

TOTAL CONTENTS

Tsinghua Science and Technology, Vol. 13, 2008

BIOLOGICAL SCIENCE AND BIOTECHNOLOGY

- | | | |
|---|--|--------------|
| Computational Identification of 99 Insect MicroRNAs Using Comparative Genomics | HE Tao, LI Fei, GU Jin, et al | (4): 425-432 |
| Preliminary Evaluation of a Candidate Multi-Epitope-Vaccine Against the Classical Swine Fever Virus | YING Jian, DONG Xiaonan, CHEN Yinghua | (4): 433-438 |
| Molecular Cloning and Distribution of a Plasma Membrane Calcium ATPase Homolog from the Pearl Oyster <i>Pinctada fucata</i> | WANG Xue, FAN Weimin, XIE Liping, et al | (4): 439-446 |
| Cytotoxicity and Apoptotic Effect of Phytoceramide IV Containing Liposomes on Murine Mastocytoma Cell P815 | CHEN Song, ZHU Wenting, ZHOU Quan, et al | (4): 447-453 |
| Macromolecular Crowding Enhances Thermal Stability of Rabbit Muscle Creatine Kinase | ZHU Jiang, HE Huawei, LI Sen | (4): 454-459 |
| Effects of Season, Variety, and Processing Method on Ellagic Acid Content in Pomegranate Leaves | XIANG Lan, XING Dongming, LEI Fan, et al | (4): 460-465 |
| Cloning, Characterization, and Expression Analysis of Calreticulin from Pearl Oyster <i>Pinctada fucata</i> | FAN Weimin, HU Yilin, LI Changzhong, et al | (4): 466-473 |
| Antioxidant Activity <i>In Vitro</i> of Three Constituents from <i>Caesalpinia sappan</i> L | HU Jun, YAN Xiaoling, WANG Wei, et al | (4): 474-479 |
| Extraction and DNA Digestion of 5'-Phosphodiesterase from Malt Root | ZOU Hechang, CAI Guangqi, CAI Wen, et al | (4): 480-484 |
| Cerebral Ischemia Reperfusion Exacerbates and Pueraria Flavonoids Attenuate Depressive Responses to Stress in Mice | LAN Jiaqi, YAN Bin, ZHAO Yu'nan, et al | (4): 485-491 |
| Characterization of the Expression of CTRP9, a Paralog of Adiponectin | HUANG Ziwen, CUI Ting, LIU Jing, et al | (4): 492-499 |

CHEMICAL ENGINEERING

- | | | |
|---|------------------------------------|--------------|
| Separation of C6-Olefin Isomers in Reactive Extractants | SONG Fengxia, YU Yanmei, CHEN Jian | (5): 730-735 |
|---|------------------------------------|--------------|

CIVIL AND HYDRAULIC ENGINEERING

- | | | |
|---|--|--------------|
| Temperature Distribution in a Long-Span Aircraft Hangar | PEI Yongzhong, BAI Yin, SHI Yongjiu, et al | (2): 184-190 |
| Using Data Mining Techniques to Support Value Management Workshops in Construction | SHEN Qiping, GUO Jianfeng, ZHANG Jianping, et al | (2): 191-201 |
| Plastic Buckling of Cylindrical Shells Under Transverse Loading | ZHANG Chonghou, LIU Yansheng, Yoshiaki Goto | (2): 202-210 |
| Accessibility of a Destination-Based Transportation System: A Large Airport Study | SHI Jing, YING Xiwen | (2): 211-219 |
| Multi-Dimensional Traffic Flow Time Series Analysis with Self-Organizing Maps | CHEN Yudong, ZHANG Yi, HU Jianming | (2): 220-228 |
| Topology Optimization for Urban Traffic Sensor Network | HU Jianming, SONG Jingyan, ZHANG Mingchen, et al | (2): 229-236 |
| Driver's Critical Gap Calibration at Urban Roundabouts: A Case Study in China | CHENG Jie, YANG Xinmiao, DENG Wei, et al | (2): 237-242 |
| Intelligent Scheduling of Public Traffic Vehicles Based on a Hybrid Genetic Algorithm | ZHANG Feizhou, CAO Xuejun, YANG Dongkai | (5): 625-631 |
| Trip Generation Model Based on Destination Attractiveness | YAO Liya, GUAN Hongzhi, YAN Hai | (5): 632-635 |
| Longitudinal Acceleration Tracking Control of Low Speed Heavy-Duty Vehicles | WANG Yuejian, BIN Yang, LI Keqiang | (5): 636-643 |
| Optimizing Work Zones for Two-Lane Urban Road Maintenance Projects | HUANG Qian, SHI Jing | (5): 644-650 |

