

Table of Contents

Preface, Committees and Sponsors

Chapter 1: Advanced Materials Design

Fabrication of Superconducting MgB₂-Based Nanocomposites with Magnetic Inclusions by Spark Plasma Sintering V. Sandu, I. Ion, P. Litra-Cristian and E. Sandu	3
Magnetron Sputtering Applied in Ni-Mn-Ga Films Preparation J.Z. Shi, C.Z. Chen and X. Dang	7
pH-Induced Cross-Linking of Dopamine-Containing Block Copolymers with Fe³⁺ to Form Self-Healing Hydrogels K. Huang, Y. Niu, L.J. Wang, Y. Liu, J.S. Chen and R.Z. Wang	11
Study on the Morphology Properties of Carbon Nanotube/Polyaniline Composites Thin Film W. Ding, V. Koutsos, J.H. Si and Z.X. Song	15
Preparation and Catalytic Activity Analysis of TiO₂ S.Y. Han, Z.M. Liu, D. Wang, M.H. Zhu, Y.L. Ma and Y.Y. Zao	19
Effect of Wheel Speeds on the Microstructure and Magnetic Properties of Melt-Spun (Nd_{0.75}Dy_{0.25})_{10.5}Zr₂Fe₈₂B_{5.5} Ribbons J. Qiu, S.D. Li, M.M. Liu, J.P. Wu, Y. Hu, X.L. Cai, J.H. Lin and L.L. Wang	23
Effect of Ge Incorporation on Hydrogenated Amorphous Silicon Germanium Thin Films Prepared by Plasma Enhanced Chemical Vapor Deposition B.J. Yan, L. Zhao, B.D. Zhao, J.W. Chen, H.W. Diao, G.H. Wang and W.J. Wang	27
Construction of High-Quality P-Type ZnSe Nanowires/n-Type Si Heterojunctions and their Nano-Optoelectronic Applications M. Lu, X.Z. Zhao, X.A. Wang, Y.B. Ren and L. Wang	31
Dielectric Property of PZT Thin Films Doped with PMnN T. Zhang, M. Li, T. Liu, B. Sun and S.N. Zhou	35
The Optical Properties of Au/Ag Nanoparticles Coated with Diamond-Like Carbon Films N.Y. Ma, Y.J. Huang and M.S. Li	39
ZnS/Ethylenediamine Hybrid Micrometer Sheets Synthesized <i>In Situ</i> on Zn Foils P. Wang, L.B. Fan, X.Y. Zhao, Z.H. Zhang, X.B. Zhu, Y.G. Zhang and P.J. Li	44

Chapter 2: Materials Engineering

Numerical Simulation of Burner for Micro Gas Turbine L. Jia, S. Liu, Y.S. Huang, N. Wang, F.Z. Wang and Z.H. Li	51
Prediction Behavior of Notched Composite under Compression Force with Experimental Method S.S. Norazar, K. Pazand and A.R. Oskoei	56
Reel-to-Reel Processing of Buffer Layers and YBCO on Textured Substrate H.Z. Liu, J. Yang and H. Zhang	62
Application of Hilbert Marginal Spectrum to Coal-Rock Interface Recognition B.P. Wang, Z.C. Wang and Y.J. Wang	70
Research on the Effect on Material Characteristics of GCr15 Steel Guide Rail in Laser Heat Treatment Condition H. Lu, M.A.S. Khaing, J. Liu and L. Zou	74
Scattering of Anti-Plane SH-Wave by the Semi-Cylindrical Gap with Multiple Shallow-Buried Inclusions in Elastic Semi-Space H.L. Li, J. Guo and L.M. Cai	78
Effect of Bump Shape on Current Density and Temperature Distributions in Solder Bump Joints under Electromigration Y. Li, X.C. Zhao, Y. Liu and H. Li	82

