

Table of Contents

Committees and Preface

Traditional Building Material

Glass Phase Structure of Blast Furnace Slag C. Li, H.H. Sun and L.T. Li	3
Influence of Seed Crystal and Modifier on the Morphology of α-calcium Sulfate Hemihydrate Prepared by Salt Solution Method in Pilot Scale B. Kong, B.H. Guan and L.C. Yang	8
Random Adjusted Calculation Method for 3D Aggregate of Concrete Y. Xu and S.H. Chen	13
Effect of Blast Furnace Slag and Steel Slag on Cement Strength, Pore Structure and Autoclave Expansion Q. Song, B.J. Shen and Z.J. Zhou	17
Analysis for the Shake Table Test of Rammed Earth Wall Panels R.R. Hu, Y.J. Dong and X.H. Zhang	21
Cement Hydration Kinetics Research Based on the Multi-Phase Hydration Model B. Lei, L. Wu and G.Q. Song	26
Cement Chemical Shrinkage Prediction Model Research Based on the Mineral Composition Content of Each Phase at Early Age L. Wu, G.Q. Song and B. Lei	31
Deterioration Evolutive Process of Cement-Based Materials under Sulphate Physical Crystallization Attack K.L. Ma, X. Feng, G.C. Long and Y.J. Xie	36
Suppressing Expansion Due to Alkali-Aggregate Reaction by Using Limestone Powder D.Y. Wu, K.h. Fang and Y.h. Liu	40
The Effect of Salt Admixtures on Foam Stability of Different AEAs Y. Ge, Q.F. Li, W.C. Yang, J. Yuan and J.S. Yu	44
Constitutive Relation of Sulfate Attacked Concrete Based on Uniaxial Loading Y.F. Nie and C.X. Qian	50
Non-Linear Elastic Incremental Constitutive Model for Confined Concrete X.N. Jin, J.P. Gao and J.L. Pan	57
Application of Traditional Local Materials and Suitable Technology in the Modern Low-Carbon Buildings: A Case Study of Rammed Earth Building D.X. Zhang, D.P. Liu, M. Xiao and H. Li	69
Representation Based Classification of Strength Theories of Concrete J. Zhang, Z.X. Zhang and C.P. Huang	74
Influence of Mineral Admixture on Concrete Abrasion Resistance Y. Xie, B. Yu, X.M. Wu and Y.M. Fan	78
Acid Rain Attack on Portland Cementitious Materials in China: Deterioration Process and Corrosion Products K. Wang, M.C. Chen and L. Xie	82
Research of Particle Contact Mechanics Behaviors and Applicative Evaluation for Asphalt Mixture S.L. Wang, X.Y. Zhu and X. Tang	86
Experiment on Cement-Based Materials with Various Compositions against Sulfate Attack Y.J. Xie, X.G. Tang and G.C. Long	94
Analyses of Pathological Changes of Lingnan Ancient Stone Bridges X.H. Li	99
Study on Optimized Mix-Proportion and Crack Resistance of Modern Secondary Lining Concrete for High-Speed Railway Tunnel L.P. Guo, W. Sun, Q.Y. Cao and J.Y. Zong	106
The Application of Extension Theory on Pavement Performance Evaluation C. Ling, L. Zhou and F. Gu	111

Current Use of Prestressed Concrete Pipe Piles Founded in Silty Geomaterials F. Yu, J.Y. He and Z.M. Zhang	116
Interfacial Activity and Adsorption Behavior of Petroleum Oxidation Soap D.X. Liu and L.T. Yao	121
Internal Forces of Double-Row Pile Slope Stabilization Systems Influenced by of Pile Row Separation S.G. Xiao and J. Yang	127
Durability of Lime-Fly Ash Stabilized Soil Activated by Calcined Phosphogypsum M. Yang, Y. Xie and Y. Pang	133
Dynamic Mechanical Behavior of Reinforced Concrete H.F. Liu, W.W. Yang and J.G. Ning	139
Experimental Investigation and Analytical Modeling of Eccentrically Loaded Composite Short Columns Confined with Glass Fiber-Reinforced Polymer Tube H.B. Guan, Q.X. Wang and B.F. Ruan	143
Non-Linear FEM Analysis for the Layered Rock-Mass Tunnel Based on the Twin Shear Strength Criterion X.Q. Wang, Z.G. Zhou and Y.H. Zhang	152
The Quantitative Calculation the Volume Fraction of Cement Pastes Z.Y. Liu, Y.S. Zhang and G.W. Sun	156
Dynamic Response Analysis of Deepwater Pier with Fluid-Solid Interaction F. Lei, J.X. Yang and H. Liu	161
Investigation and Countermeasures of Ship-Bridge Collision Accidents in China in Recent Years B. Yan and G.L. Dai	167
Analysis on Nonlinear Flowing Consolidation of Clay Q. Sun, X.H. Xue, S.Y. Zhu and L. Xue	175
Statistics and Analysis of Influential Factors on Shear Strength of Reinforced Saline Soil with Wheat Straw and Lime M. Li, S.X. Chai, H.P. Du and L. Wei	181
Mechanical Properties and Microstructures of Cement Mortar Modified with Styrene-Butadiene Polymer Emulsion Z.J. Wang, R. Wang and Y.B. Cheng	190
Solving the Inverse Heat Conduction Problem with Multi-Variables Q.W. Xue, X.Y. Du and G.P. Wang	195
Evaluation of Earth Pressures Against Rigid Retaining Structures with RTT Mode F. Song, J.M. Zhang and L.Y. Zhang	200
The Analysis of Long Spiral Drilling Hole's Deformation with Finite Element X.S. Zhao, L.L. Mo and D.X. Geng	206
Study on Light-Colored Technology of Highway Tunnel Pavement T.Q. Ling, S.G. Zhang and X.L. Li	211
Permanent Deformation Prediction Model of Graded Gravel under Repeated Load X.S. Wang, X.J. Ding and Y.L. Xie	217
Effect of Semi-Rigid Connection and Pole in Different Flat on the Overall Steady-State Load-Bearing Capacity of the Steel Tubular Scaffold with Couplers H.X. Zhang and J. Jin	222
Size Dependent Micro-Stress-Field of Fibers in Eutectic Ceramic Rod H.X. Lu, X.Q. Liu, X.H. Ni, T. Sun and B.F. Li	226
Design and Analysis for Hydraulic Travel System of Container Stacker H.X. Han, X.H. Guo and X.L. Cao	230
Development in Research of Engineering Investigation for Offshore Wind Farm T.R. Huang, P.C. Wu, G.Q. Cheng and P.J. Yue	235
Model Development and Application for Saline Water Irrigation in Arid Area in Inner Mongolia S.Q. Yang, J.F. Jia and Z.G. Ye	241
Research on Low Voltage Power Line Narrow-Band Communication Simulation Platform H.T. Tian, R.M. Yuan, Z.G. Huang, S.T. Wang, S.X. Li, K. Zhong, G.N. Lu and X.B. Yang	251

Study of the Influence of Capillary Water Surface Tension on Drying Shrinkage and Self-Shrinkage Deformation of Concrete Y.C. Zhang and Q.N. Li	258
Discuss on Highly Weathered Metamorphic Fillers as Soft Stone Fillers L.Y. Yang, F. Xue, J. Huang and C.Q. Hou	264
Elaborate Simulation Method for the Influence of Soil Excavation of Shield Tunnels on Existing Pile Foundations R.J. Zhang, J.J. Zheng and Y.K. Dong	270
Research on Expanded Polystyrene Light-aggregate Concrete X.A. Ning, J.Y. Liu and Z.Y. Yang	276
Influence of Mineral Admixtures on Mortar Brittleness B.L. Xiao, L.H. Li and H.M. Tang	281
Experimental Research on Dynamic Poisson's Ratio of Silty Clay H. Pan, G.X. Chen and T. Sun	286
The Research on the Recognition Technique of Rock AE and Noise Signal J.P. He and N. Wang	293
Simplified Computation of 1D Consolidation for Unsaturated Soil when Air Phase Neglected H.F. Xu and K.h. Xie	298
Experimental Study on Mechanical Properties of Rock Pile M.K. Huang and X.W. Yang	303
Determination of Sulfate Concentration of Soil Used for Assessment of the Sulfate Attack to Concrete X. Zhang, Q.L. Liu, L.Q. Jia and L.N. Xu	307
The Spring Rigidity Values Analysis in Incremental Method of Deep Excavation with Considering Interaction among Soil Springs C.E. Chen and C.B. He	312
Experimental Research on Dynamic Response for RC Column Subjected to Impact Loading H. Su, Y.M. Zhang and Y.P. Su	319
Influence of Different Ways of Foundation Treatment on the Differential Settlement of Road- Tunnel Composite Structure Z. Liu, C.Y. Zhou and W. Huang	323
Numerical Analysis of Dynamic Compaction based on Large Deformation N.G. Xie, Y. Chen, Y. Ye and L. Wang	330
Preparation and Performances of Self-Compacting Concrete Used in the Joint Section between Steel and Concrete Box Girders of Edong Yangtze River Highway Bridge B.X. Li, A.J. Guan and M.K. Zhou	334
Study on Bi-Stable Behaviors of Isotropic Shell Structures and Numerical Simulation Y.P. Wu	341
Experimental Study on Fundamental Mechanical Properties of Autoclaved Sand-lime Brick Masonr Z.J. Zhang	345
The Performance Analysis of Semi-Flexible Pavement by the Volume Parameter of Matrix Asphalt Mixture Q.J. Ding, Z. Sun, F. Shen and S.L. Huang	351
Prediction of Shield Tunnelling-Induced Ground Settlement Considering Soil-Water Coupled and around Soil Disturbance Damage J.F. Liu, B. Liu and H.Z. Zhang	357
Generic Model for Energy Carbon Emission of Building Materials M. Liu, Y.Q. Li and X. Zhan	365
Application of Sanming Steel Slag Powder in Cement and Concrete D.M. Zhang, M.S. Lu and F.X. Liu	369
Damage Analysis for Quasi-Birttle Materials of CT Image under Uniaxial Compression C. Yi, H.G. Zhu and L.Z. Liu	373
Thermal Degradation of Flame Retardant Cotton Cellulose M. Gao and F.C. Wu	380
Research on Compressive Stress - Strain Relationship of Fiber Reinforced Concrete T.C. Wang, H.L. Zhao, J.J. Hao and J.Q. Zu	384

