, X. Wang and D.L. Zhao	2047
Recycling Limestone Dust Waste for Thai Pottery Production	
S. Sangsuk, S. Khunton and S. Nilpairach	2051
Culture of PRJ-1 Demulsifying Bacteria and Performance Evaluation	
Q.W. Liu, Y.K. Zhang, X.D. Lei and Y.H. Zhang	2055
The Retrieval and Use of Components from AMPS Production Residue	
H.J. Wang and J.S. Feng	2060

Microwave Regeneration of Field-Spent Granular Activated Carbon from Power Plants Y. Fu, L.C. Wang and Z. Zhou	2065
A Multi-Objective Linear Programming Model for a Regional Two-Phase MSW Transfer System in a Medium Sized City – A Case Study in Zhongshan, China J.C. Zhou, H.B. Chen, Y. Hu, H.L. Zhang and L. Ren	2071
Preparation and Investigation of Magnetic Fluid with the Iron Oxide Spent Catalyst H.P. Shao, Y. Ji, X.T. Liu and Z.M. Guo	2079
Design of Integrated Treatment Process of Municipal Solid Waste in Shanghai G.L. Gao and M.H. He	2084
Influence of Synthesis Temperature on Magnetic and Adsorption Properties of Nickel–Zinc Ferrite Nanoparticles by Microwave Hydrothermal Method D. Chen, Y. Li and Y. Guo	2088
Main Constraints and Solutions for Urban Sewage Reclamation W.B. Si, Y.T. Lv and X.J. Liu	2092
On Cause Analysis and Treatment Strategy of River Water Pollution in Northern China W.B. Si, Y.T. Lv and X.J. Liu	2097
Effect of Flocculation of Cationic Polyacrylamide on the Migration Rate of Suspended Particles J.J. Wang, Z.L. Sha and X.K. Wang	2102

Chapter 9: Water Supply and Drainage Engineering

Biological Stability of Drinking Water in an Eastern China City L. Chen, M.H. Wang, R.B. Jia and L. Li	2109
Environmental Safety Analysis for Slope under the Situation with and without Load on Top Surface K.P. Chen, J.Y. Liu and B.X. Yuan	2114
Distribution of SO₂ and the Meteorological Factors in Yantai Urban Areas from 2008 to 2010 M. Chang, W. Liu, X.L. Zhang, Y.Z. Ji and J.G. Song	2118
Fuzzy Mathematics Applied to Heavy Metal Pollution in the Marine Environment, the Calculation of Water Quality Assessment - A Case Study of Lianyungang Marine W.B. Chen	2124
Kinetics of DeNO_x Process by Ammonia Injection H.P. Xiao, Q.J. Yu and L. Huang	2131
Design of Functional Groups Modified into Adsorption Resins and Investigation of Mechanism for Adsorbing Gallic Acid in Water Z.H. Fei, W.Z. Shi, Z.T. Liu, J. Chen, R. Xing, Y.L. Gu and G.C. Zhang	2136
Study of Earthworms Treating Municipal Wastewater in Cold Regions Z.F. Li and T.L. Ma	2141
A New Evaluation Method of Scale Inhibitors for Controlling CaCO₃ Scale in Reverse Osmosis System Based on pH Measurement X.N. Zhang, W.L. Wu, D.M. Li and G.J. Zhao	2146
The Experimental Study of Rural Domestic Sewage Treated with the Mixture of Diatomite and Coagulant C. Li, X.Y. Zhang, J.L. Liu and D. Ding	2153
Preparation and Characterization of BaTiO₃/ PVDF Inorganic-Organic Composite Ultrafiltration Membranes L.D. Chen, G.X. Jin, X.B. Wu, W.Z. Lang and D.Z. Sun	2158
Removal of Various Contaminations from Drainage by Using Free Water Surface and Submerged Surface Flow Wetland Systems J.P. Wang, H.C. Yang and C.T. Hsieh	2162
Research on the Influence Factors of the Biological Phosphorus Removal in Carrousel Oxidation Ditch Process Z.F. Guo, H. Zhang, J. Hu, X.W. Huang and Y. Luo	2169
Energy Embodiment of Water Supply: A Comparison between the US and China W.W. Mo, Q. Zhang and R.C. Wang	2175