The Calculation of Fractal Model's Non-Scale Range X.J. Yan, L.F. Xue and W.Q. Li	88
Effects of Environmental Parameters on Marine Corrosion of Aluminium Alloys Z.H. Dan, I. Muto and N. Hara	95
Laminated Bamboo and the Design Applications N. Jing and H. Fang	99
Synthesis and Crystal Structure of Phosphorus Vandium Heteropolyacid Sodium H.X. Liu, J.Z. Xiao, J. Wang, F.F. Jian, H.J. Yue and X.S. Tai	103
Structure and Technics Research on Composite Ship T-Joint M.E. Guo, Z.L. Sun and Z.N. Yu	107
Numerical Simulation for Metal Powder Cross Shear Rolling Compaction M.J. Liu and G.C. Liu	111
Measurement of the Electric Initiating Device Temperature Using Infrared Microscopic Thermographer W.C. Zhang, X.W. Wang, B. Xu and D.P. Zhang	116
Experiment Research of BDP/IFR Halogen Free Flame-Retarding for Oil-Extended SEBS Y.C. Li, X.Y. Li, X. Wang, Y.H. Han, F. Fan and Z.Y. Fu	122
Growth and Spectral Properties of Ho^{3+}, Tm^{3+} Codoped BaY_2F_8 Laser Crystal F.M. Zeng, G.T. Zou and J.H. Liu	128
Research of the Grinding Force and Surface Morphology of Fiber-Reinforced Ceramic Matrix Composite Y.G. Wang and B. Lin	132
Optimization of the Preparation Process of Nano-Sized Calcium Carbonate with Low DOP Absorbency Applied in Plastic H.J. Zhu, Z.L. Chen and L. Xu	136
Study on Surface Topography and Texture of Workpiece Machined by Tangential Turn-Milling S. Ren	144
Optimization on Thin Film Bulk Acoustic Resonator (FBAR) by Transmitting Line Method T. Zhang, M. Li, P. Liu, B. Sun and S.N. Zhou	149
A New Anodic Bonding Method of Triple-Stack Structure Y. Yuan, H.J. Cui, X.H. Wang, D.B. Xiao and X.Z. Wu	153
Fabrication of Pb-Free Sn-Bi Solder Using Polyoxyethylene Lauryl Ether S.H. Zhang and Q.F. Chen	159
Creep and Microstructure of an Anion PP Filament Y.G. Zhuo and J. Liu	164
Research on the Environment Friendly Materials Y.G. Zhuo and J. Liu	168
Glass/ITO/PbS/P3HT/Al: A Hybrid Film Solar Cell P. Wang, L.B. Fan, M.Y. Yang, Z.H. Zhang, X.B. Zhu, Y.G. Zhang and P.J. Li	172
A Heterojunction Film Solar Cell of Glass/ITO/CdS/PbS/Al P. Wang, L.B. Fan, L.J. Sun, Z.H. Zhang, X.B. Zhu, Y.G. Zhang and P.J. Li	176
Polymerization of <i>D,L</i>-Lactide and <i>In Situ</i> Fabrication of PDLA Porous Scaffolds in Supercritical Carbon Dioxide J.H. Li, B.H. Luo, W. Xu and C.R. Zhou	180
Optimization of the Composite Cure Process Based on the Thermo-Kinetic Model S. Shevtsov, I. Zhilyaev, A. Soloviev, I. Parinov and V. Dubrov	185
Investigation on the Simulation of SCR Chemical Reaction W. Wang, Y.H. Xiao and X.N. Tian	193
First Principles Study on Different Size of Pd-Doped CdS M.M. Li, P.J. Wang and C.G. Ding	198
Experimental Research of PCMs - TH29 Using on Building Energy Storage L. Qiu, R.P. Niu and Z. Tan	202
Modelling of Electroelastic Behaviour of Embedded Piezoelectric Actuators in Smart Structures: 2D and 3D Effects B. Zhao and X.D. Wang	207

Effect of Different Layers of Glass Cloth on Carbon Fiber Reinforced Hybrid Composite Core	
C.L. Zhang, K. Qiao, B. Zhu, Z.T. Lin, B. Xie, S.L. Zhang, W.S. Xu and F. Zhong	215
Effects of Various Parameters on the Coating of Substrates with Trenches	
A. Mazloomi and A. Moosavi	219
Preparation Methods of Copper-Steel Composite Wire	
Q.M. Wu, D.Q. Wang and Y. Gao	223
Influences of Phosphorous Gettering on Minority Carrier Lifetime Distribution of Polycrystalline Silicon Wafer	
S.H. Ma, C.Z. Hao and X. Jiang	229
Application of Acoustic Emission Technology in Material Detection	
C.L. Zhang, K. Qiao, B. Zhu, B. Xie, Z.T. Lin, S.L. Zhang, X.X. Huang and F. Zhong	233

