

Table of Contents

Preface and Conference Organization

Chapter 1: Advanced Materials

Effect of Lithium Difluoro(oxalato)Borate-Based Electrolyte on the Performance of $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$ for High-Voltage Lithium-Ion Batteries X.P. Li, X.L. Cui, M.Y. Wang and X.X. Wang	3
Research of Dispersant Quantity in each Stage of Grinding Calcium Carbonate D.W. Chen, X.L. Ge, Q.T. Shi and Y. Tian	7
Study on Bamboo Culm Used for Structure Axial Compression Performance Numerical Simulation Z.R. Zhao, W.S. Fu, W. Han and J.B. Zhou	13
Influence of Auxiliary Material on the Performance of the Resin Bond Used in Abrasive Tools S.L. Li, T. Lin, Z. Wang and X.B. He	18
Effect and its Mechanisms of Hydrated Lime on Water Stability of Hot Asphalt Mixture W.F. Yang	22
Effect of Al and Zn Content on the Preparation of Semisolid Mg-Al-Zn Magnesium Alloy Q.Q. Zhang and W.R. Chen	27
Effect of Microstructure on Mechanical Properties of High Carbon Steel Wire Rod B. Wang, S. Xiang and Y. Liang	31
Preparation, Characterization and Magnetic Property of MFe_2O_4 (m=Mn, Zn, Ni, Co) Nanoparticles L.X. Yang, S. Li, J. Zhang, Z. Chen and S.C. Xu	35
Green Process for Preparing Cellulose/Reactive Epoxy (BGE) through an <i>In Situ</i> Chemical Blend (Pre-Hybrid Polymer Bio-Composite) M.E. Gibril, X.D. Li, Y. Zhang, K.Q. Han and M.H. Yu	39
Improve Efficiency of Organic Solar Cell by Adding Dispersed ZnO Nanoparticles Y.M. Lu, Y.F. Wu and L.C. Hsu	43
Study on the Preparation of New Thickener in Reactive Printing Y.J. Tan, C.N. Liu, X.N. Chen and J.L. Ma	52
Numerical Simulation of Binary Alloy Crystal Growth Using Phase-Field Method Y.B. Dong, M. Chen and X. Wang	57
Ti (CN) Precipitation in Ultra-High Strength Ti Micro-Alloyed Steels with 700MPa Yield Strength on TSCR Process Q.L. Chen, X.P. Mao and X.J. Sun	61
Emulsion Polymerization of Methyl Methacrylate and Butyl Acrylate Using Non-Ionic Polyurethane as Emulsifier J. Zheng, G.H. Xie, X. Hu and H.A. Peng	70
The Component Analysis of Penetration Sealer Materials L.W. Teng, W.T. Lin, J. Chen, A. Cheng and H.M. Hsu	74
Effect of Sintering Aids on the Densification of Andalusite Ceramics J.F. Wu, H. Cheng, X.H. Xu and T.F. Deng	78
Magnesium Ferrite Powder and its Composite Electrospinning Nano-Fiber Preparation M. Guo, T.H. Zhang, J. Dong and L. Cheng	83
Comparison of Prediction Models for Concrete Carbonation B. Yu, D. Cheng, C.S. Shi and H.X. Wei	87
The Influence of Surface Active Agent on Zn Base Brazing Filler Metal Soft Solder Y.Y. Xu, Y.F. Yan, Y.Y. Sheng and S. Li	91
Encapsulation of Vitamin E in Glassy Carbohydrates by Extrusion D.W. Chang, X.M. Zhang and J.M. Kim	95
Applications of Wood-Plastic Composites (WPC) in the Design of Multimedia Speaker Box D. Li, L. Liu and K.Q. Wang	100