Road Resources Distribution and Evolution Analysis Using a Species Competition Model for Improving Road Equity	YING Xiwen, SHI Jing	(5): 651-659
Prediction Method for Regional Logistics	QIU Ying, LU Huapu, WANG Haiwei	(5): 660-668
Transition from Multiple Macro-Cracking to Multiple Micro-Cracking in Cementitious Composites	ZHANG Jun, LENG Bing	(5): 669-673
Simulation of Emergency Evacuation in Virtual Reality	REN Aizhu, CHEN Chi, LUO Yuan	(5): 674-680
Simplified Beam Design for Semi-Rigid Composite Frames at the Serviceability Limit State	WANG Jingfeng, LI Guoqiang	(5): 681-688
Determinants of Housing Liquidity in Chinese Cities: Does Market Maturity Matter?	WU Jing, ZHENG Siqi	(5): 689-695
Numerical Analysis of Moisture Influential Depth in Concrete During Drying-Wetting Cycles	LI Chunqiu, LI Kefei, CHEN Zhaoyuan	(5): 696-701
Equitable Financial Evaluation Method for Public-Private Partnership Projects	KE Yongjian, LIU Xinping, WANG Shouqing	(5): 702-707
Agent-Based Evacuation Model Incorporating Fire Scene and Building Geometry	TANG Fangqin, REN Aizhu	(5): 708-714
ECONOMICS AND MANAGEMENT SCIENCE		
Mobile Commerce User Acceptance Study in China: A Revised UTAUT Model	MIN Qingfei, JI Shaobo, QU Gang	(3): 257-264
Applying TAM in B2C E-Commerce Research: An Extended Model	QIU Lingyun, LI Dong	(3): 265-272
Review of Relationships Among Variables in TAM	LI Yuanquan, QI Jiayin, SHU Huaying	(3): 273-278
Role of Trust Transfer in E-Commerce Acceptance	YANG Qing, HUANG Lihua, XU Yunjie	(3): 279-286
Empirical Study of Consumers' Purchase Intentions in C2C Electronic Commerce	HE Dehua, LU Yaobin, ZHOU Deyi	(3): 287-292
A Laboratory Experiment for Comparing Effectiveness of Three Types of Online Recommendations	SHI Lin, WANG Kanliang	(3): 293-299
Mobile Technologies Adoption: An Exploratory Case Study	CHU Yan, HUANG Lihua	(3): 300-305
IDT-TAM Integrated Model for IT Adoption	ZHANG Nan, GUO Xunhua, CHEN Guoqing	(3): 306-311
Extending TAM for Online Learning Systems: An Intrinsic Motivation Perspective	ZHANG Sheng, ZHAO Jue, TAN Weiwei	(3): 312-317
Impact of Internal Factors on Information Technology Adoption: An Empirical Investigation of Chinese Firms	WU Chunming, ZHAO Jing, XIA Liang, et al	(3): 318-322
Review of IT/IS Adoption and Decision-Making Behavior in Small Businesses	YANG Xiaoping, FU Jing	(3): 323-328
IT Capability as Moderator Between IT Investment and Firm Performance	LIU Yongmei, LU Hongjian, HU Junhua	(3): 329-336
Absorptive Capacity of Information Technology and Its Conceptual Model	BI Xinhua, YU Cuiling	(3): 337-343
Effect of Incentives on Web-Based Surveys	SU Jie, SHAO Peiji, FANG Jiaming	(3): 344-347
Business Performance, Business Strategy, and Information System Strategic Alignment: An Empirical Study on Chinese Firms	DONG Xiaoying, LIU Qianqian, YIN Dezhi	(3): 348-354
How Chinese Companies Enhance Competitive Advantage Through Enterprise Information System Implementation	MA Xiaofeng, LIU Lu, LI Jing, et al	(3): 355-361
Informization Implementation for Chinese Retailers	ZHU Yan, LI Yan, QIAN Yu, et al	(3): 362-367
Impact of Web Site Functions on E-Business Success in Chinese Wholesale and Retail Industries	TANG Qian, HUANG Jinghua	(3): 368-373
Inter-Organizational Coordination, IT Support, and Environment	QU Gang, JI Shaobo, MIN Qingfei	(3): 374-382