Chapter 3: Manufacturing, Technology and Processing

Oil Depot Foam Fire Extinguishing System Design Research	
J.H. Zhao and H.S. Zhang	241
High-Speed Railway PFV Prediction Model Research Under Regional Economic Conditions	
X.D. Du and N. Ren	246
Finite Element Simulation of Large H-Beam in X-H Rolling Process	
P.Q. Wang, Q.H. Zhang, B.T. Dong and R.P. Ma	251
Technology on Bra Pattern Structure Design	
X.N. Chen, D. Jiang, J.P. Wang and H. Shi	256
Research on the Capacity Promotion of Chemical Logistics Based on the Material Resources	
Y.P. Chen	260
Research on Oxygen Content and Crack Control of Oxygen-Free Copper Billet in Horizontal Continuous Casting Process	
M.E. Guo, Y.X. Shi and Y.C. Guo	264
Manufacturing Process Design of Multi-Scale Synthetic Leaves Based on Microcapillary Plastic Film	
Z.B. Xu, B.C. Wang, J.P. Cao and Y. Liu	268
A Novel Technique for Arithmetic Elements Standard Cell Library Establishment Based on Tanner Tools	
C. Zhao, C.Z. Zhao and B. Da	273
Simulation of Bubbles Aggregation Process Base on Interface Compression Method	
Y.G. Nie, Y. Mao, J. Wang and J.Y. Wang	277
Production of Carbon Dioxide Snow by Flash-Atomization for Material Cleaning Process	
Y.J. Shen, T.C. Lin and M.R. Wang	282
The Simulation of CO₂ Recovery & Liquefaction Flowsheet in the Beer Fermentation Process by Aspen Plus Software	
K.Z. Yu, J.X. Tang and X. Ling	286
The Study of the Plastic Cover Mold Design and Process Optimization Based on Moldflow	
D.P. Yang and J.M. Han	290
Synthesis and Investigation of Al₂O₃/SiO₂/ZrO₂ Powders via Selective Laser Sintering	
W. Wang, Y.X. Liu, X.D. Shi, J.H. Li and J.Y.H. Fuh	297
A Review of Flow Pattern of Boiling Flowing in the Tube	
J.X. Zhang and N. Nuoribusiren	301
Electrical Properties of InSbN Alloys Fabricated by Two-Step Ion Implantation	
Y. Wang, D.H. Zhang, Y.J. Jin, X.Z. Chen and J.H. Li	305
Preparation of Water-Insoluble Antheraea Pernyi Silk Fibroin Films	
S.Z. Lu, L. Mao, Y. Liu, S. Sun and G.J. Li	311
The Integration of Taguchi Method and FAHP Method to Improve the SMT Solder Paste Printing Thickness Processing Capability	
T.H. Hung	316
Study on Short-Circuit Transition Welding System Based on Push-Pull Wire Feeder	
P.F. Huang, C.W. Wang, Z.Y. Lu and L.L. Bai	320

Preparation of Gradient ZTA Ceramic by Centrifugal Slip Casting Method S.K. Wang, J.Y. Yu, Q. Li, E.Y. Zheng, Y.G. Duan and G.C. Qi	324
A Study of Engineering Construction Safety Influencing Factors Based on SEM Model J.L. Zhou and Z.Y. Sun	328