Experimental Study on Freeze-Thaw Resistance Durablilty of High Performance Concrete J.F. Huo, X.X. Ji and H. Yang	393
Construction and Experiment of the Harbin Ice Shell G.B. Nie, X.D. Zhi, F. Fan, T. Kokawa, S. Niu and Z.W. Yu	398
Back-Propagation Model for Nanofiltration Process Simulation in Pesticide Wastewater Treatment Q. Yang, Y.J. Hu and L. Xue	404
The Impact of Corrosion on the Mechanical Behavior of Bolt X.Y. Li	408
A Simple Model of Predicting the Degree of Hydration of Concrete Using Artificial Neural Networks D.X. Zhang and W.J. Yang	412
Analytical Modeling of Flutter Aerodynamic Derivatives for Open-Truss Stiffened Suspension Bridge E.K. Mohamad, S. Raafat and K. Younis	418
Analysis and Comparison on Mechanical Properties between Full-Graded and Wet-Screened Concretes S.H. Zhou, H.Q. Yang and Y. Dong	426
The Internal Forces and Deflection of a Simply-Supported Hip-Truncated Combined Parabolical Cylinder Roof A.L. Sun	430
High Temperature Mechanical Behaviors of Concrete Y. Xu, R.H. Wang, H.C. Yao and B. Jia	436
Study On Damage Characteristics Of Concrete Under Impact Load B. Jia, H.C. Yao, L. Bai and J.L. Tao	442
Experimental Study on High Performance Ceramsite Using Yongjiang River Site J.Z. Liu, H.H. Zhou, Z.M. He and Z.W. Zhang	446
Mechanical Characteristic of a Simple Supported Combined Parabolical Roof A.L. Sun	451
Orthogonal Experimental Study on Properties of Hybrid Fiber Reinforced Cement Mortar H.Y. Yuan, S. Zhang and G.Z. Li	456
Influence of High-silicon Limestone on Mineral Structure and Performance of Belite-Barium Calcium Sulphoaluminate Clinker P.Q. Zhao, L.C. Lu and S.D. Wang	460
Influences of Microelement on Microstructure and Mechanical Performance of Alite-Strontium Calcium Sulphoaluminate Cement Q.Y. Li, L.C. Lu and S.D. Wang	466
Effect of MgO on the Composition, Structure and Properties of Alite-Calcium Strontium Sulphoaluminate Cement C.N. Yin, L.C. Lu, S.D. Wang and Y.M. Chen	472
Effect of Waterproof Emulsion on Properties of Calcined Gypsum from Flue Gas Desulfurization F.F. Wang, G.Z. Li and M.R. Liu	478
Influence of Strontium Doping on Sintering and Performance of Alite-Rich Cement Clinker G.Q. Li, S.D. Wang, C.N. Yin and L.C. Lu	482
Fatigue Test of Asphalt Mixture and Ultrasonic Forecast J.R. Wu	488
Experimental Study on Strength Characteristics Comparison of Tamped and Poured Concrete X.Y. Liu, Y.F. Li, Z.X. Chen and L. Wang	492
Mechanism of High-strength Concrete Damage Evolution Based on CT Observation H. Zhang, R.S. Yang, L. Zhao and H. Cao	498
Pozzolanic Reaction of Supplementary Cementitious Materials and Its Effects on the Strength of Mass Concrete H.S. Yang, K.H. Fang and S.J. Tu	505
The Influence of Limestone Powder on Fluidity, Strength and Hydration of Cement Mortar H.S. Yang, K.H. Fang and S.J. Tu	512

Comparison of FT-IR, Thermal Analysis and XRD for Determination of Products of Cement Hydration Z.H. Ou, B.G. Ma and S.W. Jian	518
Micromechanical-Rheology Model for Predicting the Complex Shear Modulus of Asphalt Mastic J.P. Zhang, J.Z. Pei and B.G. Wang	523
Homogenised Dynamic Material Model for Brick Masonry and Its Application X.Z. Li, X.Y. Wei and J.H. Zhao	528
Influences of Initial Curing Conditions on the Microstructure of Fly Ash Cement System G. Li, E.L. Lu, P. Wang, O. Geng and Y.S. Ji	532
Optimum Study and Engineering Application of Mixing Ratio for C50 Concrete X.S. Song and G.Q. Xu	537
Preparation of Cement Water Reducer of Modified Lignosulfonate X.W. Wu and H. Zhang	541
Design Flexibility of Growing and Transformable House in Malaysia N. Utaberta, N. Spalie and N.G. Abdullah	545
Experimental Testing of Fiber Reinforced Polymer-Concrete Composite Beam Y.L. Wang, Q.D. Hao and J.P. Ou	549
Experimental Research and Finite Element Analysis on Behavior of Steel Frame with Semi-Rigid Connections F.X. Li and B. Xin	553
The Seismic Investigations on Active Stone Structure Buildings (Concept and Principles) Y.H. Shi and D.H. Yu	559
Deterioration of Mechanical Properties of High-Strength Pumpcrete after Exposure to High Temperatures G.L. Yuan, J.W. Zhang, J.W. Chen and D.Y. Zhu	564
Adiabatic Temperature Rise of Pulverized Fuel Ash (PFA) Concrete P.L. Ng, I.Y.T. Ng, W.W.S. Fung, J.J. Chen and A.K.H. Kwan	570
Study on Bonding Capacity of Different Assemble Patterns of Wood Species in Structural Lumber X.Y. Zhou, J.H. Li, Z.F. Zhang and W.X. Peng	578
Effect of Thermal Environment at Early Age on Hydration Phases Composition and Strength Development of Concrete Containing Fly Ash F.C. Zhang, D.J. Shen, J.K. Zhou and Z.H. Li	582
Study on the Construction Technique of Xigeda Soil House W. Chen, T. Jiao and X.W. Li	589
Prediction of Saturate Concrete Elastic Modulus by Considering Pores and Microcracks D. Zheng and X.X. Li	594
Microstructure Modeling of the Ribbed Steel Bar Hot Rolling of V-Microalloyed Steel L. Yang, Y.Z. He and X.M. Yuan	599
The Study of the Chemical Modifier for Matrix Asphalt-Crumb Rubber System X.D. Quan, W.M. Feng and G.S. Liao	603
Study on the Electrical Model of Cemented Soil X.Q. Dong and X.H. Bai	607
Study on the Influence of Air-Entraining Agent on the Impermeability of Cement-Based Composites Based on its Pore Structure by Fractal Theory Z.Q. Du and W. Sun	615
Properties and Mechanism of Soil Consolidator for Highway Slopes H. Tang	619
Investigation on Hydration Characteristics of Zinc-Doped Portland Cement Pastes X.G. Li, X.B. Yin, B.G. Ma, B. Wu, Q. Chen and Y. Lv	623
Influences of Water Content on Compression Strength of Mortar Q. Ma and T. Wang	628
Research on the Load Capacity of Separation Concrete-Filled Steel Tubes Subjected to Eccentric Compression on Separation Side X.P. Liu, S. Tang, C.H. Tang, Z.Y. Yang and Z. Sun	632
Experimental Study on the Wet Fly Ash Stabilized by Cement W. Shi, X.W. Chen, J.J. Yang and J. Han	637

Analysis of the Damping Performance for Large-Span Steel Arch Structure with Buckling Restrained Braces	
X.D. Li and X.L. Wang	642
Effect of Lightweight Aggregate Moisture Content on Pore Structure of Concrete	
S.H. Dong, Y. Ge, B.S. Zhang and J. Yuan	647
Design and Application of Special Slope Retaining	
L.P. Wen, S.L. Wang and X.P. Zhu	652
Damage Model and Damage Mechanical Characteristics of Loaded Rock under Freeze-Thaw Conditions	
H.M. Zhang and G.S. Yang	658
Effect of Vibrating Load on Grain Size Distribution of Crushed Rock Layer	
L.J. Yang, W.H. Bai, B.X. Sun, S.J. Wang and J.Z. Zhang	663
State-of-the-Art Review on Concrete Softening Curve	
Z.F. Zhao, Z.G. Zhao, X.J. Feng and M. Li	669
Experimental Study of Mechanical Behavior of Concrete Filled Steel Tubular Short Columns after Fire	
M. Zhou, X.T. Wang and W.Z. Wang	674
Experimental Research on Fire Response and Post-Fire Bearing Capacity of Profiled Sheet-Ceramsite Concrete Composite Floor	
X.T. Wang, H.J. Wang and M. Zhou	679
Study on Micro-Structure Rebuild of Clay in Process of Consolidation	
S.Q. Li, L.X. Gao and S.X. Chai	685
Study on Characteristic of Saturated Soft Clay under one-Way Cyclic Loading	
T.J. Liu, G.F. An and H.B. Zhang	690
Analytical Solution and Engineering Application of the Inclined Rectangle Plate under Longitudinal and Lateral Load	
J.F. Zhang	696
Effect of Aggregate on Drying Shrinkage of Concrete	
R. Mu, W.L. Tian and Y.G. Guo	701
Strength Properties of Activated Hwangtoh Mortars	
D. Oh, D. Song and S. Go	709
Crack Resistance Evaluating of HSC Based on Thermal Stress Testing	
B. Chen, Y.B. Cai, J.T. Ding and Y. Jian	716
Lateral and Local Stability of Steel-Concrete Composite Beam	
L.Z. Jiang, J.J. Qi, W.B. Zhou and X. Li	721
Experimental Study of Mineral Polymer Made from Iron Tailing	
Y.M. Nie, M.H. Xia, J.X. Zhang, S.X. Liu and X.C. Cui	730
Application of Rock Bolt Foundation in the Design of Metallurgical Industry Factory Building	
H.B. Liu	734
Volume Change of Limestone and its Effects on Drying Shrinkage of Concrete	
S. Yagi, C. Aquino, M. Inoue and T. Okamoto	738
Quality Evaluation of Recycled Fine Aggregate Based on the Double-Control Concept of Water Demand Ratio and Strength Ratio	
S. Gao, Q.Y. Li and Q.J. Shang	742
Ellipse Particle Modeling for Fresh Concrete and Dynamic Simulation of Slump Test	
Q. Yuan and Z.Q. Guo	746
Experimental Research on Environmental Friendly Ash Aerated Concrete	
Q.Y. Li, X.N. Yang, S. Gao and L. Zhang	751
Chloride Diffusion Property of Recycled Aggregate Concrete Treated with Water Repellent Agents-Silane	
Y.G. Zhu, J.G. Dai and Q.Y. Li	755
Study of Constitution Relationship Model for Masonry under Axial Compression	
W. Liu, L.P. Tong and P. Xu	762
Identification of Nonlinear Structural Parameters under Unmeasured Excitation	
Y. Lei, Y. Wu and T. Li	768