Recirculating Cooling Water Treatment Process of Low Carbon & Environmental Protection in Fossil-Fueled Power Plant S.H. Huo, X.J. Zheng and Z.Q. Ma	2182
The Analysis and Improvement Measure of Chemical Stability of Water Quality in Jinan City Water Distribution System J.P. Ma, Y.J. Xu, M. Lv, H. Xu, J.S. Li and J.J. Wang	2186
Study on the Mode of Subarea and Rebuilding of City Water Supply System Based on Genetic Algorithm H. Lu and C. Shao	2190

Chapter 10: Noise and Vibration Control

Bending Stiffness Analysis of Elastic Shafts with Three Types of Transverse Cracks Z.Y. Cai, H.L. Wu, X.L. Zhao and J.P. Zhang	2197
Assessment of Reduction Measure for Seismicresponse of Bridge Decks during near-Source Earthquakes S. Hai	2205
Noise Propagation Calculation Service in Urban Traffic Strategic Noise Mapping N. Li, F. Tao and B. Liu	2211
The DDT Residual Current Status and Variance Analysis of the Early and Late Rice in the Jiangxi Province R.F. Li, C.Y. Li, C.H. Hu, Z.H. Liu, C.J. Guo and P. Zhang	2215
Improvement of Grey Clustering Model for Comprehensive Assessment of Environmental Quality: A Case Study in Water Environment L.Q. Fan, Q.Y. Zhang, Q. Liu, Z.C. Wu, B. Yu, W.L. Tian, Y.X. Chen and W.G. Xu	2222
Risk Evaluation for Shipwreck Environmental Pollution Based on AHP- Fuzzy Comprehensive Evaluation H. Xing, S.L. Duan, H.L. Yu and Q.A. Liu	2228
Characteristics of Water Soluble Ions in Atmospheric Aerosol on Clear and Hazy Days at Lin'an Regional Background Station, China H.H. Xu, J. Liu, M.J. Mao and J. Yao	2233

Chapter 11: Clean Production Process

Research on the Green Cutting Process with Water Vapor for the Cooling Lubricant J.J. Ren, J.L. Ren, Y. Wang and F.L. Yu	2241
Preparation of Cellulosic Adsorbent for Heavy Metal Ions with Microwave Irradiation B.X. Zhao, J. Shu, L.N. Zheng, Y. Wei and F. Yang	2246
Hydrolytic Stability of Reactive Black 5 and the Preparation of Ink X. Bai, G.S. Qin, Y.T. Zhang, H.Q. Zhang and J.D. Liu	2250
Research of Ecological Footprint Application in Foreign and China Y. Li, T.T. Guo and P.P. Li	2256
Study on Ecological Footprint Calculation of Beijing Urban Agricultural Fertilizer and Agricultural Straw Y. Li, T.T. Guo and P.P. Li	2260
Process Simulation on Fluidized Bed Pyrolysis of Biomass C. Wang, G.Y. Chen, W.C. Ma, X.L. Zhu and Y. Wang	2265
A New Treatment on Printing and Dyeing Waste Water Y. Jiang, Y.H. Wang and L. Jiang	2270
Cytotoxicity of Copper Oxide Nanoparticles in Human Alveolar Epithelial Cells N. Li, H.J. Sui and D.M. Gao	2274
Biological Evaluation of Three Types of Inshore Pollution in Dalian City Using <i>Ulva pertusa</i> as Indicator X.M. Hang, T. Wang, M. Zhang and Y.Q. Sun	2278
Three-Dimensional Simulation for Perikinetic Flocculation of Fine Sediment under the Ionization in Still Water L.S. Liu, X. Luo, G.L. Yang and M.H. Yu	2282