Chapter 4: Mechanical Engineering

Design and Dynamic Analysis Optimization for a Kind of N-Degree Freedom Space Manipulator and Arm J.X. Liu, Z.Q. Deng and H. Sun	335
Based on the Finite Element Method for Gear and Rack Research on Contact Fatigue Strength of Study Y.X. Li, L. Yang, M.X. Wang and Z. Wang	339
Attenuation of Acoustic Emission Signals in Structural Interfaces X.H. Wang, H.W. Hu and Z.Y. Zhang	343
Study on the Axial Tooth Shape of CRT Slips F.G. Jiang, Z. Liang, G.H. Zhao, Y.H. Yan and P. Wang	347
A Novel Three-Dimensional Gait Analysis System T. Liu, Y. Inoue, K. Shibata, K. Shiojima and J.B. Yin	352
Permanent Magnets Design and Magnetic Field Analysis of a Novel Permanent Magnet Linear Motor G. Zhang, Z.G. Xie, X.S. Chen and X.F. Zhou	356
Study on Finite Element Analysis Models of Slant Rig Working Course F.G. Jiang, Z. Liang and L.W. Zhang	363
Numerical Simulation Calculation of Hydroplane Direct Route Motion Based on FLUENT Y. Qin, X. Liang and J.N. Zhang	368
Dynamic Shear Stress Evaluation on Micro-Turning Tool Using Photoelasticity S. Mandal, A. Kumar and Nagahanumaiah	376
Dynamic Simulation Analysis of Shipborne Missile Launching under High-Wave-Level Environment Z. Zhong, Y. Jiang, Y.Y. Li and C. Zhang	380
A Multi-Dimensional Coupled Electro-Thermal Model of a LFP Battery H.Z. Cen, X.Z. Wei, H.F. Dai and L. Song	386
Energy-Saving Rare Earth Lifting Permanent Magnet N. Ding and D.T. Zhang	391
Numerical Simulation Study on High-Temperature Ventilated Cavitating Flow Considering the Compressibility of Gases J. Zhao, G.Y. Wang, Y. Zhao and Y.J. Liu	395
Study on Fatigue Life of Pressure Vessels Based on Random Load G.Z. Hu, Z.B. Liu, L. Kang and T.Q. Wang	400
The Research of the Bending of Triangle Plate in One Boundary with Mixed Variable Method D.L. Meng and Y.J. Chen	405
Tool-Path Calculation for NC Machining the Helical Surface of Screw Shaft Based on the End Section Q.Q. Han and R.L. Liu	410
FEM Analysis and Optimization of Large Load Suspended Platform X.J. Zheng, Y.S. Han and Z.Y. Xie	415
Stability Analysis of Biped Walking X.F. Zhou, P. Huang, G. Zhang and X.S. Chen	420
Influence of Front Shape on Crosswind Aerodynamic Loads of Heavy-Duty Truck: A Numerical Case Study X.J. Hu, P. Qin, P. Guo and J.Y. Wang	428
Theoretical Analysis of Machine Presses' Untimely Unloading S.K. Zhang, Z.G. Zhang, Y.D. Wu, J.H. Zhang and Q.H. Zhang	433
An Analysis of Unloading for Mechanical Press C.L. Li, Q. He, Z.G. Zhang, Q.H. Zhang and J.H. Zhang	437

An Improved Parameter Estimation Method for Three-Parameter Weibull Distribution in the Life Analysis of Rolling Bearing	442
F.L. Yin, Y.S. Wang, C.H. Zhang and X.P. Zhang	
Relation between Topological Entropies and Fractal Dimensions of Chaotic Attractors of the Hénon Map	447
X.Z. Chen, L.L. Xiong and L. Li	
Bionic Concave Pit-Like Metal Surface and Soil Direct Shear Test	451
Y.M. Tang and Y. Tian	
A New Goodness-of-Fit Test for Grouped Data	455
J. Qin and J. Yang	
Theoretical and Experimental Study on Stiffness Characteristics of a Wire Race Ball Bearing	461
D.F. Zhong, J.B. Yuan, X.B. Shan and T. Xie	
RMRS: A Reconfigurable Modular Robot System and its Applications	466
X.F. Zhou, L. Jiang, C.W. Cai and H.F. Zhu	
Disassembly Analysis Based on Entropy and Extension Theory	472
N. Zhao, R. Mu, W. Huang and W.G. Lin	
Pipeline Frequency Test Bed Design	477
J. Wang and Y.M. He	
Simulation for Pole Placement in Textile Machinery Electrohydraulic Servo System	482
J.Y. Xu	
Finite Element Analysis of a Mechanical Heart Valve in Assembly	487
L.L. Wu, G.J. Wan, F. Zhou, J. Yang and N. Huang	
Experiment and Simulation of a Laser Shock Wave Driven Cantilever Beam	491
Y. Wu, L.C. Xiong, Q.S. Zhou and J.C. Xia	
Finite Element Analysis on the Vibration Mode of Composite Thin-Walled Box Beam with Double-Cell Sections	495
S.S. Sun, F.W. Jia and Y.S. Ren	
The Study of Design and Installation Process for Supersonic Nozzle	500
L.S. Wu, G.L. Li and Q. Fu	
Development of High-Efficiency Tree Planter Based on Non-Smooth Surface of Blunt Body	504
B.Q. Hu, J.S. Dong and X.J. Hu	
Research on Mining Method of Submarine Natural Gas Hydrates Based on a Double-Channel Lift Pump	509
Y.C. Zeng, H.L. Xu, W.R. Wu and B. Wu	
The Analysis and Experimental Verification of the Hump Characteristic of Viscous Couple	517
L.Q. Jin, C.X. Song and S.X. Song	
TRIZ Based Tool Management Applied in Mechanical Heart Valve Engineering Systems	521
F. Zhou, Y.Y. Cui, L.L. Wu, Y. Chen, J. Yang and N. Huang	
An Improved H-Converter Circuit Electromagnetic Interference Analysis	525
W. Zhang	
Modeling and Experimental Verification of a Hybrid Energy Harvester Using Piezoelectric and Electromagnetic Technologies	529
Z.L. Xu, X.X. Wang, X.B. Shan and T. Xie	
Research on the Hydraulic Actuator Control of the Quadruiped Robot Based Dual-Loop	533
E.C. Yang, Q. Wei, R.B. Cai and H.X. Ma	
Strength Calculation Analysis of Diesel Engine Linkage Based on Contact Finite Element Method and Experimental Study	539
G.X. Wang, L.J. Guo, W.F. Sun and J.Y. Ma	
Finite Element Model and Analysis of Mandibular Incisors' Orthodontics	546
X.F. Deng and L. Jiang	
The Analysis of Electric Vehicle Ride Comfort Test Simulation Based on the Adams/Car	552
X. Fan and C. Hu	
The Application of Magnetic Drive Technology in the Desulfurization Side Entering Agitator	556
Z. Gao, L. Li, T.G. Zhang and P.F. Nie	
Late-Stage Evolution of Thin Liquid Coating Films over Step Topographies	560
M. Asgari and A. Moosavi	