Localized Electrochemical Corrosion Characteristics of Carbon Steel in Seawater Y. Zou, Q. Bai, J. Wang, W. Wang and X.F. Kong	104
Preparation and Mechanical Properties of Short <i>Antheraea pernyi</i> Silk Fiber Reinforced Onion Composite R.Y. Song, L.J. Zheng, Y.P. Zhao and Y.F. Qian	110
Tribological Properties of Ti-Al Alloy Self-Lubricating Composite Materials X.L. Wang, L.Y. Yang, S.R. Wang and Y. Zhang	114
Diffusion Dynamics of HAc from Cellulose Acetate Filament during Coagulation Process J. Li, J. Song, J.H. Cao, L.F. Wang and Q.L. Zhang	118
Microstructure Evolution of Hypereutectic Al-Si Alloy in Semi-Solid Compression Deformation Y.T. Wang, X.G. Yuan, B.Y. Yu and H.J. Huang	122
Effects of Tourmaline Powder on Growth Activity of Marine Bacteria and Diatoms Y.H. Qi, Z.P. Zhang and W.L. Li	130
Molecular Simulation Study Conformation and Energy of Polyaniline/Graphite Composites R.B. Guo, Z.L. Mo, X.B. Zhu and S.R. Yang	134
Synthesis and Characterization of Cellulose/Quaternary Phosphonium Salt F.L. Kong, J. Song, B.W. Cheng and Y.B. Zheng	138
Study on Structure Design and Properties of Super Absorbent Copolymerized with Milk Protein Grafted Acrylic Acid M. Wei, B. Gao, Y.C. Xiao and Y.F. Sui	142
Preparation, Characterization of Supported Phosphotungstic Acid HPW-MCM-48 and Photocatalytic Degradation of Aqueous Methyl Orange Z.L. Liu, L.G. Guan, Z.R. Liu, M.C. Bao and L. Xu	147
Boundary Element Analysis of Accelerated Chloride Diffusion in High Performance Concrete Y. Wang, W.C. Hang, L.F. Yang and Z. Chen	151
Different Performance of Foam Concrete Caused by Two Types of Fiber Y.D. Cai, J.S. Wang, Y.F. Luo, W.W. Long, X.F. Yang and F. Zhu	156
Study on Color Change of Brown Sapphire in Changle, Shandong Y.Z. Zheng, K.Y. Zhao, X.L. Tang, Z.H. Xie and E.D. Zu	160
Tensile Properties of 15wt. %TiB₂/7055 Composite Fabricated by <i>In Situ</i> Method D. Chen, C. Zou, Y.J. Zhang, N.H. Ma and H.W. Wang	165
The Complexation of Calix[6]Arene Sulfoxide Derivative with Uranium Y.A. Pi, J.S. Wang, Q.W. Guo, H.Y. Mo, Y.F. Xia and X.L. Zou	170
Adsorption of Cr (VI) by Cross-Linked Magnetic Hydroxamated Chitosan L. Jia, J.S. Wang, Q.W. Guo, X.L. Zou and L. Xie	175
Sulfur and Lead Isotopic Geochemistry of the Shidi Pb-Zn Deposit in Xiushan County, Chongqing X.J. Xiang, Y. Shuang and K. Gong	180
The Kinetics Studies for the Adsorption of Furadan from Aqueous Solution by Orange Peel G.F. Xu, Z.X. Shen and R.X. Guo	187
Electro-Thermal Effect Analysis on GaAs PHEMT Based on Physical Model Z.X. Wu, G.C. Fu and H.T. Gu	192
Progress of the Current Interface Research on Carbon Nanotubes Reinforced Aluminum-Matrix Composites C. Wu, W.X. Ma, Y.P. Chen, Y. Li, Y. Chen and J. Li	196
Creep Properties and Life Estimation of P91 Steel with Low Hardness Y.J. Niu, H.S. Cai, J.F. Geng, D.F. Ma, G.D. Ma, Y.F. Zhao and X. Yang	201
Half-Metallic and Optical Properties of Cu and Cr Codoped AlN Y.Q. Fan and X. Yao	205
Determination of Fluoride in Antarctic Krill <i>Euphausia superba</i> Using Ion Chromatography X.S. Shen, H.Y. Zhang, Y.L. Li and Y.Q. Cai	210
Preparation and Characterization of Double Activity Sulfate-Gallate Bagasse Xylan H.P. Li, G.W. Yang, Y.Y. Huang and J.W. Yuan	216
Effect of Sintering Time on the Mechanical Properties of WC-8Co Cemented Carbide for Friction Stir Welding Tool B.L. Liang, C. Zhang, Y.L. Ai, C.H. Liu, W. He, W.H. Chen and J.Z. Wen	220