Chapter 12: Hydrology and Water Resources Engineering

Implicit Bidiagonal Numerical Scheme for Simulation of 2D Flood Waves G.C. Sun	2293
Research on the Factors of Introducing Chloride Ion of Hydraulic Support Transmission Medium and the Controlling Ways J. Zhou, Q. Shao, H. Xu, X.C. Ma and S. Li	2297
Annual Runoff Forecasting Based on Wavelet De-Noising SPA Model A.Y. Li and J.H. Lu	2301
Evapotranspiration Retrieval in Arid and Semi-Arid Areas Q. Li, X. Chen and A.M. Bao	2307
Evapotranspiration Estimates from Eddy Covariance Tower in Arid and Semi-Arid Areas Q. Li, X. Chen and A.M. Bao	2312
Optimal Operation of Complicated Giant Hydropower Stations Based on Decomposition-Coordination Method K. Yang, G.S. Liu, Y.H. Hao, R. Zhou, J. Zheng and Z. Cheng	2316
Groundwater Hydrograph Patterns in North China Plain during 1982-1986 Interpreted Using Principal Component Analysis R.G. Zhang	2320
Application of Isotopic Technology in Aqueous Environment H.Y. Hu	2325
Research on Influence of Water Source Heat Pump System to Groundwater - A Case Study of New Campus of Taiyuan University S.Q. Gao and Y.M. Feng	2329
Application of the Lattice Boltzmann Method in Shallow Water Lake H.F. Liu, M. Li and Y.W. Zhao	2333
Preparation and Characterization of Antimicrobial PES Ultra-Filtration Membrane Modified with Capsaicin H.M. Wang, X.L. Gao, B.W. Su and C.J. Gao	2338
Research on Non-Point Source Pollution Resulted from Livestock Breeding in Jiangxi Province N. Zheng and C. Fu	2344
A Modified Ecological Footprint Model and its Application in Hydropower Project C.L. He	2349
Research on Tactics of Water Diversion of Lake Dong X.M. Guo and L. Kang	2358
Study on Imaging Arsenic Aggregates in Porous Media by X-Ray Difference Micro-Tomography D.P. Peng, T. Huang and C.X. Meng	2362
Study on the Influence Factors of Water Environment Change in Zhaocun Reservoir C.F. Zeng, L.C. Wang, F.T. Zhang and W. Wang	2367
A Comparison of Parameter Estimation for Distributed Hydrological Modelling Using Automatic and Manual Methods X.H. Li, Q. Zhang, M. Shao and Y.L. Li	2372
Evolution of Hydro-Climatic Elements in the Three Gorges Reservoir under Changing Environment X.Y. Ding, H.D. Zhou, Y.H. Wang and Y.C. Wang	2376
Fuzzy Comprehensive Evaluation Method on Water Environmental Quality Based on Entropy Weight with Consideration of Toxicology of Evaluation Factors J.Y. Yang and L.L. Zhang	2383
Influence Analysis of Flow-Sediment Processes on River Health X.L. Sun, C.H. Hu and J.Q. Xie	2389
Study on Solar Automatic Waterfall-Type Aeration System Q.Q. Wei and B.Y. Tan	2393