The Mechanism of Explosive Spalling and Measures to Resistant Spalling of Concrete Exposed to High Temperature by Incorporating Fibers: A Review J. Yang and G.F. Peng	773
Concrete Study Using Infrared Thermography and Forced Resonant Frequency R.B.C. Sales, M.T. Paulino Aguilar, F. Augusto Sales, S. Bragança Lana and P.R. Cetlin	778
Mix Proportion Design Method Optimization of Asphalt Mixture for Heavy Load Pavement X. Du, Q. Tong and X. Xu	787
Microstructural Characterizations of Ultra-High Strength Steel Bars M.Y. Chen, B.M. Hwuang and J.R. Yang	796
Study on Chemical Compositions and Elements of Artocarpus Heterophyllus Lam Wood C.J. Chen, X.T. Yang, J.J. Luo and W. Qin	805
Numerical Simulation on Influence of Thermal and Moisture Parameters on Concrete Deformation C.L. Liu, C.X. Qian and D.P. Chen	809
Seismic Assessment of a Historical Masonry Building C.H. Huang, S.H. Yin and S. Chou	814
Adobe and Effect of Earthquake on Adobe Structure M. Najinassajfar and A. Vahidi	818
Application of Spray-on Waterproofing Membrane in Tunnels J.Q. Ma	822
Microstructural Characterization of Non-Oriented Low Silicon Steel Produced by Compact Strip Production Y.L. Fu and K.M. Wu	827
Mechanical Properties of Heat Treated 65Mn Steel Produced by Compact Strip Production G. Huang, G.H. Jiao, D.Z. Wen, C.Q. Zhou and K.M. Wu	832
Nucleation of Intragranular Acicular Ferrite in the Heat Affected Zone of Ti-Bearing Hsla Steel L.Q. Zhang and K.M. Wu	837
Mechanical and Physical Properties of a High Strength Pressure Vessel Steel 12Cr2Mo1R H.H. Wang, J.Z. Li, T.H. Xi and K.M. Wu	842
Effect of Heat Treatment on Mechanical Properties of 1500MPa High Strength Wear-Resistant Steel K. Liu, J.J. Zhang and K.M. Wu	847
Preparation and Properties of OMMT/ SBS Modified Bitumen N.F. Han, D.J. Zhou and X.D. Tang	852

Advanced Building Material

Analysis of High-Permeable Concrete Pavement Heat Transfer Mechanism C.F. Wang, D.B. Ji, Z.Q. Yi and L. Liu	859
A Summary of Cold Patch Material for Asphalt Pavements L.D. Zhao and Y.Q. Tan	864
Fiber-Reinforced Rapid Repair Material for Concrete Pavement J. Zhao and T. Song	870
Numerical Simulation for the Thermal Stress of Composite Wall Insulation System T. Cheng and K.Q. Yan	875
Study on Consolidation Technology for Municipal Waste and Its Safety J.Y. Sun and Y.D. Xu	880
Research on Thermal and Structural Performances of Shale Ceramsite Concrete Y.B. Jiang and X.R. Wang	885
Microstructure Characteristics and Mechanical Properties of <i>in-Situ</i> Composite Steel Processed by Severe Cold-Rolling and Subsequent Annealing J. Zhao, Z. Wang, H. Zhang, H.Y. Zhai, Q.X. Wen, J.C. Chen and Y.W. Gao	889
Simulation Investigation for Heat Transfer in Fin-Tube Thermal Storage Unit with Phase Change Material J.Y. Long	895

Analysis of Stress - Strain Curve on Recycled Aggregate Concrete under Uniaxial and Conventional Triaxial Compression H.F. Yang, Z.H. Deng and Y. Huang	900
Experimental Study on Pavement Performance of SEBS Modified Asphalt Mixture C.F. Zheng, L. Wang and D.J. Zhao	906
PS-MMT/SBS Composite Modified Asphalt: Preparation and Aging Property D.J. Zhou, N.F. Han and X.D. Tang	912
Experimental Study on Epoxy Asphalt Binder K.F. Liu	916
The Optimization Model of Insulation Material of External Wall Based on Multi-Attribute Generalized Connection Degree M.W. Wang, G.Y. Chen, K. Ge and J.F. Yang	920
Research on Mechanical Performance of Sisal Fiber Reinforced Concrete and its Mechanism H.M. Bao and S. Li	925
Mechanics Properties of the Lime-Steel Slag Stabilized Soil for Pavement Structures T. Cheng and K.Q. Yan	931
Optimization of the Optical Performance of TiO₂/Ag/TiO₂ Multilayers for Warm Climates Q. Liang, J. Liu, W.Z. Xu and G. Xu	936
Effect of Desulfurization Ash with Different Desulfurization Temperature and Gypsum Content on the Fluidity, Strength and Rebar Protection of Cement Based Materials X.D. Wen, G.S. Li, J.Y. Song and Z.N. Gao	940
Application of Inorganic Cohesive Glue in Concrete Repair S.H. Liu	945
Activation Mechanism of Cement Paste for Waste Concrete Autoclaved Products C.J. Ke, H. Wang and T. Ke	949
Infrared Spectrum Study of Autoclaved Systems with Solid Wastes C.J. Ke, W.Z. Wu and B. Yuan	954
Optimization Design of Cooling System of Vacuum Calibrator for Plastics Profile Extrusion Q.B. Wang, Z.M. Wang and A.H. Peng	959
Experiment Study on Uniaxial Properties of PVC Membrane Material C.Z. Zhou, Q.L. Zhang and Y.Y. Zhang	963
Development of Low Carbon High Strength H-Beam Steel J.Q. Qian, J.P. Chen, B.Q. Wu and J.C. Wu	969
Interaction and Molecular Weight Distribution Behavior in Polymer Blends of Styrene-Butadiene-Rubber and Bitumen Y.Q. Jiang and Y.B. Zhang	973
Study on the Preparation and the Construction Technology of Anti-Static and Anti-Corrosion Self-Leveling Floor Coating Y. Chang and J.F. Liang	981
Fracture Energy Analysis of Eco-Concretes in Japan C. Aquino, S. Yagi and T. Okamoto	985
Steady State Dynamic Performance of the Slab with EPS-Blocks D.Y. Zhang, L.M. Wang and X.P. Liang	990
Study on Electromagnetic Shielding Effectiveness of Nickel Fiber-Filled Cement G.X. Xiong, Z.B. Zhang and M. Deng	997
Microstructure and Mechanical Properties of Mg-12Gd-2Y-Sm-0.5Zr Alloy K.J. Li and Q.N. Li	1001
Theoretical Assessment of FRP Tendon Wedge Anchorage System P. Zhuge, S.W. Hou, S.Z. Qiang and M.H. Liu	1006
Properties of Aliphatic Polyurea Coated Concrete under Salt Fog Exposure W.B. Huang, P. Lu, J. Zhang and X.M. Li	1010
Die Wall Lubricated Warm Compaction of Fe-Ni-Cu-Mo-C Powders M.Y. Ke and Z.Y. Xiao	1016
Investigation of Electromagnetic Interference Shielding Effectiveness of Cement-Based Composites Filled with Carbon Materials G.X. Xiong, Z.B. Zhang, M. Deng and Y.F. Zhou	1021