Influencing Factors and Conditions on the Synthesis of Double Activity Sulfate-Gallate Bagasse Xylan	
H.P. Li, G.W. Yang, G.W. Yang and J.W. Yuan	224
Preparation Process of Green Ceramic Coating of Magnesium Alloy through Micro-Arc Oxidation	
S. Wang and W.W. Ding	228
Impact Properties of Particulate Reinforced Aluminum Matrix Composites	
D. Chen, X.F. Li, Y.J. Zhang, N.H. Ma and H.W. Wang	233
Characterization and Catalytic Activity of CuO and NiO Supported on ZrO₂ for CO Low Temperature Oxidation	
Z. Chen, Y.L. Xie, J.X. Qiu and Z.H. Chen	237
Characterization and Microwave Absorption Performance of CNTs/Fe₃O₄/PANI Nanocomposites	
X.Y. Yang, J.Y. Cheng, D.Q. Zhang and M.S. Gao	242
Study on High Order TiO₂ Nanotube Arrays and the Mechanical Properties	
D.P. Long, J.R. Xue and Z.X. Yan	247

Chapter 2: Materials Processing Technologies

Synthesis and Exchange for Li⁺ of Spinel Type Material LiMn_{0.75}Ti_{0.5}O₃	
J.H. Jiang	255
The Synthesis and Ion-Exchange Property of Li_{0.5}Mn_{1.375}O₃	
J.H. Jiang and W.Y. Dai	259
Study of an Inorganic Ion Exchanger LiMn_{1.25}O₃	
J.H. Jiang	263
Prepare and Properties of Titanium with Surface Nanostructure by High Energy Shot Peening	
B.D. Yin, S.F. Zhang, J.Y. Yang, Z.N. Deng and Y. Sun	267
Study of Adhesive Curing Pressure in Process of Ferrite Phase Shifter	
Q. Li, G.C. Fu and B. Wan	271
Effect of Artificial Aging on Intergranular Corrosion of 6063 Al Alloy	
J.M. Wang, X.D. Meng, Y.Y. Bai, G.F. Ma, Y. Liu and C.L. He	275
Grain Refinement of Mg₉₇Y₂Cu₁ Alloy Solidified with Pulsed Direct Current Magnetic Field	
S.L. Tan, Q. Zhou, J.B. Fu and H. Fu	279
Springback Experimental Research of Advanced High-Strength Steel	
J.Y. Ke, Y.Q. Liu, G. Li and T. Du	284
Direct Synthesis and Characterization of Three-Dimensional Graphene Foam	
W.B. Huang, G.L. Wang, F.Q. Gao, Z.T. Qiao, G. Wang and L. Tao	289
Nd,Yb:YAG Laser Crystal Production and its Property	
X.J. Zhang, C. Li, H. Lin, Q.L. Li and J.H. Liu	293
The Synthesis of a Polyaspartic Acid Ester and Development of the Coatings	
X.P. Liu and T.L. Zheng	297
Effect of Interlayers on the Structure and Properties of TiAlSiN Coatings Deposited on High-Speed Steel Substrate	
H. Du, H.B. Zhao, J. Xiong, L.L. Wang and G. Xian	302
An Investigation of Carburized Layers on Austenitic Stainless Steels	
T. Zhang and X.S. Tong	307
Effect of Cold Spray Processes on Friction Stir Welded Microstructures of AZ31 Magnesium Alloys	
H.Y. Zhang, S.L. Wang, L. Xing and C.G. Yang	311
Ceramic Powder (Silicon Carbide) - Monitoring and Influencing Process its Production	
I. Orlovský, M. Hatala and J. Duplák	316
The Preparation of Color Ink-Jet Paper Coating and the Investigation of its Printing Quality	
J. Liu	322

An Experimental Study on Synthesizing TiC-10Ni Composite Coating Using Electro-Thermal Explosion Ultra-High Speed Spraying J.J. Liu and Z.D. Liu	326
Effects of Mechanical Vibration and Pouring Temperature on Solidified Structure of Superalloy K4169 X.H. Xie, L.P. Chen, C.B. Xiao and X. Tang	332
GPU Accelerated Finite Element Simulation for Ultra-High Strength Steel Quenching C. Wang, B. Zhu, L. Wang, Y.L. Wang and Y.S. Zhang	337
Managing Varnish of Turbine Oil S. Fang and X.L. Gen	341