A Design Technique for a Magnetic Bearing-Rotor in a Turbo Blower Considering Critical Speeds	
H.H. Jung, S.H. Kang, B.H. Cho and C.S. Kim	564
Research on Measure Method of Common Normal Length Variation of Bilateral Modification Gear	
Y.L. Wei, Q.B. Yan, B. Li, H. Xu and Y.Y. Fan	568
Analytical Estimation of Structural Integrity for a Thermocouple in Nuclear Power Plant	
B.H. Cho, H.H. Jung, J.D. Hwang, C.S. Kim and H.O. Choi	572
Dynamic Modeling and Analysis of Astronauts' Exercise during Spaceflight	
H. Chen and D.X. Li	576
Research on Settlement Characteristics of Storage Tank Group on Non-Composite Foundation	
S. Wang, R.G. Yu, Y.M. Zhang and X.X. Wang	585
Singularity Analysis of 2-DOF Parallel Manipulator	
J.G. Lee, S.R. Lee, C.Y. Lee and S.H. Yang	589
Kinematics Performance Optimization for 6PUS Parallel Mechanism	
X.Q. Tan	593
Study on the Structural Safety Evaluation for Pressure Vessel of the CNG Vehicle Using F.E.M.	
E.S. Kim, J.H. Kim, B.S. Moon and J.M. Goh	598
Lightweight Design for a Cab of a Heavy-Duty Truck Based on Passive Safety	
X.Y. Wang, D.F. Wang, W.L. Sun and P.W. Liu	603
Numerical Study on Three-Dimensional Steady-State Temperature Field of a Gasoline Engine	
G.X. Wang, H.B. Chen, Z.C. Yuan and W. Lu	610
The Analysis and Simulation of Stability on Cutting Chatter System Based on Matlab	
J.H. Xie, R. Huo, Y. Gao and Y.F. Guan	615
Analytical Techniques of Case and Pad for 5-Pad Tilting Pad Bearing	
M.J. Shin, J.D. Hwang, C.S. Kim and S.Y. Cho	620

Chapter 5: Applied Computer Technologies and Control

Zero-Inflated Poisson Model with Group Data	
J. Yang and X. Zhang	627
Minimum Automatic Construction of the Adaptive MIS Based on the User's Function Requirement	
G.Z. Xu and C.G. Xue	632
Sensor Optimization for Cutting Status Monitoring in Single Manufacturing Unit	
K. He, M.P. Jia, Z.Z. Zhao and R. Wang	636
Research on the Hierarchical Representation Model of IOT Based on RDF	
C. Yi, H.Z. Liao and Z.X. Li	640
Semantic Model Construction of Emergency Plan Based on Category Theory	
W.D. Huang, M.R. Wu and L. Yan	645
Research on Piezoelectric Self-Adaptive Micro-EDM CNC System	
Y. Zhang, Q.H. Zhang, X.Z. Fu and C.X. Zhang	652
Quantum Information Delay Protocol Using Entanglement Swapping	
X.Y. Li and W.M. Zhi	657
The Generalized Product Quality's Comprehensive Evaluation Method Based on Entropy Weight Method	
Y. Liu, J. Wang, G.Z. Liu, L.Q. Liu and B.C. Wen	662
Modeling and Simulation of Aircraft Assembly Line Based on Quest	
H. Lu, X. Liu, W. Pang, W.H. Ye and B.S. Wei	666
The Comparison between the Controlling Algorithms Based on the Shedding Motor	
Y.M. Tang, Q. Yu and F. Liu	670
Design System and Simulation Control of the 6-DOF Parallel Manipulator	
R. Vongvit and H.T. Zhu	674