Design and Construction of the Slab with Novel Filled Material L.M. Wang, D.Y. Zhang and X.P. Liang	1025
Behavioral Prediction of Reactive Powder Concrete Based on Artificial Neural Network T. Ji, Y.Z. Zhuang, B.C. Chen and Z.B. Huang	1030
Effects of Packing Degree and Calcium-Silicon Ratio of Cementitious Material on Strength of Reactive Powder Concrete T. Ji, B.C. Chen, Y.Z. Zhuang, Z.B. Huang and Y.N. Liang	1034
Numerical Analysis on Vibration Mitigation Effect of EPS Geofoam on Retaining Wall D.L. Wang	1038
Production of High-Performance Composite Concrete Segment and Experimental Investigation of Materials Y.L. Gao and B.G. Ma	1042
Finite Element Simulation on Three-point Bending of Brazed Aluminum Honeycomb Panel M.J. Peng, Y. Sun, J. Yao, Y.H. Duan and S.B. Wang	1046
Experiment and Finite Element Study on the Structural Behavior of Steel Sandwich Panels X.X. Zha, P.C. Qin and H.X. Wang	1051
A Research on Performance of Waste Polystyrene Insulation Block P. Guo and M. Feng	1055
Experimental Research on Physical and Mechanical Properties of Steel Fiber High-Strength Concrete Y.D. Wang and X.C. Fan	1061
Preparation of a Superhydrophobic Carbon Dilm by a Novel Vapor Phase Transport Process G. Li	1065
Laboratory Experimental Study on Pullout Behavior of Mortar Grouted GFRP Soil Nails Z.Y. Liu, C.W. Ma and Z. Zhao	1069
Study on Effects of Admixture and Shrinkage Models on High-Performance Concrete F.S. Meng	1073
A New Method to Prepare Carbon Fiber/Carbon Black Reinforced Concrete and its Properties Z.T. Hou, M.Q. Sun, B. Li and X.D. Zhang	1077
Study on the Fabrication of Compound Cold Cathode Electrode in a Field Emission Display F.G. Wang and Y.K. Li	1082
Fabrication of Combined Type Insulation Wall in a Field Emission Display with Carbon Nanotube Emitters F.G. Wang and Y.K. Li	1086
Dynamic Response of High Steep Rock Slopes Based on Wenchuan Near-Field Seismic Motion Characteristics S.G. Xiao and W.K. Feng	1090
Multiphase Constitutive Model of " Matrix-Strengthen Particle of Saturated Soil " W.X. Ma, Y.G. Fang and Z. Li	1098
Fabrication and Mechanical Characterization of Carbon Nanotubes-Enhanced Epoxy H. Faleh, L.M. Shen and R. Al Mahaidi	1102
Destruction Process Analysis of Laminated Ceramic Composites Based on APDL B.F. Li, J. Zheng, X.H. Ni, L. Zhao and G.H. Zhong	1107
Study on Wheat Straw/ Sodium Sulfate /Water Glass Shaped Phase Change Plate for Walling Material G.H. Hou, X. Zhu and Y.C. Cui	1111
Study on Thermal Field of Mass Concrete by Experiment and Numerical Simulation X.Y. Li and Z.G. Zhang	1117
Impact-Echo Based Nondestructive Evaluation of Grout Condition in Post-Tensioned Bridge Ducts Z.F. Wang and X.Y. Zhou	1122
Gradient of Soil Constitutive Model W.X. Ma and Y.G. Fang	1126
Influence of Hot Leveling and Cooling Process on Residual Stresses of Steel Plates J.P. Chen, J.Q. Qian and S.Z. Li	1130

The Hypothesis of Free Deposited Permeability of Gob Areas and its Application H.G. Wang, Z.G. Yan and F.L. Wu	1136
Field Test on Composite Foundation Incorporating Flexible and Rigid Piles Z.M. Zhang and Q.Q. Zhang	1140
Effect of Crumb Rubber Modifier on Pavement Performance of Wearing Course Asphalt Mixture X. Qiu, L.Y. Chen and L. Xue	1145
The Low-Velocity Impact Response of Sandwich Panels X.X. Zha and H.X. Wang	1149
CFSC for Positive and Negative Temperature Sensing by Resistivity Measurement S.D. Wang, L.C. Lu and X. Cheng	1153
A New General Solution for the Bending and Vibration of Orthotropic Rectangular Thin Plates with Four Free Edges H. Zhang, H.Q. Que and H. Ding	1158
Development of a Method in Evaluation and Adjustment for Consistency of Group Decision-Making Based on Grey Relational Analysis and its Application in Evaluation of New Rural Economic Building Materials L.J. Wang and L. Li	1163
Study on Crystallinity Degree of Hydration Products in Autoclaved Samples with Solid Wastes T.Q. Ni and C.J. Ke	1169
A Lithium Salt Accelerator for Deepwater Low-Temperature Cementing: its Acceleration Mechanism and Performance Evaluation C.W. Wang, R.H. Wang, R.C. Cheng and E.D. Chen	1174
Computer Simulation of Magnetic Fluids in Turbulent Pipe Flow M.L. Sun, B. Wang, F. Zhan, S. Lu and H.R. Cui	1181
Quantitative Structure-Activity Relationship between Compound Molecular Characteristics and Nanofiltration Separation Efficiency Q. Yang and X. Qiu	1185
Application of Large-Stone Asphalt Mixes in the Base Course Maintenance of Expressway H.M. Hu, Y.Y. Tong and W.L. Zhang	1189
Energy Efficiency Analysis of Existing Rural Residence in Hot Summer and Cold Winter Area of China S.S. Wu and W.B. Wu	1193
Experimental Research of Self-Igniting Coal Gangue Bonding Material by Orthogonal Design X.F. Zhang, M. Zhou and B. Zhang	1197
Characterization of Plasma Electrolytic Oxidation Films Formed on AZ31 Magnesium Alloys by Different Voltage Parameters L. Wang, L. Chen and W. Fu	1203
Damage Effective Functions Described Based on Combination of Macro and Micro Damage Mechanics Z.H. Qiu, W.H. Zhang and H.L. Chen	1209

Web Add

Asphalt Overlaying Cement Pavement Structure with APP Modified Asphalt Felt Controlling Reflective Crack X.F. Wang and Y.Q. Yuan	1218
Research on Activation of Abandoned Mortar Power Construction Waste B.G. Ma, L. Su, S.W. Jian, X.F. Song and Y.D. Zhai	1222
Effect of Epoxy Binder on Fire Protection and Bonding Strength of Intumescent Fire Protective Coatings for Steel M.C. Yew and N.H. Ramli Sulong	1228
Study on Hot-Pressing Technology of Cement Bamboo Particleboard X.G. Li, X. Zheng and Y.Q. Wu	1233
Analysis on Excess Pore Water Pressure Caused by Prestressed Concrete Pipes Construction in Saturated Clay Ground G.H. Fu, L.M. Wei and H. Zhou	1238

Research on ANSYS Slope Model Automatic Generation Based on GIS J.L. Zhao and K.R. Chen	1245
---	------

Web Add

The Analysis of the Stress Field and Crack of Rock under the Blast Loading Z.G. Zhang, Y.D. Bian and B. Gao	1252
Numerical Analysis to Impact of Different Heights for Subgrade Connecting in High-Speed Railway J.Y. Yuan and Y.Y. Lv	1256
Study of Transmission Electromicroscope of Polyaluminum Chloride X.A. Ning, J.Y. Liu and Z.Y. Yang	1260
Debonding Effects on Internal Force and Stiffness of Single Tube Concrete-Filled Steel Tubular Arch Rib G.Y. Tu, D.H. Yan, X.D. Shao and Z.P. Yi	1264
Character of Embankment Reinforced with Geotextile on Sloping Weak Foundation J.L. Liu and J.Q. Liu	1272
Influence of Layer Interface Condition on Modulus Backcalculation Results of Semi-Rigid Asphalt Pavement X. Qiu, Q. Yang and Y.J. Hu	1277
Bio-Based Rigid Polyurethane Foam from Liquefied Products of Wood in the Presence of Polyhydric Alcohols Z.F. Zheng, H. Pan, Y.B. Huang and Y.H. Chung	1281
Experimental Study on Soil Water Characteristic Curve of Compacted Unsaturated Soil D.L. Wang	1285
Evaluation of Mechanical Properties at early Ages of Dry-Mixed Self-Compacting Concrete P.X. He, X.S. Wang and J.G. Wang	1289
Theory Analysis for Magnetic Fluid Inclination Sensor M.L. Sun, H.R. Cui, B. Wang and S. Lu	1295
Experiment Study of Optimal Combination of Strength for Mortar and Block of Autoclaved Sand-Lime Brick Masonry Z.J. Zhang	1299

Web Add

Flexural and Crack Behaviors of RC Beams Applied with UHTCC Cover Subjected to Rebar Corrosion X.H. Cai, S.L. Xu and Z. He	1304
Study on a New Adhesive of Concrete Cracks Repairing Q. Zhou, J.P. Hao, P. Lv and J.J. Men	1308
State-of-the-Art for Experimental Studies on the Mechanical Behavior of FRP-Confined Concrete W.B. Sun and J.L. Wang	1313
Influence of Structural Plane in Similar Soil Surrounding Rock on Excavation Stability Q. Chen, W.T. Chen and G.W. Meng	1318
The Effect of Polypropylene Fiber on the Mechanical Properties of Self-Compacting Concrete Y.R. Zhu, J. Cai, D. Wang and G.H. Huang	1325
Comparative Studies on the Mechanical Properties and Durability of Concrete Modified with Water-Soluble Polymer Y. Zhang, H.B. Zhang, N. Li and Q. Su	1330
Experimental Study on the Compressive Behavior of Concrete Encased in CFRP Tubes W.B. Sun	1335
Present Status of Research on FRP Tendons and its Future Prospects X.Y. Zhou, B.S. Xu and N. Li	1342
Crack Resistance of Concrete with Incorporation of Light-Burnt MgO X. Chen, H.Q. Yang, S.H. Zhou and J.J. Yan	1348