Chapter 3: Mechanical Research

The Dynamic Simulation of Engine Slider-Crank Mechanism Based on ANSYS and ADAMS L. Ni, Y.Y. Huang and C.K. Zhou	347
The Dynamics Simulation of Tracked Vehicles on the Hard and Soft Ground Based on the RecurDyn C.K. Zhou, Y.Y. Huang and L. Ni	351
A Calibration Approach for the Parallel Kinematics Machines Tools Based on Error Sensitivity Analysis Y. Shi and W.T. Liu	355
The Particle Motion and Power Theory Analysis of Centrifugal Field W. Guo	363
An Approach for Continuous Small Line Blocks High Speed Machining of Embedded Systems Y.T. Wang, Q.J. Zhang and J.S. Cheng	367
Fatigue Crack Prediction of LC9 with Corrosion Damage Considering Effect of Load Frequency X.D. Li, Z.T. Mu and W.S. Sun	374
Resonance Reliability Sensitivity Analysis for Random Cam Mechanism System X.X. Si, R.J. Zhang and L.L. Zhang	378
Using Stress Relaxation Data to Predict Creep Behavior J.Q. Guo, L. Tian, H.C. Shi and W.Z. Meng	382
Experiment Verification and Model Analysis of Partially-Filled Liquid Tank under Different Liquid Level Y.N. Cai, B.N. Liang, H.L. Yu and Y.C. Song	386
Study on Modeling Method and Characteristics of Bearing System with High Rotation Speed L.G. Cai, G. Li, Y.H. Cui, T.N. Guo and Y.S. Zhao	391
Analysis of Equivalent Parameters for Honeycomb Sandwich Mirror X.A. Chen, Y.Y. Zhang, G.T. Hu, Q.N. Zeng, H. Liu and J.Z. Fang	397
Application of Hidden Markov Models in Ball Mill Gearbox for Fault Diagnosis R.S. Zheng, X.M. Dong, W.S. Hao, Y. Li and R.X. Wang	401
Mechanical Properties Analysis for Compression Equipment of Underground Lifting Compression Processing Station H. Zhou, G.Y. Li, J. Hu and C. Li	405
Four-Order Parabolic Transmission Error Design of Helical Gear Based on Meshing Area J.J. Yang and J.J. Wang	410
Finite Element Analysis on the Directly Buried Heating Bent Pipeline with Many Break Angles B.X. Qian, F. Wang and G.W. Wang	415
Small Line Segment Interpolation Algorithm for Smoothing Machining X.F. Bu, H. Lin, L.M. Zheng and H. Zhang	420
Finite Element Analysis of Crystal Furnace Based on ANSYS Workbench B. Yuan, Y.X. Liu and J.L. Yang	427
Research on a Variable Degree of Freedom Luffing Mechanism, Part I X.G. Yao, Y.B. Feng, X.S. Guo and C.L. Ma	433

Research on a Variable Degree of Freedom Luffing Mechanism, Part II Y.B. Feng, X.G. Yao, X.S. Guo and C.L. Ma	439
The Calculation of Train Slipstreams on Platform of Underground High-Speed Rail Station W.C. Yang, C. He and L.M. Peng	445
Numerical Simulation of Free Surface Flows by Using Weakly Compressible Corrected MPS Method H. Wang, Q. Jiang and C.K. Zhang	449
Analytical Prediction Model for Fatigue Crack Propagation Rate under Tension-Compression Loading Y. Sha, S.G. Bai and Y.H. Wang	455
Elastic-Plastic State of Inhomogeneous Soil Array with a Spherical Cavity V.I. Andreev, A.S. Avershyev and S. Jemioło	462
Tensile Properties of Friction Stir Welding Aluminum Alloys Used in Aviation Z.Z. Chen, M. Li, X.G. Ma and Y. Xiao	466
Crack Propagation in Concrete with Silica Particles A. Sprince, G. Fischer, L. Pakrastinsh and A. Korjakins	470
Comparison between Experiments and FEM Simulations of the Reinforced Concrete Structure under Shake Table Test R.Z. Wang, W.Y. Chang, B.C. Lin and C.H. Huang	477
Parameter Identification of a Stress Relaxation Model Based on Differential Evolution Algorithm W.W. Zhang and H. Xu	482
Studies on Mechanical Properties of Mulberry Branches Scrimber M.L. Chen, C.G. Wang, S.Y. Zhang, H. Wu, X. Wang and Y.W. Pei	486
Health Evaluation for Durability of Harbor Engineering in South China Based on AHP Z. Chen, X. Li, J.Y. Chen, Y.L. Wei, F. Xu, X. Liu and B.X. Tao	489
Determination of a Loading Pressure in the Metal Forming by the Given Movements E.V. Murashkin and M.V. Polonik	494
Skid Line Prediction in Automobile Panel Forming Process Q.M. Li, Y.Q. Liu, G. Li, Z.B. Zhang and T. Du	500
Structural Behaviour of Single Layer Space Frame with Member Arrangement Following Spiral Phyllotaxis K.K. Choong and J.Y. Kim	505