Methodology for Web Services Adoption Based on Technology Adoption Theory and Business Process Analyses	AN Liping, YAN Jianyuan, TONG Lingyun	(3): 383-389
Conceptual Model of IT Infrastructure Capability and Its Empirical Justification	QI Xianfeng, LAN Boxiong, GUO Zhenwei	(3): 390-394
Gap Model for Dual Customer Values	HOU Lun, TANG Xiaowo	(3): 395-399
IT Organizational Transformation, Knowledge Integration, and IT Assimilation: A Case Study	YIN Guopeng, CHEN Yu	(3): 400-407
E-Business Transformation: An Analysis Framework Based on Critical Organizational Dimensions	ZENG Qingfeng, CHEN Wenbo, HUANG Lihua	(3): 408-413
Empirical Study of Distinct Features and Challenges of Joint Development of Information Systems: The Case of ABC Bank	MAO Jiye, SONG Wenmo	(3): 414-419
Bibliometric Analysis of Current Web Survey Research in China	ZHANG Qian, SHAO Peiji, FANG Jiaming	(3): 420-424
Coordination by Option Contracts in a Retailer-Led Supply Chain with Demand Update	WANG Xiaolong, LIU Liwen	(4): 570-580
ENGINEERING PHYSICS		
Fire Spread Model for Old Towns Based on Cellular Automaton	GAO Nan, WENG Wenguo, MA Wei, et al	(5): 736-740
ENVIRONMENTAL SCIENCE AND ENGINEERING		
Ecological Water Requirement Estimates for Typical Areas in the Huaihe Basin	DONG Xin, DU Pengfei, TONG Qingyuan, et al	(2): 243-248
Characterization of Cu(II) Ion Adsorption Behavior of the Polyacrylic Acid-Polyvinylidene Fluoride Blended Polymer	SONG Laizhou, WANG Jibin, ZHENG Qiuyan, et al	(2): 249-256
Potential Ecological Benefits of the Middle Route for the South-North Water Diversion Project	Han-Chu CHEN, DU Pengfei	(5): 715-719
Numerical Simulations of the Transparency of Waterfront Bodies	WANG Hua, PANG Yong, DING Ling, et al	(5): 720-729
INFORMATION SCIENCE AND TECHNOLOGY		
Carrier Frequency Offset Compensation for an Interleaved OFDMA Uplink	FAN Da, CAO Zhigang	(1): 1-8
Direct GPS P-Code Acquisition Method Based on FFT	LI Hong, LU Mingquan, FENG Zhenming	(1): 9-16
Adaptive Hammerstein Predistorter Using the Recursive Prediction Error Method	LI Hui, WANG Desheng, CHEN Zhaowu	(1): 17-22
Simple, High-Performance Fusion Rule for Censored Decisions in Wireless Sensor Networks	LIU Xiangyang, PENG Yingning, WANG Xiutan	(1): 23-29
Improved Minimum Detectable Velocity in Bistatic Space-Based Radar	LI Hua, TANG Jun, PENG Yingning	(1): 30-34
Steady-State Analysis of Target Tracker with Constant Input/Bias Constraint	LIU Yujing, MENG Huadong, WANG Desheng	(1): 35-42
Temperature Dependence of the Spontaneous Brillouin Scattering Spectrum in Microstructure Fiber with Small Core	PI Yanyan, ZHANG Wei, WANG Yin, et al	(1): 43-46
Soft Sensing of Overflow Particle Size Distributions in Hydrocyclones Using a Combined Method	SUN Zhe, WANG Huangang, ZHANG Zengke	(1): 47-53
Efficient Scheme for Optimizing Quantum Fourier Circuits	JIANG Min, ZHANG Zengke, Tzyh-Jong Tarn	(1): 54-58
Computing Nonlinear LTS Estimator Based on a Random Differential Evolution Strategy	YANG Biao, ZHANG Zengke, SUN Zhengshun	(1): 59-64
Dynamic Reconstruction-Based Fuzzy Neural Network Method for Fault Detection in Chaotic System	YANG Hongying, YE Hao, WANG Guizeng	(1): 65-70
Intelligent Scheduling Controller Design for Networked Control Systems Based on Estimation of Distribution Algorithm	LI Hongbo, SUN Zengqi, CHEN Badong, et al	(1): 71-77
Incremental Placement-Based Clock Network Minimization Methodology	ZHOU Qiang, CAI Yici, HUANG Liang, et al	(1): 78-84
Performance Flexibility Architecture of Core Service Platform for Next-Generation Network	YANG Menghui, YANG Weikang, WANG Xiaoge, et al	(1): 85-90