Flexural Capacity of Concrete Beams Prestressed with Carbon Fiber Reinforced Polymer (CFRP) Tendons	
X.L. Du, Z.H. Wang and J.B. Liu	1353
Diffusion Mechanism of Chemical Contaminator in the Environment Medium and Interaction between them	
Q. Cui and Z.H. Zhang	1363
Estimation of the Passive Earth Pressure with Inclined Cohesive Backfills: The Effect of Intermediate Principal Stress is Considered	
W.L. Yu, J. Zhang, X.H. Sun, R.L. Hu and X. Wei	1370
The Optimal Intelligent Algorithm on Orthogonal Five-Variate Wavelet Packets	
L. Li	1377
The Crack Resistance and Impermeability Properties of Mortar with PP Fiber and Capillary Crystalline Material and their Mechanism	
W. Huang, P. Wang, W.Y. Yin, L. Zhang and W. Shu	1381
Damage Evolution Analysis of Calcareous Mudstone with Different Water Content under Uniaxial Compression	
M. Ji, N. Zhang and F. Gao	1388
Self-Expansive Behavior of Steel Fiber Reinforced Self-Stressing Concrete	
B.X. Wang, C.K. Huang and H.A. He	1396
Discussions about the Situation and Prospects of New Building Materials Industry	
Y. Gao, Y.J. Zhao, X.B. Han and J.M. Bian	1400
Experimental Study on the Chloride Diffusivity of Recycled Aggregate Concrete	
H.Y. Qin, Y.L. Zhao, B.G. Luo and Y.H. Chen	1404
Resistivity Characters of Concrete with Fly Ash and Slag	
J. Geng, J.S. Shen and W. Chen	1409
An Experimental Study on Workability of Dry-Mixed Self-Compacting Concrete	
X.S. Wang, J.G. Wang and P.X. He	1414
Cable System Using Epoxy-Coated Prestressing Steels in China	
W.X. Zhu, L. Li and A.W. Deng	1420
Experimental Study on the Engineering Characteristics of Improved Soil	
Z.Q. Li, Z.D. Cui, Y.P. Wang, L.C. Wang and D. Zhong	1426
The Design of a Novel Heat Exchanger without Water Treatment	
Y. Wang, Z.Y. Wang and X.Z. Fu	1432
Electromagnetic Shielding Effectiveness of Carbon Black -Carbon Fiber Cement Based Materials	
S.W. Huang, G.H. Chen, Q. Luo and Y.H. Xu	1438
Stiffness Revising to Recycled Course Aggregate Reinforced Concrete Beams under Short-Term Loading	
W.H. Bai	1443
Study on Properties of Blended Finely Ground Limestone Powder Cement and Compressive Strength of Mortar	
H.L. Lv, F.P. Jia, Y. Cheng, Y. Li, Y. Long and J. Yang	1449
Effect of Straw Fiber Modification on Performance of Gypsum Composite	
Z.D. Gao and G.Z. Li	1455
Modification of Polypropylene Fibers by Acrylic Acid and its Influence on the Mechanical Property of Cement Mortar	
C. Ning, G.Z. Li, S. Zhang and H.Y. Yuan	1459
Explore Shallow Ground Temperature of Railway Embankment in Permafrost Regions on Qinghai-Tibet Plateau	
Y.L. Chou, Y.X. Liang, Y.W. Li and Y.P. Zhu	1463
Study on Prestressed Laminated Strand Lumber and its Load-Carrying Capacity	
J. Ma and Q.S. Yang	1470
The Visco-Elastic Behaviors of PVC Coated Fabrics under Different Stress and Temperatures	
Y.Y. Zhang, Q.L. Zhang and C.Z. Zhou	1476
Parameter Calculation of Viscous Damper Applied in the Truncated Model Test Design of a Deepwater Semi-Submersible Platform	
D.S. Qiao and J.P. Ou	1480

Free-Form, High Energy Performance, Transparent Envelope L. Alonso, B. Lauret and F. Alonso	1486
Analysis of Flow and Failure Mechanism of Cushion in Rigid Pile Composite Foundation Y.K. Dong, J.J. Zheng and J. Zhang	1491
Shrinkage Properties of Cement Solidified Sludge with High Water Content Z. Wang, S.F. Xu, L.L. Yan, P. Guo and Q. Chen	1496
Experimental Research on Compressive Strength and Storage Period for Dry-Mixed Material of Shotcrete J.S. Zhang, Q.Y. Ma and X.T. Han	1501
Research Status and Prospects on the Ultra High Performance Concrete J. Sun	1506
Preparation of Interior Latex Coatings by Recycling Banknote Printing Wastewater Z.M. Qiu, Y.Y. Zeng and Z.W. Liu	1509
Failure Models of Buildings Affected by Xi'an Ground Fissure W.Y. Li, C.J. Pan and Y.M. Men	1513
Experimental Study on the Flexural Behavior of Concrete Beam Reinforced With HRBF500 Steel Bars J.W. Zhang, W.J. Ge, H. Dai and Y.M. Tu	1518
Experimental Investigation on the Damage Localization of Limestone under Triaxial Compression Condition H.Q. Yang and X.P. Zhou	1524
Simulation and Experimental Study on Temperature Distribution of Mass Steel Fiber Concrete Y.D. Wang, X.C. Fan, C.L. Xiang and H. Liu	1531
Mechanical Properties of Steam-Cured Concrete with Combined Mineral Admixtures Z.M. He, J.Z. Liu and T.H. Wang	1535
Effect of Macro-PP Fiber on Uniaxial Tensile Behavior of Concrete X.F. Wang and Y.N. Ding	1539
Numerical Simulation of Traffic Emissions in Urban Street Canyon P. Wang, D.Q. Zhao, G.T. Cai and C.P. Liao	1548
The Analysis on Coefficient of Horizontal Subgrade Reaction of the Guardrail in the Highway L. Yang, D.H. Chen and H. Zheng	1552
Structure Characteristics and Mechanical Properties of Fiber Reinforced Concrete W.Q. Deng and J. Zhao	1556
Study on the Photo-Catalytic Properties of Nano-TiO₂ Cementitious Materials T. Meng, Z.Z. Huang, X.Q. Qian, P.L. Zhu and Y.C. Yu	1561
Test Research on Modified-Soils of Foam-Conditioned for Metro Shield Tunneling Engineering B. Liu, L. Huang, G.G. Qiao and T. Li	1566
Evaluation on Stress Relaxation Properties of Geomembrane S.F. Xu, Y. Zhang and Z. Wang	1572
Flexural Vibration in a Binary Phononic Crystal Thick Plate with a Point Defect Z.J. Yao, G.L. Yu, Y.S. Wang and J.B. Li	1577
Effects of Low-Angle Grain Boundaries on the Yield-Strength Ratio of High Grade Pipeline Steels D.Y. Xu and H. Yu	1581
Abrupt Gush Problem of Foundation Pit Considering the Influence of Shear Strength of Soil J.L. Liu and J.Q. Liu	1586
Modelling Pervious Concrete under Compression Loading – a Discrete Element Approach C.Q. Lian, Z.G. Yan and S. Beecham	1590
Structural System and Conceptual Model Test of Solar Chimney X.Q. Zhang, X.F. Yuan and L.M. Li	1601
Transformer Fault Diagnosis Based on Cluster Analysis and Statistical Theory W.Q. Zhao and D.X. Niu	1611

Experimental Research on the Anti-Crack Performance and Microscopic Mechanism of the Hybrid Fiber Concrete	1615
X.F. Liu, X.Z. Sheng, J.X. Li and Y.X. Lun	
Experimental Study of FRP Rubber Bearing	1621
H. Zhang, T.B. Peng, J.Z. Li and W.X. Li	
Research on Function Aggregate Prepared by Steel Wastewater Sludge	1625
Q.J. Ding, X.L. Huang, H. Sun and K. Yang	
Magnesium Alloys: An Alternative for Aluminium in Structural Applications	1631
D.W. Shu and I.R. Ahmad	
Experimental Study on Molding Technology and Mechanical Properties of Cotton Stalk Block	1636
G.X. Chen, W.G. Feng and W. Huang	
Improving Packing Density of Powder in Cement Paste for Production of High-Performance Concrete	1640
A.K.H. Kwan, J.J. Chen, W.W.S. Fung and L.G. Li	
Application of Concrete Bar-Type Plank in Constructional Engineering - a Case Study of State Key Laboratory for Green Building Materials	1648
Y. Cao and J.P. Yang	
Preparation of Foam Glass Composite from Iron Ore Tailing	1653
S.H. Zhang, Z.Q. Kang and Q. Lu	
Discussion on HRBF500 Grain Reinforcement and C100 High-Performance Fiber Reinforced Cementitious Composites (HPFRCC) in the Civil Air Defense Work	1658
S. Yao, J.W. Zhang and Y.M. Tu	
Application of Engineered Cementitious Composites for Earthquake Resistance and Disaster Mitigation of Structures	1665
S. Yao, J.W. Zhang and Y.M. Tu	
Fabrication of Antimony Doped Tin Oxide (ATO) Films For Heat Insulated Glass Coating	1670
Y.N. Shieh, P.C. Hsieh and C.J. Chen	
Micro-Mechanics of UPR Composite Toughened by Rigid Nano-Particles	1675
Y. Peng, J.H. Liu and X.P. Hu	
Experimental Study on Basic Behavior of Recycled Fine Aggregate Mortar	1680
Z.P. Chen, N. Wang, S.Q. Zhang and S.F. Zheng	
The Preparation and Research of Thermal Energy Storage Concrete	1686
C.H. Wang, X.H. Gu, J.H. Liu and X.W. Ba	
Analysis of Microstructure of Steel-Slag Ceramic Tiles	1690
L.H. Zhao, P. Liu, X.B. Ai, X. Lu, H. Bai, D.Q. Cang, Q. Tang and S.L. Zheng	
Structure and Interfacial Property of UHMWPE Fiber Treated by Pyrrole Vapor Deposition	1695
C. Zhou, X. Jin and W.Y. Wang	
Flexural Performance of Glued Laminated Bamboo Beams	1700
Y. Wei, S.X. Jiang, Q.F. Lv, Q.S. Zhang, L.B. Wang and Z.T. Lu	
Mechanical Properties of Hybrid Nylon-Steel- and Steel-Fibre-Reinforced High Strength Concrete at Low Fibre Volume Fraction	1704
M.K. Yew and O. Ismail	
Natural Vibration Characteristics of Long-Span Suspension Bridge with CFRP Cables	1708
H.Y. Zheng, H.Y. Jiang and Z.T. Lu	
Influence of Heat Treatment Conditions on Crystallization and Thermal Expansion of Las Glass-Ceramics	1712
Z.H. Xiao and M.H. Luo	
Experimental Study on the Durability of Glass Fiber Reinforced Polymer Pole and Tower for Power Transmission	1717
L.L. Zhang, Q. Sun and L. Zhang	
Experimental Study of Reinforced Concrete Eccentric Compression Columns with HRBF400 Steel Bars	1725
W.J. Ge, J.W. Zhang, H. Dai and Y.M. Tu	
Predicting the Workability of Self-Compacting Concrete Using Artificial Neural Network	1730
F.X. Li, Q.J. Yu, J.X. Wei and J.X. Li	
Heating and Cooling Performance of Building Integrated Solar Roof Panels	1735
M. Yan, L. Zhu, Y.P. Wang and M.Z. Zhu	