AC Position Servo System Controller of Aircraft Simulator Based on Genetic Algorithm Optimization	679
B.L. Liu, X.L. Zheng and X.Q. Li	
Automatic Tracing and Measuring Crankpin Surface for the Initial Orientation in Non-Circular Grinding	683
N.Y. Shen, J. Li and X.L. Wang	
Flexible Distributed Workflow System Research	688
Y. Li, X. Tong, H.R. Wang, J.Y. Wang and Z.B. Zhang	
Application of Entropy Weight Method and TOPSIS Model in the Cold-Chain Logistics and Distribution Center Location	693
Z.Y. Jia and X.X. Yang	
A QFD-AHP-Based Approach for Determining Storage Performance Parameters	697
G.Y. Zhao, Y.F. Sun and W. Liu	
A Fusion Prognostics Framework Based on FMMEA and Bayesian Theory	703
Y.J. Tao	
Navigation and Positioning by Using the Insufficient Geomagnetic Components	707
S.H. Xiao, Z.W. Cai, Y.M. Xie and S.F. Bian	
Coordinate Transform Methods Used in Dynamic Simulation of Satellite Separation	712
X.Z. Hu, X.Q. Chen and Y. Zhao	
Algorithm Base on Gamma-Ray Computed Tomography Method for Gas-Solid Flow Time Average Concentration in Cyclone	718
X.C. Liu, X.K. Hu, J.Y. Chen and Y.D. Wei	
Construction Quality Supervision Game Analysis and Collusion	723
H. Ren and F. Xu	
Resource Allocation Mechanism of Cloud Services in Logistic	729
D.J. Ma	
Predict Hypotension Events during Spinal Anesthesia Based on Particle Swarm Optimization Neural Networks	733
H.J. Dai and Y. Qiu	
Parametric Design of Axial Piston Pump Based on Secondary Development of Pro/Toolkit	737
Y.J. Sun and L. Wang	
Efficient Framework of Cloud Computing Ontology for the Global Factory Automation	741
H.Y. Jeong and H.G. Choi	
Expert System of the Fiber-Optical Detection for Colon Hydropathy	745
C.K. Wang	
Short-Term Prediction on the Time Series of PCP Speed Based on Elman Neural Network	749
X.R. Lv, X. Luo, S.J. Wang and R. Nie	
Research on the Design of Electromechanical Product Based on Interaction	754
D.F. Niu, L.Y. Xie and T. Shao	
Application of Torque Control Mode in Drilling & Routing Machine	758
G.C. Liu and M.J. Liu	
Research of Multi-Axes Motion Control System Based on LabVIEW Platform	763
L.H. Deng, J.H. Li and L.G. Liu	
Design of Equipment's Transportation Programs and Transport Activities	769
T. Deng, N.C. Wang and L. Ma	
Design of Automatic Guided Vehicles Based on Computer Control	776
J. Wang, T.Z. Chen, C.Y. Liu and S.G. Ye	
A Wire Feed Control System Based on Detecting Induced Electromotive Force of the Motor	781
Z.Y. Lu, P.F. Huang, Y.G. Zhang and S.J. Bai	
Investigation to Angular Resolution in Cube-Orientation-Based Interactions	785
J.B. Yin and T. Liu	
A Study of Fibrin Zymography Method for the Assay of Plasminogen Activators	789
M.X. Huang, X.Q. Yu and Y. Ye	
Research on the Safety of Rear Seat Occupants in the Frontal Collision	795
L. Hong and Y.T. Wu	
Traffic Impact Analysis of Road Construction Based on Vissim	800
Y.Z. Yang, X.N. Hao and J.S. Luo	

Analysis of Logistics Center Location-Selecting Based on GIS - Take Li County as an Example	
M. Gao and M.W. Dong	804
Design of Data Acquisition System Based on LabVIEW	
L.G. Liu, J.H. Li and L.H. Deng	808
The Study of Network Authentication Methods Based on Palmprint and Digital Watermarking	
F. Li and L. Tang	814
Unstable Manifold of Hénon Map	
B. Chen and M. Jia	818