Chapter 13: Soil and Water Conservation and Desertification Control

Discussion in Planting of Highway's Central Segregation Area in Jiangxi, China C.Y. Long	2401
Dominant Factors Influencing Overall Temporal Sedimentation Rates at Loagan Bunut Lake, Miri, Sarawak, Malaysia. R.B. Dagang, S. Lau and A.K. Sayok	2406
Effect of <i>Rhizobium</i> Inoculation on Growth of Stony Desertification - Grown White Clover (<i>Trifolium</i>) by <i>Rhizobium</i> sp. SWFU27, SWFU29 J.H. Wang, W.X. Zhang, G.L. Lai, Y.B. Zhao, B. Li, L.P. Zhang and Z. Xiong	2416
Effects of Slope Aspect on Soil Chemical and Microbial Properties during Natural Recovery on Abandoned Cropland in the Loess Plateau, China C. Zhang, S. Xue, G.B. Liu and C.S. Zhang	2422
Dynamics on the Interaction between Vegetation Growth and Aeolian Dust Deposition F.F. Zhang, H.Y. Zhang and T.S. Huang	2430
Evaluation of Soil Fertility in Red Soil Eroded Watershed Based on GIS and Geostatistics H.B. Chen, Z.B. Chen, K. Huang and Z.Q. Chen	2434
Soil Moisture Research of Revegetation Area on Slop of Yingrui Highway in the Spring C.Y. Long	2440
Soil Nutrient and Soil Enzyme Activity of the Slopes with Different Ecological Protection Technologies Z.C. Zhao, W.N. Xu and D. Xia	2445
Hydraulic Characteristics of a Pilot-Scale Vertical Subsurface Flow Constructed Wetland L. Zheng, A.Z. Ding, D.C. Kong and L.R. Cheng	2451
Energy Analysis and Energy Saving Applications of Hotel Typed Large Public Building B. Liu and Z.L. Zhang	2459
Effects of Sand Burial and Water Regimes on Seed Germination and Seedling Emergence of Two Desert Species F. Peng, W. Tsuji, T. Wang and A. Tsunekawa	2465
Effects of Water and Soil Conservation Practices on Reducing Pollution from Agricultural Nonpoint Source in Northeast China Y.H. Yang, B.X. Yan, H. Zhu and L.X. Wang	2473
Ecological Benefit Evaluation of the Beijing-Tianjin Sandstorm Source Control Project in Beijing Y. Chen, Q. Wu and N.X. Chen	2479
Nitrogen and Water Uptake on Sloping Lands of Thailand S. Siriwong, T. Kongkaew, G. Cadisch and T. Hilger	2484
The Design of Demountable Freezer Y.A. Yang, Q.B. Xu and S.C. Liu	2497
Research on Anti-Erosion Properties of Pebbly Clay Slope in Airport C. Zhang, W. Wu and R.J. Chen	2502
Study on the Heavy Metal Sediment Pollution and Ecological Effect in Yin-Dong Liang Mine Area M.Z. Yang, J.P. Chen and S.H. Pu	2506
Effect of a Cellulose-Degrading Strain on Anaerobic Fermentation of Corn Straw M.F. Niu, S.Y. Wang, W.D. Xu, A.D. Ge and H. Wang	2510
Experimental Study on Co-Pyrolysis of Oil Sludge and Coal X.Y. Li, X.X. Yang, G. Cheng, H.Q. Feng, X.J. Liu and Y.F. Ma	2515

Chapter 14: Environmental Protection

Long-Term Effects of Crop Residual and Inorganic Fertilizers on Yield and Soil Organic Matter for a Winter Wheat-Maize System in North China Plain Z.C. Yang, L.D. Zhou, Y.Z. Lv and H. Li	2523
--	------