Study of RPC Mechanical Properties and Anti-Freeze-Thaw Resistance Y.Z. Ju, F. Wang and D.H. Wang	1742
Laboratory Evaluation on Performance of Crumb Rubber SMA Y.M. Dong and Y.Q. Tan	1749
Experimental Study on Mechanical Behavior of Laminated Glass's PVB Film Z.X. Tao, Q.L. Zhang, J. Chen and B.Y. Xie	1756
Bending Toughness of Zinc Phosphate Steel Fiber Reinforced Concrete before and after Corrosion M. Sun, D.J. Wen and P. Xie	1762
Researches on Properties of Polymer Modified Rapid Hardening Sulphoaluminate Cement Repair Mortar W. Zhao, D.X. Li, Q.H. Li and Z.X. Wang	1767
Crack Formation and Reinforcing Techniques on Fly Ash Aerated-Concrete P. Peng and H. Zhang	1772
Research on Design of Aluminum Truss Bridge Q.J. Wen and Y.J. Qi	1776
Microwave Synthesis of SiO₂ Aerogels Core / Polystyrene Shell Composite Structure G.G. Geng, J.T. Guo, H. Wang and R.J. Ma	1780
Research on Fracture-CMOD Toughness of Steel Fiber Reinforced Concrete X.W. Wang, W.L. Tian, L.L. Fan, M.J. Zhou and X.Y. Zhao	1784
The Compressive and Flexural Deformation of Rubberized Concrete W.H. Zheng, L.J. Li and F. Liu	1788
Study on Microstructure and Properties of Low-Mo Fire-Resistant Steel R.C. Wan, F. Sun, L.T. Zhang and A.D. Shan	1792
Improved Water Resistance of Waterborne Polyurethane S.L. Luo, G.F. Gong, J.Q. Deng, G. Shi and H. Zhu	1796
Experimental Study on the Damage of Steel Fiber Reinforced Concrete by Simulation Domestic Sewage H.T. Zhu, X.Q. Fan, Q. Zhang and J. Li	1801
Experimental Research on the Influence of Humidity on the Moisture Diffusion in Cement-Based Materials Q. Su, T.J. Zhao, F. Xiao and T. Cui	1806
Flexural Capacity of Singly Reinforced CRC Beams(Part-I) H. Zhu, L.H. Yang and L. Yuan	1810
Performance of Lightweight Epoxy Asphalt Mixture C.L. Jiang, X.R. Li, Z.D. Qian, W.J. Lv, P. Zhang and K. Feng	1815
Study on Stress Relaxation Properties of GFRP Rebars/Bolts G.Q. Yuan, G.H. Dong and J. Ma	1821
Effect of Alkali on the Geopolymer Strength T.S. Qiu, J.Z. Kuang and F. Shi	1827
Synthesis Technology of Silica Aerogels/Polystyrene Core-Shell Composite Materials G.Q. Geng, J.T. Guo, J.J. Zou and G.X. Bian	1833
The Spline Finite Element Method for the Analysis of the Dynamic Response of Composite Material Plate F.X. You	1837
Effect of Nano-Al₂O₃ on Mechanical Properties and Microstructure of Al₂O₃/Si₃N₄ Compound Ceramics S.M. Hao and H.F. Wang	1846
An Experimental Study on Improved Mechanical Behavior of Textile-Reinforced Concrete S.P. Yin and S.L. Xu	1850
Effects of Molecular Structure of Polycarboxylate Water Reducers on their Performance in Cement Paste S. Li, Q.J. Yu, J.X. Wei and Y.J. Ji	1854
Effect of Phosphate Cement and Aggregate on the Fluidity and Strength of Phosphate Concrete H.T. Wang, J.H. Cao, M. Xue and S.M. Li	1859
Research on the Durability of Magnesium Phosphate Cement H.T. Wang, M. Xue and J.H. Cao	1864

Reinforcing Admixtures and their Effectiveness Experiments for Strength and Damping of Polymer Modified Concrete M.F. Wang and X.Y. Song	1869
Action Mechanism of Sulfate Compatible Polycarboxylate Type Admixture Y.Q. Jiang, J.Y. Zhang and M.Z. Gong	1875
Effect of Fly Ash Content on Mechanical Properties of Cement-Fly Ash Stabilized Crushed Stones X. Chen, M.K. Zhou and J. Liu	1881
Impermeability of Sulphoaluminate Cement Mortar Modified by Redispersible Polymer Powders Z.M. Ye, W. Chen and X. Cheng	1886
Research on Moisture Porosity Test of Liner Materials by Explosive Lining H.L. Wang and J.X. Yu	1891
Mechanical Property of Pavement Concrete with Nano-Particles M.H. Zhang, H.G. Wang and J.M. Zhang	1896
Research on Crack Resistance of Roller Compacted ConcreteRCC L. Zeng, D.Y. Wu and Y.H. Zhang	1900
Influence of Metakaolin on Mechanical Properties of High-Performance Concrete B.M. Wang and W. Liu	1904
Experimental Study on Impact-Mechanics Properties of Basalt Fibre Reinforced Concrete F.L. Fan, J.Y. Xu, E.L. Bai and Q. He	1910
Research on Stability of High Strength Aluminum Alloy Columns Loaded by Axial Compressive Load X.M. Zhai, Y.J. Wang, H. Wu and F. Fan	1915
Local Buckling Analysis of Aluminum I Section Beams Y.Q. Wang, H.X. Yuan, Y.J. Shi and M. Cheng	1921
Experimental Study of Stress-Strain Characteristics of the Fly Ash Blended with Curing Agent Z. Shen, L. Zong and X. Dong	1934
Experimental Study on Improving the early Strength of Fly Ash Concrete H. Niu, K. Yang, K.B. Zhao and H.Z. Chi	1943
Phase Evolutionary Process of CaO-Al₂O₃-SiO₂ System Glass and Glass-Ceramic F. He, C.M. Ping and J.S. Cheng	1947
Application of MgO Concrete in China Dongfeng Arch Dam Foundation C.L. Chen, C.S. Tang and Z.H. Zhao	1953
Simulation and Analysis of the Thermal Stress in Concrete under Temperature Fluctuation Condition Y.D. Zhao, X.Y. Li and H.Y. Liu	1957
Mechanical and Fatigue Performance Tests of Cast Aluminum Alloy ZL111 Adopted in Structure Y.Q. Wang, H.X. Yuan and Y.J. Shi	1961
Energy-Absorption Property of Ceramic Fiber Reinforced Concrete H.Y. Su, J.Y. Xu, M. Li and Y. Li	1970
Experimental Behavior of Reinforced Shotcrete with Low Fiber Content X.G. Wang, Z.X. Cheng, Y. Hao and Y.X. Wang	1976
Repeatability of Workability Test Methods of Self-Consolidating Concrete W.J. Long, K.H. Khayat and F. Xing	1981
The Research and Application of Pumping Ultra-Early Strength Concrete Y.Z. Lin and D.C. Lin	1987
Form Pressure of Precast Prestressed Self-Consolidating Concrete W.J. Long, G. Lemieux, K.H. Khayat and F. Xing	1991
Geometric Nonlinearity Analysis of Composite Laminated Box Beam Q. Su and Y.P. Wu	1999
Influence of the Additives on the Workability and Mechanic Properties of Epoxy Mortar J.L. Guo, W.Y. Guo, R.J. Xie, Y.M. Li and Y.B. Yang	2003
Effect of Fly Ash, MgO and Curing Solution on the Chemical Shrinkage of Alkali-Activated Slag Cement Y.H. Fang, Y.M. Gu and Q.B. Kang	2008