Chapter 4: Products Design and Manufacture

A Study of a New Seat-Suspension of Commercial Vehicles Using Magneto-Rheological Dampers J.B. Wang, P.H. Zhang, J.J. Chen and H. Chen	515
A 3D Numerical Investigation on Droplets Distribution in a Wave-Plate Separator Y.L. Qu, S. Bu and B. Wan	522
Simulation on Linear-Motor-Driven Water Hydraulic Reciprocating Plunger Pump Z.M. Zhang, Y.J. Gong, J.Y. Hou and H.P. Wu	530
Thermal Design Improvements on Avionic Device in Confined Space under Supersonic Conditions Y. Li, G.C. Fu and N. Li	536
Research and Design of the Control System for Natural Gas Heater Y. Guo, Z.Q. Huang and S.X. Yang	541
Efficient Recursive Dynamics and Real Time Simulation of Flexible Space Robots System F.Y. Tian, Y.D. Li, Z. Wang and F.D. Li	546
Method of Holes Machining Path Optimization for NC Turret Punch Press P.S. Zhong, Y.J. Yu, H.L. Xin and Z.G. Lu	553
The Development of Robot for Work of Drainpipe Deposit Cleaning F.P. Xu, Y. Zhou and Z.C. Zhao	558
Kinematics of a New 14 DOF Humanoid Biped Robot L.M. Chen and F. Wang	564
Optimization and Simulation on Pressure-Reducing Valve in Water Hydraulic Vane Pump X.F. He, B. Deng, X. Huang and X.W. Yan	569

Influence of Port Plate Closed-Compression Angle on the Vibration and Noise of a Water Hydraulic Piston Pump	
X.F. He, X. Huang, B. Deng and L.H. Zhao	574
Dynamic Response of a Main Shaft System of Francis Turbine-Generator Units	
Z.J. Li, Y.L. Zhang and X.J. Yang	581
Element Bearing Ratio Based Shakedown Analysis for Branch Pipe	
Y. Zhang, W. Zhang, Y.H. Qi and J. Wang	586
Finite Element Analysis and Structural Optimization of Mine Man-Car Skip Underframe	
Y.Y. Zhang, L.Q. Kong and J. Shi	591
Research on the Flexible Product Platform Technology of Machining Center	
Y.L. Zhao and S.C. Ma	596
Method of Tool Path Optimization in Impeller NC Machining Based on Configuration Space Theory	
R.X. Geng and H.J. Qi	602
Modal Analysis and Fault Diagnosis of Dynamic Machine Foundation under Ambient Excitation	
J.J. Liu, R.C. Xiao, F.Y. Xie and W. Liu	607
Accurate Mathematical Model of Profile Curve Generated by Pre-Grinding Hob and Three-Dimensional Simulation of the Gear Generation	
K.M. Yang, Z.Z. Liu, W.F. Wang and L.W. Guan	612
The Virtual Prototype Dynamic Simulation Design for the Lunar Vehicle Based on ADAMS	
X.R. Li, X.B. Kong and Z.C. Xiang	620
Mechanism Design of the Automatic Adjustment of the Number of Inserting Fuses of the Inserting Fuse Machine for Firecracker	
G.P. Liu, W.Q. Wang, Z.Y. Cai and R.H. Hu	624
Structure Design and Optimization of the Metal Spoon Cross Rolling Mills	
Z.M. Liu and L. Fu	629
Boring-Rolling Process Research and Tooling Design of Hydraulic Cylinder	
Y. Jing and F. Zhao	634
Application of UG/WAVE Technology in the Design of Automobile Front Axle	
L. Guo	639
Researcher on Manufacturing Surface of Air Compressor Cylinder by Vibration and Mechanism of Lubrication	
M.P. Zhong, J.L. Yuan, W.F. Yao and X. Chi	643