Modeling of Busbars in High Power Neutral Point Clamped Three-Level Inverters	YI Rong, ZHAO Zhengming, ZHONG Yulin	(1): 91-97
Object-Oriented System-on-Network-on-Chip Template and Implementation: H.263 Case Study	MA Liwei, SUN Yihe	(1): 98-105
Fuzzy Programming Models for Vendor Selection Problem in a Supply Chain	WANG Junyan, ZHAO Ruiqing, TANG Wansheng	(1): 106-111
Image and Video Quality Assessment Using Neural Network and SVM	DING Wenrui, TONG Yubing, ZHANG Qishan, et al	(1): 112-116
Dependent-Chance Programming Models for Capital Budgeting in Fuzzy Environments	LIANG Rui, GAO Jinwu	(1): 117-120
Pause or No Pause?—Prosodic Phrase Boundaries Revisited	TSENG Chiu-Yu, CHANG Chun-Hsiang	(4): 500-509
IBM Voice Conversion Systems for 2007 TC-STAR Evaluation	SHUANG Zhiwei, Raimo Bakis, QIN Yong	(4): 510-514
A Synthesis Instance Pruning Approach Based on Virtual Non-uniform Replacements	ZHANG Wei, LING Zhenhua, HU Guoping, et al	(4): 515-521
Advances in SVM-Based System Using GMM Super Vectors for Text-Independent Speaker Verification	ZHAO Jian, DONG Yuan, ZHAO Xianyu, et al	(4): 522-527
Maximum Likelihood <i>A Priori</i> Knowledge Interpolation-Based Handset Mismatch Compensation for Robust Speaker Identification	LIAO Yuanfu, ZHUANG Zhixian, YANG Jyhher	(4): 528-532
Tone-3 Accent Realization in Short Chinese Sentences	CAO Wen, ZHANG Jinsong	(4): 533-539
NICT/ATR Chinese-Japanese-English Speech-to-Speech Translation System	Tohru Shimizu, Yutaka Ashikari, Eiichiro Sumita, et al	(4): 540-544
An Introduction to the Chinese Speech Recognition Front-End of the NICT/ATR Multi-Lingual Speech Translation System	ZHANG Jinsong, Takatoshi Jitsuhiro, Hirofumi Yamamoto, et al	(4): 545-552
Two-Level Cross-Talked Admission Control Mechanism for QoS Guarantee in 802.11e EDCA	NIU Zhisheng, LIU Jing	(6): 741-746
Analysis of Multi-Channel and Slotted Random Multi-Access Protocol with Two-Dimensional Probability for Ad Hoc Network	ZHOU Ningyu, ZHAO Dongfeng, DING Hongwei	(6): 747-753
QoS Support Polling Scheme for Multimedia Traffic in Wireless LAN MAC Protocol	YANG Zhijun, ZHAO Dongfeng	(6): 754-758
Sum Rate and Power Consumption of a Circular-Layout Distributed Antenna System with MMSE Receivers	GAN Jiansong, LI Yunzhou, ZHOU Shidong, et al	(6): 759-768
Multiuser MIMO Downlink Transmission Schemes over Time-Varying Channels	WANG Hongmei, XU Xibin, ZHAO Ming, et al	(6): 769-777
Hybrid Forwarding in Cooperative Communications	PENG Cong, ZHAO Ming, YAO Yan	(6): 778-783
Two-Way Digital Video Transmission over Medium-Voltage Power-Lines Using Time-Domain Synchronous Orthogonal Frequency Division Multiplexing Technology	SONG Jian, WU Qing, PAN Changyong, et al	(6): 784-789
Unfolded Frequency Response and Model of a Multi-Tap Direct Sampling Mixer	PAN Yun, GE Ning, DONG Zaiwang	(6): 790-795
Anti-Jamming with Adaptive Arrays Utilizing Power Inversion Algorithm	MENG Dawei, FENG Zhenming, LU Mingquan	(6): 796-799
Suppressing Autocorrelation Sidelobes of LFM Pulse Trains with Genetic Algorithm	WANG Peng, MENG Huadong, WANG Xiqin	(6): 800-806
Modeling of a Multiple Digital Automatic Gain Control System	WANG Jingdian, LU Xiuhong, ZHANG Li	(6): 807-811
Low Latency High Throughput Circular Asynchronous FIFO	XIAO Yong, ZHOU Runde	(6): 812-816
Fuzzy-Expert Diagnostics for Detecting and Locating Internal Faults in Three Phase Induction Motors	DONG Mingchui, CHEANG Takson, SEKAR Booma Devi, et al	(6): 817-822
Adaptive Under-Frequency Load Shedding	DONG Mingchui, LOU Chinwang, WONG Chikong	(6): 823-828