Mechanics Performance of Complex High Titanium Heavy Slag Reinforcement Concrete Beam J.K. Sun, W. Chen, S.H. Huang and Y.M. Li	2013
Web Add	
Research and Application of New Technologies in Engineering Disaster Prevention J.C. Zhang, K. Xu and Y. Xu	2023
The Assessment of Expansion Performance of Expansive Agent in Composite Cementitious Materials and its Mix Design M. Miao, P.Y. Yan and J.J. Feng	2028
A Study on Sliced Bamboo Veneer-Chinese Fir Glulam Composite Panel C.G. Du	2033
Static Behavior of Layered Fiber Reinforced Concrete T-Shaped Beam Y. Gu, W.D. Zhuo and Y.T. Qiu	2037
Research on Mechanical Properties of Steel Fiber Reinforced High Performance Recycled Concrete W.L. Li, W.G. Chai, C. Yi, Y.L. Gao and Z.G. Li	2044
Mechanical Behavior of Composite Column Reinforced Paulownia Wood Sandwich L. Wan, W.Q. Liu and H. Fang	2049
Polymerization of Silicone Modified Acrylate Emulsion and Preparation of Self-Cleaning Exterior Wall Paint B.Q. Jiang, S.F. Hu, Y.D. Liu and M.W. Wang	2055
Copolymerization of Organosilicone-Veova10-VAc Emulsion Modified with Protective Colloid of PAM-PEG B.Q. Jiang, S.F. Hu, J.N. Zeng and M.W. Wang	2060
Effects of Silicone Modified Acrylate Emulsion , Silicone Oil Modified Wollastonite and Self-Made Emulsifying wax on Contact Angle of Exterior Wall Paint B.Q. Jiang, S.F. Hu, J.G. Zou and X.Y. Yu	2065
Preparation and Characterization of Nanoscale Silicate Composite Architectural Heat-Insulating Coatings X.X. Tao, J. Qiao, W.Y. Yin, R.C. Jin, L.Z. Pei, J. Chen and Q. Zhang	2069
Additives on the Performance of Ceramsite Concrete F.Z. Wu and W.H. Wang	2074
Test on the Performance of Road Base-Course Made of Steel Slag and Fly Ash Z.Y. Yan, Y. Shu, J.Q. Bu and X.G. Li	2078
Effects of Mineral Admixtures on the Chloride Permeability of Hydraulic Concrete D.Q. Zhang, X.Y. Li, X.W. Ma and Z. Wang	2082
Research on the Mechanical Behavior of Styropor Concrete at High Strain Rates Z.B. Hu, J.Y. Xu, J. Zhu, Q. He, G. Li and W. Lin	2086
Contrast Investigation on Aseismic Behavior of Masonry Wall Strengthened with Carbon Fiber Sheet and Steel-Meshed Cement Mortar X.Y. Liu, J.C. Wang, Y.W. Wang and G. Li	2092
Magnetic Stress Sensitivity Analysis for Ferromagnetic Material S.L. Wang, B. Zhang, E.G. Xiong and X.Y. Zhu	2098
Performance Evaluation of Flame-Retardant NSCFR-Treated Laminated Veneer Lumber(LVL) Part:Thermal, Physical and Mechanical Properties Y.Q. Wu, C.H. Yao, Y. Qing, J.X. Lv and Y.C. Hu	2106
Curvature Ductility of Singly Reinforced CRC Beams (Part-II) L.H. Yang, H. Zhu and A. Fafitis	2111
Coefficient of Linear Expansion of Air-Entraining Concrete with Silica Fume J.C. Dou and J.S. Yang	2116
Discussion about the Application and Importance of Building Energy Conservation in Building Design Z.F. Hu and L. Wang	2121
Development of U-Anchor CFRP Rod Manufacturing Machine D. Tabuchi, T. Sajima, H. Onikura, O. Ohnishi, S. Kurokawa, T. Doi and T. Ohta	2125

Study on Crack Behavior of Recycled Fine Aggregate Concrete under Axial Compressive Load	
Z.W. Zhang, L.S. Ma, X.C. Chi, H.L. Wang, X.Y. Wang, P. Jin, J. Zhou and Y.Q. Tu	2129
Experimental Study and Numerical Simulation of Bond Behaviors Between FRP Bar and Concrete	
X.S. Xu	2134
A Study on the Properties of Water-Based Woodenware Nanocoating	
T.L. Chen, H. Chang and W.H. Wong	2139
Flexural Fatigue Behavior of PAN Fiber Reinforced Concrete under Cyclic Loading	
W.D. Zhuo, S.G. Ping and Y. Gu	2143
Microcosmic Analysis on Bonding Performance of Polypropylene Fiber Concrete	
W.H. Xuan, Y. Wang and Y.Z. Chen	2150
Research on Bearing Capacity of Short Concrete Filled Double Skin Steel Tubes Columns under Axial Compression	
J.Y. Chen and Y. Hai	2154
Preparation and Physicochemical Properties of Concrete Slump-Loss Resistance Agent for Small Slump	
G.R. Duan, G.H. Huang, X. Wang and Y. Gong	2158
Integration Utilize Research of Building Waste in Energy Saving of Buildings	
C.Q. Li, F. Xiang and Y. Ping	2165
Comparison of Diffusion and Chloride Ion Penetration of High-Performance Concrete	
M.I. Khan	2171
Experiment of Basic Mechanical Properties of Concrete Mixed with Composite Coarse-Aggregate	
F.L. Li, J. Li, S. Chen and W.J. Zhao	2178
Deflection and Crack-Width Prediction of Partially Bonded CFRP Concrete Beams	
Y. Deng and J.F. Liang	2182
Binary Superposition Mix Design Method for SFRC Part I: Principle and Evaluation	
S.B. Zhao, H.Y. Huo, C.X. Song and L.S. Song	2186
Binary Superposition Mix Design Method for SFRC Part II: Flexural Strength and Toughness	
H.Y. Huo, S.B. Zhao, L.S. Song and C.X. Song	2191
Effects of Change in Fineness of Fly Ash on Air-Entrained Concrete	
H.Z. Quan and H. Kasami	2195
Experimental Study on Mechanical Properties of Fine Aggregate Concrete Made after Wet-Sieving Coarse Aggregate	
S.B. Zhao, N. Liang, L.X. Liu, L. Sun and S. Yang	2200
MODELLING of Deflection Performance in Partially Bonded CFRP Prestressed Beams	
Y. Deng and J.F. Liang	2204
Application and Exploration of Isolated Technology for Custom Steel Structure Residence	
F.H. Zhao and J. Yang	2208
Separation of Crude Phenols from Bamboo Tar and Modification of Aminobenzenesulfonic-Based Superplasticizer	
X.Y. Jiang and J.X. Zhao	2214
Study on Self-Igniting Gangue Concrete	
M. Zhou, X.F. Zhang, F.J. Guan and Z.S. Wang	2219
Experimental Research on Mechanics of Fiber Reinforced Polymers	
W.C. Jin, D.W. Ye and W.H. Zheng	2225
Fracture Energy of Steel Fiber Reinforced High Strength Concrete	
T.Y. Zhang, Z.L. Wang and D.Y. Gao	2230
Time-Dependent Properties of Lightweight Concrete Using Sedimentary Lightweight Aggregate	
H.J. Chen, W.P. Tsai and M.D. Yang	2235

Other Related Topics

Experimental Study on the Heat Transfer in Rock Layers with the Vertical Downhole Heat Exchanger	
Y.C. Tang, X.D. Ou and B.T. Wang	2243
Development of Geomechanical Model Similar Material for Soft Rock Tunnels	
Q. Liu, S.C. Li, L.P. Li, Y. Zhao and X.S. Yuan	2249
Effects of TiO₂ on Crystal Phases of Mold Fluxes	
L.F. Sun, H.P. Wang, M.F. Jiang, Q.Z. Lin, C.L. Liu and Y. Zou	2254
Nonlinear Coupling Analysis on Working Behaviour of Pile Group	
R.F. Wang	2259
Finite Element Model Updating of a PSC Box Girder Bridge Using Ambient Vibration Test	
M. Hiatt, A. Mathiasson, J. Okwori, S.S. Jin, S. Shang, G.J. Yun, J. Caicedo, R. Christenson, C.B. Yun and H. Sohn	2263
Study of Constructive Materials and Structure inside Long Highway Tunnel Based on Environment Factors	
X.L. Shi and M.R. Yang	2271
Prediction Method of Vertical Ultimate Bearing Capacity of Single Pile Based on Support Vector Machine	
Y.J. Liu, S.H. Liang, J.W. Wu and N. Fu	2278
Establishment of the Principle of Total Potential Energy with Least Value in Elastic System Dynamics	
R.L. Chen, Y.Q. Huang, J. Xiang, S.C. Ma, C.J. Yin, H. Dong and G.Y. Yang	2283
The Connection of Welded Seam Three Dimensional Appearance with Performance for Joints of Stainless Steel Plate Laser Welding	
S.Y. Liu, X.J. Zhang, G.B. Liu, L. Zhang, K.F. Zhao, Y.W. Hu and J.S. Ji	2293
New Denatonium Benzoate/tin Heterogeneous Catalyst to Obtain Biodiesel via Low Temperature Transesterification Process(LTTP)	
P. Sifuentes Gallardo, A.S. López Rodríguez, L.L. Díaz Flores, M.A. Hernández Rivera, L.F. Ramos de Valle and C. Sorto Castañón	2299
Behavior of Channel Shear Connectors in Normal and Light Weight Aggregate Concrete (Experimental and Analytical Study)	
M. Shariati, N.H. Ramli Sulong, H. Sinaei, M.M. Arabnejad Khanouki and P. Shafigh	2303
Research on Performance of Resisting Foundation Displacement of High Voltage Electricity Transmission Tower in Mining Subsidence Area	
Q.J. Shu, G.L. Yuan, Y.F. Zhang and G.L. Guo	2308
Research Development in Void Formation Mechanism and Elimination Method during RTM Process	
M. Yang, Q.S. Zeng, H.Y. Wang and W.X. Zhang	2315
Elasto-Plasticity Solution on Bearing Characteristic of Cast-in-Place Concrete Pipe Pile with Large Diameter in Layered Soil under Lateral Load	
J.W. Zhang, H.L. Liu and G. Yang	2321
Behavior of through Beam Connections Composed of CFSST Columns and Steel Beams by Finite Element Studying	
M.M. Arabnejad Khanouki, N.H. Ramli Sulong and M. Shariati	2329
Construction Technology of Treatment Measure of Swelling Rock Slope Replaced Backfilling Clay	
F.Y. Tan, R.H. Zou, H.B. Hu and Z.K. Lin	2334
Crosslinking and Reinforcement of PET/TiO₂/Clay Composites for Pavement Applications	
A.S. Lopez Rodriguez, P. Sifuentes-Gallardo, C. Sorto Castañón, L.L. Díaz Flores, M.A. Hernández Rivera and R. Falconi Calderon	2340
The Research of Pull-out Method to Inspect Concrete Strength	
F.Q. Li, C. Wang, H.B. Jiang and X.Y. Li	2344
Structural and Optical Properties of InSnO₃ Sol-Gel Coatings to Use in Windows Glass Buildings	
L.D.J. Dominguez Gallegos, A.S. López Rodríguez, P. Sifuentes Gallardo, M.A. Hernández Rivera, M.G. Garnica Romo and L.L. Díaz Flores	2348
Model Test Research of Cushion Thickness on the Long-Short Piles Composite Foundation	
X.S. Ge, J.W. Xue and X.L. Zhai	2352
Hybrid Structural Systems of An Active Building Envelope System(ABE)	
B.J. Tsai, K.D. Huang and C.H. Lee	2359