Research on the Niche of Major Plant Population of the Barren Hillsides in the Arid Valley of the Upper Reach of the Minjiang River Z.S. Yang	2531
Spectral Characteristics in the Degradation Process of Colored Dissolved Organic Matter from Large Filamentous Algae Sources in Saltwater Lake L.M. Zou, J.H. Li, D.G. Jiang and Y.L. Wang	2536
Effects of Si⁺, K⁺ and Ca²⁺ on Antioxidant Enzyme Activities and Osmolytes in <i>Halocnemum strobilaceum</i> under Salt Stress D. Su, N.L. Chen, T.P. Gao, C.Y. Wang, H.M. Sheng and C.L. Yang	2542
A Review of Impacts of Oil Pollution on Coastal Wetland Ecosystem H.M. Sun and W.J. Tian	2551
Environmental Protection through Small Businesses: An Analysis of the Role of Stakeholders in Green Operations R.Z. Raja Mohd Rasi, A. Abdekhodae and R. Nagarajah	2555
Fast Degradation of Chlorpyrifos in Soil by Strain <i>Cupriavidus taiwanensis</i> X1 Labeled with LuxAB B.B. Zhu, D.S. Wang, Y.Y. Cao, X.Y. Tang, R.M. Hua and T.Z. Shi	2566
Evaluation Model Using the AHP of Ecological Environmental Quality of Jiuyuangou Watershed in the Loess Plateau F.G. Dai, X.G. Fu and H.J. Cai	2571
The Eco-Environmental Water Demand Estimation and Prediction of Shijiazhuang City in Hebei Province F.G. Dai and H.J. Cai	2575
Spatiotemporal Inventory of Biogenic Volatile Organic Compound Emissions in China Based on Vegetation Volume and Production Y.Q. Chi and S.D. Xie	2579
Influences of Synthesis Procedure on the Photocatalytic Activities of CdS L. Xue, Y.Z. Cheng and X.Y. Sun	2583
Protection of the Marine Environment and Obligation <i>Erga omnes</i> B. Qu	2587
Experimental Study on Coal Pyrogenation Characteristic and Dynamic Model of Reaction T. Lv, B. Li and T.T. Zhou	2592
Analysis of the Characteristics of Typical Haze in Winter Y.H. Zhang, Y.F. Wang and Y.J. Ma	2596
Effect of Acid Deposition on Soil Ca²⁺ Contents of Two Forest Ecosystems in Dinghushan Biosphere Reserve J.P. Wu, P. Ying, P.Y. Tan and T. Liu	2601
Research on 17β-Estradiol Degradation Bacteria Isolated from Activated Sludge and its Degradate Characteristics L. Zhang and C.C. Li	2606
Oxidation of Chemical Warfare Agents in Supercritical Water L.Y. Wang, M.M. Ma, X.C. Hu, G.M. Zuo, H.Y. Zhu, H.R. Tang, Z.X. Cheng and H.H. Zhao	2610
The Removal of Color from Fuchsin Basic Dye Wastewater Using Activated Carbon L.Y. Ye, X.X. Zhang, Y.W. Yin, S. Tu and Y. Sha	2616
The Competitiveness of Ecological Civilization Y.X. Tao and X.H. Zhang	2620
Distributive Characteristics of Soil Microorganisms at Wetland on Mongolian Plateau in Inner Mongolia (E1483) J. Zhao, H. Min, Y.Q. Shao, Z.L. Zhao, Q.M. Guo and Y.X. Cui	2624
Environmental Security Evaluation Method for Oil Field G.X. Yan, Y.B. Weng, L. Chang, Z.X. Chen and S.H. Guo	2630
Early Warning Method of Environmental Security for Oil Field Y.B. Weng, G.X. Yan, L. Chang and S.H. Guo	2634
Purification Effect of Constructed Wetland on TN and TP Removal from Eutrophic Wastewater J.L. Kang	2638
The Study of PCDD/Fs Distribution in a Medical Waste Incinerator S.S. Su, Y. Lu and Y. Hui	2643