Chapter 5: Information Systems and Computer Applications

The Analysis of Similarity Measure Function in Image Matching Algorithms	
H.L. Liu, W. Song, P.Y. Na, M. Li and P. Yang	649
The Research and Application on Illumination Model Algorithm of Oilfield Virtual Reality System	
W.Z. Wu and K. Sun	654
A New Method of Expressing Point Model Based on Kd-Tree for Plane Area	
Q. Zhang, N. Shan, F.C. Qian and Y.L. Ye	658
The Seawater Quality Evaluating of the Yangtze Estuary Wetland Based on BP Neural Networks	
B.B. Zhang and Y.L. Wang	662
OSK Digital Circuit Design for a 14-bit 2.5 GSPS RF-DDS	
Z.H. Deng and Y.H. Zhu	667
SAR Image Denoising Using an Improved Adaptive Bitateral Filter	
H.Z. Wang and Q.Z. Huang	672
Design and Practice Research of Sports Injury Network Consulting System	
J.X. Liang and B. Zhang	678
Design and Development of Physical Education Teaching Network Courses in Colleges and Universities	
L.Y. Li and B. Xiao	682
Design and Application of Real-Time Flight Information Acquisition System	
Y. Li, Y.F. Liu, Z.Y. Shi and F. Yang	686

Development of Computer-Aided Design Module for Mechanical Products Based on AutoCAD	691
L.D. Zhang, Y.H. Liao and C.H. Fu	
Research on the Facilities Layout Planning in MTO Manufacturing Industry Based on Genetic Algorithm	695
Y. Wang, Y.R. Li and Y.Q. Zhou	
Design of Smart Home Management System Based on GSM and Zigbee	703
J.M. Wang and H.B. Wei	
A Novel Traffic Flow Forecasting Method Based on the Artificial Neural Networks and Intelligent Transportation Systems Data Mining	708
W. He, T. Lu and C.Q. Yu	
Study on Data Compression Algorithm Based on Semantic Analysis	712
Q. Hong and X.L. Lu	

Chapter 6: Related Topics

Application Research of Memory Alloy Washer on Power Equipment Safety and Energy Saving	719
T.X. Chen, X.L. Fang and H. Tian	
Behavior of the Spruce and Birch Wood from the Fire Safety Point of View	725
P. Kučera, A. Lokaj and V. Vlček	
The Flooding Tolerance and Growth Characteristics of 2 Woody Species by Flooding Durations for Aquatic Ecosystem Restoration	729
B.H. Koo, W.R. Leem and M. Park	
Comparative and Study the Influence of Sand Depth for Liquefied Evaluation	733
Z.Y. Li and Z.S. Chen	
Investigation of Silicone Oil Leaching in PDMS Fouling Release Coating by Confocal Laser Scanning Microscope	737
Z.P. Zhang, Y.H. Qi, M. Ba and F.J. Liu	
Research on Surface Roughness Measurement of ACSR Using Light-Section Microscope	742
G.R. Hua, T. Yue and Y.C. Lin	
A Novel Sparse Weighted Least Squares Support Vector Classifier	746
B. Yang and L. Zhang	
Inverse Generalized Harmonic Numbers with Riordan Arrays	750
G.W. Xi, L. Long, X.Q. Tian and Z.H. Chen	
Empirical Research on Business Intelligence Success	754
S. Kokin and T.A. Wang	
Exploring the Effect of Organizational Dynamic Capability on Data Quality-BI Success Relationship	759
S. Kokin and T.A. Wang	
Solving the Lower Reliability Confidence Limit of Binomial Distribution by Using Numeric Iteration Method	764
B. Wan, G.C. Fu and Y.B. Dong	
Spillage Control Method in the Production Process of Argon Oxygen Smelting Low-Carbon Ferrochrome	768
H.T. Ma, S.F. Ma, H.H. Yu and F. Chen	
Reform and Practice in Major-Division Engineering Training Model Based on Project-Driven	773
R.J. Lv, W.Q. Liao and X.S. Wang	
Effect on Tailing Dam Stability of Rainfall Infiltration	777
Y. Liu, J. Wang, Z.J. Zhang and R. Gui	
Experimental Study on Direct Shear Creep Characteristics and Long-Term Strength of Red Layer Sliding Zone Soil in Southern Hunan	782
F. Zhu, Z.Y. Duan, Z.Y. Wu, Y.Q. Wu, T.L. Li and Y.D. Cai	
Project Teaching Reform and Practice in the Art and Design Course	788
Z.L. Xia	
Power Transfer Coefficients between Two 3D Semi-Infinite Solids in EFEA Formulation	792
X.L. Chen and W.W. Zhang	

Modeling, Analysing and Simulation – Way to Good Operation Phase of Residential Stock J. Česelský and E.W. Berankova	796
The Evolution and Discriminate Analysis of the SPT Discrimination Methods in Code of Seismic Design of Building in China Q.Y. Zhao, R. Sun and Y.R. Li	801
The Applicability of Code for Characteristic Depth in Liquefied Evaluation Z.Y. Li and Y.L. Wang	805