Study on the Visual Image of Armchairs Furniture in Yangming Shu Wu T.L. Chen and P.F. Hong	2371
Study on Selection and Optimization of Vertical Transportation Equipment for High-Rise Construction X.J. Qi, X.H. Zhou, M.L. Song and F.M. Li	2376
Multidisciplinary Teaching - Changing Collaboration during Building Design A. Dederichs and J. Karlshøj	2382
Novel Surface Treat Technology for Improving Wear-Resistant Properties of Cylinder Liner Z.H. Cai, P. Zhang and Q. Zeng	2387
Test Study for Earth Embankment Engineering in Kunming New Airport F.Y. Tan, Z.Q. Jiang, J.L. Ren, S.G. Hu and Q. Gong	2391
A New Method of Gradation Design about Rutting Resistance of Asphalt Pavement B.L. Zhu, X. Huang and Y.P. Jing	2397
Cost Risk Assessment of Construction Projects Based on Entropy-Weighted Matter-Element Model M.H. Xie and Y. Yang	2402
Unified Analytical Solution for Cylindrical Cavity Expansion of Saturated Soil Based on Large Deformation and Non-Drainage C.L. Nie	2406
The Effectiveness Experiment Study on The Hidden Karst Detection Method of City Tunnel Engineering Z.Q. Xie, H.B. Xiao, Z.Y. Li and Y.S. Wang	2416
Technology of Preventing the Metro Tunnel Disaster Caused by Overhead Excavation in Underground Space C. Liu, J.C. Zhang and K.Y. Wang	2422
Stability Evaluation of Chenmenshan Open-Pit by SURPAC and MIDAS Z.L. Zhou, X.B. Li, K.W. Liu and Y. Zou	2426
Microstructure, Hardness and Oxidation Resistance of CrN and CrAlN Coatings Synthesized by Multi-Arc Ion Plating Technology Z.H. Cai, Z. Ping and Y.L. Di	2430
Shape Optimization Study of Mild Steel Slit Dampers Y.H. Xu, A.Q. Li, X.D. Zhou and P. Sun	2434
Application of the Complex Variable Differential Method in the Back Analysis of Geotechnical Engineering M.W. Liu and Y.R. Zheng	2439
Analysis on ROI Characteristics in CT Images of Q2 Loess under Freezing Temperature W.J. Ye, G.S. Yang, F.J. Niu, N. Zhuang and X.R. Zheng	2445
Study on Longitudinal Vibration of Pile in the Viscous Damping Layered Soils Y.H. Wang, K.H. Wang, Z.X. Zha and R.B. Que	2450
Effect of Aging on the High-Temperature Rheological Properties of SBS Modified Asphalt N.L. Li, X.P. Zhao, T.H. Li and J.Z. Pei	2458
The Characters of K_I and K_{II} in Notched Beam F.G. Xu, Q. Gao and Z.H. Liu	2464
Experimental Study of Mechanical Properties of Rock Mass Containing Intermittent Joints of Prefabricated R.H. Wang, J.L. Li, J. Guo, Y.Z. Jiang and L. Dang	2468
Reduced-Scale Model Tests of Fires in Railway Tunnel and Structure Fire Safety H.L. Zhao, Z.S. Xu and X.P. Jiang	2473
Study Influence of Groundwater Seepage on the Deep Foundation Pit H.M. Gao, Y.L. Zhao and J.T. Zhao	2477
Reliability Analysis of Stability of Foundation Pit Supported by Composite Soil Nailing Y.L. Zhao and W.G. An	2481
Study on the Improved Model of the Internal Force of the Shield Tunnel Segment Y. Yang and X.G. Chen	2488
Test Study and Design on the Bearing Capacity of Long Column of Steel Reinforced High-Strength Concrete Z. Han, Z.P. Sun and B. Yu	2493

Two-Scale Analysis for the Mechanical Properties of Nano-Composites with Non-Linear Interface	
D.M. Luo, Y.L. Zhou, H. Yang and L.F. Li	2498
Effect of Natural Ageing on Precipitation of Al-Zn-Mg-Cu-Li Alloys	
Z.K. Zhao, C.L. Li, Q.Z. Sun, P.Q. Zhang, G.Q. Wang and C.Q. Chen	2503
The Research of Low Temperature Performance of Asphalt Mixture	
C.L. Zhang, L.Y. Wei and Q.Y. Meng	2507
Testing Study on DJM Pile Composite Foundation under Flexible Load	
X.C. Xiang, G.S. Jiang and C.Q. Zhu	2513
Risk Analysis and Management for the Collapses of Tunnel	
Y. Lei, X. Zeng and F. Huang	2518
Design Measures of Low Carbon Buildings with Exterior Envelope Made of ETFE Air Pillows	
X. Zhao, E.S. Long and L.H. Huang	2524
Experimental Study on Microcosmic and Microscopic Properties of C100 High-Strength Concrete	
Z.W. Yue, H. Zhang, B.Y. Dou and P.F. Han	2529
Stability Analysis of Tunnel Structure in Gob Area	
N. Zhuang, W.J. Ye and K.Z. Zhu	2533
Study of Ultimately Loading of Pile Foundation by Strength Reduction Method of Non-Linear Limit Analysis of FEM	
T.W. Dong, Y.R. Zheng, L.Z. Huang and G. Chen	2537
A Study on Stability of Expressway Tunnel Surrounding Rock Containing Weak Intercalated Rock	
D.K. Shi and Y.S. Zhang	2543
Application Studies of Optic Fiber Measuring Techniques for Field Tests of Overlength Piles in Subway Engineering	
X.R. Wang, F. Li and X.F. Jia	2548
Initial Crack Propagation Directions of Branched Crack under Tension with Finite Element Analysis	
Y. Zhu, R.K.L. Su and Q.C. Yu	2553
Insulation Materials Selection for Passive Evaporative Cooling Roof in Buildings	
W.S. Yang and K.H. Guo	2558
Application of Non-Destructive Technology in Evaluating Concrete to Sulfate Attack	
X.G. Tang, Y.J. Xie and G.C. Long	2565
Adsorption of Methylene Blue onto Secondary Expanded Graphite	
Y.H. Chang, B. Wang, H. Luo and L.J. Zhi	2571
Study on the Reclaimed Binder Properties Using Vacuum Rotating Reclaim	
L. Jia and Y.P. Zhu	2575
Analyzing the Influence of Pile - Soil - Structure Interaction on Seismic Response of Cable-Stayed Bridge Tower	
S.Z. Tian, C.M. Zhang and W.B. Luo	2580
A Study of Wind Generator Set Planetary Gear Transmission Dynamics Analysis	
J.J. Zhang, W.L. Sun and L.L. Ma	2590
Study on High Cutting Slopes with Horizontal Soft-Hard Strata in Three Gorges Reservoir Area	
G.X. Yang, J.Y. Dong, F.Q. Wu, D. Wang and J.H. Yang	2595
Basic Properties of Woodceramics Made from Furane Resin/Wood Powder Composite	
W.H. Zhou, Y.S. Yu and X.L. Xiong	2602
The Manufacture and Test of Advanced Composite Material Flange	
G.Q. Tao, Z.G. Liu, M.Y. Lv and S.S. Chen	2606
Structure Dynamic Signal Denoise Using Multi-Scale EMD	
D. Yang, W.X. Ren and X. Xiao	2611
Application of Biot Consolidation Theory to Analyze Land Subsidence	
S.F. Wang and M.X. Zheng	2615
Effects of Temperature and Strain-Rate on the Compressive Strength of Concrete	
C.X. Liu and Y.L. Li	2619

Study on Application of PCM in Asphalt Mixture B. Ma, S.S. Wang and J. Li	2625
Optimum Design Study on Leveling Variable Stiffness of Composite Foundation with Rammed Soil-Cement Pile Z.S. Zhang, Y. Deng, W. Zhang and D.S. Ju	2631
Experimental Research on Wet-Chemical Property of Highly Weathered Rock C.Q. Hou, X.M. Wang and L.Y. Yang	2636
Intelligent Simulation and Recognition of Metro Station Excavation Based on Differential Evolution and Finite Element A.N. Jiang, J.X. Wang and D.H. Yu	2641
Anti-Freezing through Drainage Ensured by Heating with Double Thermal Resources for Construction Joints of Tunnels in Cold Area Y.M. Wu	2648
Preliminary Development of Indirect Tensile Tester Cooperated with Industrial Computered Tomography for Asphalt Mixture X.J. Li, L.H. Jiang and Y.X. Wang	2654
FEM Analysis on Failure of Buried Pipelines Conveying Fluid Crossing Fault X.S. Song and Q.J. Zhu	2658
Multi-Criteria Fuzzy Optimization Model of Open-Sea Oil Terminal's Layout G.L. Tang, X.Q. Song, W.Y. Wang and Z.J. Guo	2663
Research of Application on Corrugated Pipe Heat Exchanger to Recycling Sewage Heat Y. Shi and L. Bai	2668
The Safety Assessment of Buildings Based on Integrated AHP and Fuzzy Comprehensive Evaluation H.M. Li, X.R. Zhong, X. Jiao and T. Xiao	2672
Application for Quick Lime Improving Strength of Loess Subgrade P. Li, H.S. Li, H.Q. Liu and X.L. Wang	2678
Subsidence Monitoring Model of AR and Kalman Hybrid Algorithm and its Application T.S. Wang, B. Zhang and K.F. Ma	2683