Application of the VSD Model to Determine Regional Control Targets of Acid Deposition H.C. Zhao and S.D. Xie	2647
Review of Secrete Industry Discharge in China and the Corresponding Reasons X. Zhou, M. Zuo, G.T. Deng and C.F. Zhou	2658
Study on River Ecological Compensation Y.C. Fu, B.Q. Ruan and F.R. Xu	2662
Physio-Chemical Properties and Hydraulic Characteristics of Reconstruction Soil Filling with Fly Ash X.Y. Chen, J.P. Yan and X.F. Yang	2669
Present Status about Wastewater Treatment at Highway Affiliated Facilities of China X.J. Wang, Y.P. Kong, J.D. Chen and X.X. Liu	2673
Study on the Divergent Characteristics of Soil Fungi and Actinomycetes at Dry Lake Wetland on Typical Steppe J. Zhao, Y.Q. Shao, Z.L. Zhao, Z.M. Li, X.T. Wu and J.Y. Li	2678
Investigation of Oxytetracycline (OTC) Removal Effectiveness of Aerobic Units and it's Measurement Optimization F.L. Hao, T.T. Dong and M.W. Shen	2682
Impact of Different Land Use on Topsoil Organic Carbon Density in Anhui Province X.W. Xu, G.X. Pan and P.C. Hou	2687
The Comparison and Evaluation about Boundary Water Environment Protection Mechanism between China and Canada Y.P. Jiao and T. Zhang	2693
Diversity of Fungi and Actinomycetes in Soil of Enclosed and Grazing Wetland on Inner Mongolian Plateau J. Zhao, Y.Q. Shao, Z.L. Zhao, F. Liu, H. Zhou and Z.M. Li	2703
Anatase TiO₂ Films via a Sol-Gel and Hydrothermal Crystallization for Enhanced Corrosion Resistance H. Yun, C. Lin and Q.J. Xu	2707
Analysis 2.5-D Permutation Power Transmission Line to Decrease Electro-Magnetic Influence at High Technology Nano-Fab Y.L. Song, C. Yu, F.C. Chuang, Y.C. Tseng, J.Y. Zou, S.G. Shsu, T.G. Ma, T.L. Wu and L.M. Chang	2711
A Three-Dimensional Numerical Simulation of Heat Transport in the Coastal Areas of the Houshi Power Plant M.L. Zhu, L.Y. Cai, W.Z. Cao and Q.L. Zhou	2718
Experimental Study and Application of the Different Waste Rock Compaction Characteristics Filled in Roadside of Gob-Side Entry Retaining Y.H. Cheng, X.S. Guo, F.X. Jiang and Z.L. Fu	2725
Distribution Characteristic and Assessment of Soil Heavy Metal Pollution around Baotou Tailings in Inner Mongolia, China R.X. Zhao, W. Guo, W.H. Sun, S.L. Xue, B. Gao and W. Sun	2730
Phytoremediation of Petroleum-Contaminated Soil C.R. Li, A. Wei and T. Chen	2737

Chapter 15: Plant Protection

Study on Sintering Red Mud Desulphurization Characteristics in Liquid-Column Impingement Scrubber J.L. Zhao, X.T. Wan, Y.T. Xu, M.M. Wang and Y.J. Li	2743
Pollen Biology of <i>Robinia pseudoacacia</i> on Zhen Mountain in Yantai C.C. Pan, L.D. Liu, H.L. Zhao, X.Y. Zhao, L. Zhang, L.J. Wang and X.J. Jia	2748
The Study of Biological Activity in Artemisia Plant Extracts H. Wang, Z.Y. Wang, W. Ma, X.B. Han and L. Ma	2752
Effects of Management Measures on Soil Properties of <i>Pinus koraiensis</i> Plantations S.L. Wang and N.N. Fan	2758
The Influence of Chlorophenoxy Herbicides MCPA on Creeping Bentgrass Physiological Index Y.F. Gao, M.W. Shi and J.H. Wang	2763

Allelopathic Effects of Twelve Hedgerow Plant Species on Seed Germination and Seedling Growth of Wheat (<i>Triticum aestivum</i> L.) Y.H. Wu, X. Cheng, Q.N. Cai and C.W. Lin	2767
Effects of Exogenous Nitric Oxide on the Photosynthesis of <i>Taxus chinensis</i> var. <i>Mairei</i> Seedlings D.W. Li, M.L. Li and X.X. Wei	2774
Observation on the Occurrence of Fungal Pathogens of Aphids and the Spreading of the Pathogens with the Dispersal of the Infected Alates in Southern Part of Yunnan, China Z.H. Huang and Y.G. Wang	2778
Effect of Herbicides on the Photosynthetic Rate and Chlorophyll Fluorescence of <i>Solidago canadensis</i> L. L.Q. Yang, F.Y. Liao and K. Zhao	2785
Evaluation of Drinking Water Biostability by a Biofilm Annular Reactor M.H. Wang, L. Chen, R.B. Jia, X. Lian and L. Li	2791
Current Status and Development Trends of Fiber-Recycling in Japan L.H. Lv, X.G. Su and Y.L. Yu	2796