Robust PCA-Based Abnormal Traffic Flow Pattern Isolation and Loop Detector Fault Detection	JIN Xuexiang, ZHANG Yi, LI Li, et al	(6): 829-835
Register Allocation Algorithm for High-Level Circuit Synthesis for Improved Testability	CHENG Benmao, WANG Hong, YANG Shiyuan, et al	(6): 836-842
Congestion-Driven Multilevel Full-Chip Routing Framework	YAO Hailong, CAI Yici, HONG Xianlong	(6): 843-849
Combination Approach of FEM and Circuit System in IR Drop Analysis and Its Applications	TANG Zhanghong, YUAN Jiansheng	(6): 850-857
MATHEMATICS		
Change-Point Estimates in Longitudinal Binary Data	WU Xiaoru, YANG Ying	(4): 553-559
Dirichlet-Neumann Problem for Unipolar Isentropic Quantum Drift-Diffusion Model	CHEN Li, CHEN Xiuqing	(4): 560-569
MECHANICAL ENGINEERING		
Symmetrical Fundamental Tensors, Differential Operator and Integral Theorems in Differential Geometry	YIN Yajun, WU Jiye, YIN Jie	(2): 121-126
Characterization of Titanium-Containing Compounds in Gray Iron	ZENG Daxin, ZHANG Yuanhao, LIU Jianyong, et al	(2): 127-131
Thermal Stresses in a Cylinder Block Casting Due to Coupled Thermal and Mechanical Effects	XU Yan, KANG Jinwu, HUANG Tianyou, et al	(2): 132-136
Monitoring of Quality of Vermicular Cast Iron from the Front of the Furnace	LI Dayong, SHI Dequan, WANG Lihua	(2): 137-141
Melt Quality Evaluation of Ductile Iron by Pattern Recognition of Thermal Analysis Cooling Curves	LI Zhenhua, LI Yanxiang, ZHOU Rong	(2): 142-146
Effect of Slope Plate Variable and Reheating on the Semi-Solid Structure of Ductile Cast Iron	M. Nili-Ahmadabadi, F. Pahlevani, P. Babaghorbani	(2): 147-151
Optimization of Casting Process for Heat and Abrasion Resistant Large Gray Iron Castings	S. M. Yoo, Y. S. Cho, C. C. Lee, et al	(2): 152-156
Surface Graphite Degeneration in Ductile Iron Castings for Resin Molds	Iulian Riposan, Mihai Hisamera, Stelian Stan, et al	(2): 157-163
Optimization of the Chemical Composition of Cast Iron Used for Casting Ball Bearing Grinding Disks	Aurel Crisan, Sorin Ion Munteanu, Ioan Ciobanu, et al	(2): 164-169
Effects of Carbon Content and Solidification Rate on the Thermal Conductivity of Grey Cast Iron	Daniel Holmgren, Attila Diószegi, Ingvar L. Svensson	(2): 170-176
Chilling Tendency and Chill of Cast Iron	E. Fraś, M. Górny, W. Kapturkiewicz, et al	(2): 177-183
Influence of Prosthetic Sagittal Alignment on Trans-Tibial Amputee Gait and Compensating Pattern: A Case Study	JIA Xiaohong, WANG Rencheng, ZHANG Ming, et al	(5): 581-586
Dynamic Stresses in a Francis Turbine Runner Based on Fluid-Structure Interaction Analysis	XIAO Ruofu, WANG Zhengwei, LUO Yongyao	(5): 587-592
Attitude Determination for MAVs Using a Kalman Filter	LIU Cheng, ZHOU Zhaoying, FU Xu	(5): 593-597
Thermomechanical Behavior in Continuous Bloom Casting with Different Mold Tapers	LUO Xin, CHEN Yong, SHEN Houfa	(5): 598-604
Daubechies Wavelet Meshless Method for 2-D Elastic Problems	LIU Ya'nan, LIU Yinghua, CEN Zhangzhi	(5): 605-608
Dynamic Recrystallization and Grain Growth Behavior of 20SiMn Low Carbon Alloy Steel	DONG Lanfeng, ZHONG Yuexian, MA Qingxian, et al	(5): 609-613
MEMS-Based Low-Cost Flight Control System for Small UAVs	FU Xu, ZHOU Zhaoying, XIONG Wei, et al	(5): 614-618
Influence of Monitoring Method and Control Complexity on Operator Performance in Manually Controlled Spacecraft Rendezvous and Docking	ZHANG Yijing, XU Yongzhong, LI Zhizhong, et al	(5): 619-624