Chapter 16: Geographic Information and Remote Sensing Science

Alkylation of p-Cresol with Isobutylene Catalyzed by Heteropoly Acid Supported on MCM-41 Catalyst Z.M. Liu, P.P. Deng and B.Y. Li	2803
Effect of the Pheromone Releasing Measure against the Banana Weevil, <i>Cosmopolites sordidus</i> (Germar) in China H. Lu, Q.F. Ma and Y.H. Zhong	2808
Research on the Urban Land Use Status and Potential Evaluation Information System Solution Based on OSGI Plug-in - A Case Study of Zhaoyuan, Shandong Province M. Wang, Y.M. Nie and H. Yuan	2812
The Estimate of Sea Ice Thickness Based on the Relative Albedo of NOAA/AVHRR S. Yuan, W. Gu and W.B. Chen	2816
RS & GIS-Based Spatialtemporal Analysis of Ecological Footprint and Biocapacity Pattern of Jinghe River Watershed in China: Does Supply Meet Demand? D.X. Yue, J.H. Ma, J.J. Guo, J.J. Zhang, J. Du, Y.J. Song and C. Hui	2820
A New Method for LAI Spatial Scaling Based on Gaussian Distribution Theory Y.Y. Dong, J.H. Wang, C.J. Li, X.G. Xu, J.L. Zhao, H.F. Wang and W.J. Huang	2833
The Dynamic Analysis of Biocapacity and Driving Force in Minqin Oasis of Western China over the Past 20 Years J. Du, D.X. Yue, J.J. Guo, J.J. Zhang, H.W. Niu and J.H. Ma	2838
Study on Characteristics of Favorable Reservoirs for High-Rank Coals, North China Y.K. Qiu, Y.B. Yao and J. Liu	2848
Using Temperature Vegetation Drought Index for Monitoring Drought Based on Remote Sensing Data L.S. Huang, Q.S. Guan, Y.S. Dong, D.Y. Zhang, W.J. Huang and D. Liang	2854
Research on Coverage Calculation of Remote Sensing Satellite Data Based on PostgreSQL K. Feng, P. Huang and W.Y. Zhang	2860
Study on Disaster Monitoring Satellite Remote Sensing Data Fast Acquisition Programming Technology G.B. Ma, W.Y. Zhang and P. Huang	2864
Dynamic Changes Analysis of Dangshan Landscape Pattern G. Fang, J.Y. Chen, J. Yang, Q. Zhao and H.M. Su	2870
Dynamic Analysis of Land Use / Cover Change in Dangshan County G. Fang, J. Yang and H.M. Su	2874
An Efficient Constrained Shortest Path Algorithm for Traffic Navigation Z.H. Wang, S.S. Shi, L.C. Yu and W.Z. Chen	2880
Study on the Wetland Change in Northeast China Based on RS and GIS Technology H.W. Cui and Q.G. Jiang	2886
Monitoring Water Resource in Taiyuan, China Using HJ-1B Imagery Y.C. Wang, J.L. Zhang, Z.B. Wang and J.S. Yang	2892

Research on Fusion Approach for Hyperspectral Image and Multispectral Image of HJ-1A F.F. Guo, J.R. Fan, W.Q. Zang, F. Liu and H.Z. Zhang	2897
Research on Key Technologies of River Rapid Survey by ADCP P. Zhang, W.Y. Sun, Z.Z. Tian and B.S. Zhang	2904
Study on A²O Method for Co-Treatment of Landfill Leachate and Municipal Sewage S.R. Zhang, T.J. Zhang, J.L. Liu and Y. Li	2908

Chapter 17: Land Resources Environment and Urban Planning

Pollen Biology of <i>Calligonum mongolicum</i> in the Middle Reaches of Heihe River C.C. Pan, L.D. Liu, H.L. Zhao, X.Y. Zhao, Y.L. Hou, L. Zhang and J.L. Liu	2917
Study on Cultivated Land Resources Use Efficiency in Henan Z.M. Zhou	2921
Sedimentary and Reservoir Characteristics of Fan Delta of Nan1 Formation in Beizhong Oilfield, Hailar Basin Y.N. Wang, Z.D. Bao, S.M. Peng and X.R. Li	2925
Hydrocarbon Generation Process Investigation of Permian and the Low Triassic Source Rocks on Lower Yangzte Region Y.R. Huang, Z.H. Zhang and J.Y. Liu	2929
Evaluation and Classification of the Siegenian Formation Reservoir in Devonian, X Block, Algeria C.M. Zhang	2933
Coalfield Structures and Potential Evaluation of Coal Resources in China D.Y. Cao, Z.Y. Lin, Z.H. Zheng and J.Q. Tan	2937
Research of Sequence Stratigraphic Models of Jiufotang Formation, Lower Cretaceous, the Luxi Sag, the Kailu Basin Y. Li, Q.B. Xie, X.M. Zhu and F. Liu	2941
Application of Data Mining on Reservoir L.C. Wang, Z.Z. Wang and G. Tao	2950
A New Method of Preparing Artificial Cores with Certain Cracks for Experiment Study of Elastic Wave Propagation Z.Z. Wang, R.H. Wang, Y.H. Bu and X. Shan	2954
Health Evaluation Investigation for Rural Area Space Pattern in the Water-Net Area K.J. Yang and Y.Z. Huang	2958
Preliminary Evaluation on Physical Properties of Coal Reservoirs in Boli Basin, Northeastern Heilongjiang Province, China Y.J. Zhao, J.Q. Li, Y.D. Cai, D.M. Liu and Y.B. Yao	2963
The Distributional Characteristics about Heavy Metal Pb, Cu, Zn, Cr of XINGYANGGANG Shoal-Sea W.J. Yu and X.Q. Zou	2970
Land Consolidation-Induced Effects on Local Landscape Patterns in Hilly and Mountainous Southwestern China F.L. Fan, C.F. Wei and S. Yin	2980
The Transformation Research of Village in City in Urban Modernization Process - Example to Hohhot X.Q. Zhao	2991
Simulation of Electron Motion in a Micro-Hollow Cathode Discharge P.C. Zheng, Y. Dai, J.M. Wang and K.M. Liu	2995
Remote Sensing System Design of Beijing Mineral Environment Monitoring and Evaluation B. Yang and J.P. Chen	2999
Electric Field Inverse Problem Analysis of Disk-Type Insulator in GIS Based on APDL A.Q. Ma and Z.S. Zhang	3005
Transfer Zone Characteristics in No. II Fault Zone and its Control on Petroleum, TaZhong Area Y.H. Zhang, X.Y. Li and Z.F. Yan	3009
Western Resource Exploitation and Sustainable Development Strategy Q.Y. Tang and C.K. Tang	3016

Yingkou YuLong Jade Ore Forming Conditions and Mineralization Analysis S. Liang, Y.C. Wang and F.R. Zhai	3020
Simulation of Operation Scheme of Su Cuo Buried Oil Pipeline L.X. Wei, L.Y. Zhang and Y. Wang	3023
Hydrocarbon Detection Techniques on Subtle Reservoir Exploration in Qiongdongnan Basin J. Xiao, B. Zhu and J.H. Liao	3028
Effects of High Temperature and Overpressure on Deep Reservoir in Qiongdongnan Basin, Northwestern South China Sea J. Xiao, B. Zhu and J.H. Liao	3033
Identifying Parasequence Sets Boundaries by Using Well Logging Data M.F. Ma and Y.F. Zhang	3038
Study on Integrated Zoning of Land Use in Mining Regions - A Case Study of Pu County in Shanxi Province Y. Wang, C. Yuan, M.C. Fu and J.J. Zhang	3042
Research on Comprehensive Environment Risk Assessment of Brownfield Reuse in Xishan District, Wuxi City H. Sun, J. Li, J.J. Lin and J. Zhao	3047
Transfer of Heavy Metals (Cd, Pb, Cu and Zn) from Roadside Soil to Ornamental Plants in Nanjing, China Z.H. Ding and X. Hu	3051