

Content

Part 1

Pedorthic care of the arthritic foot.....	1
<i>Peng Hu</i>	
Development and Biocompatibility evaluation of silk fibroin-based nerve grafts for peripheral nerve regeneration	4
<i>Yumin Yang, Fei Ding, Jian Wu, Xuemei Chen, Jie Liu, Xiaosong Gu</i>	
Synthesis and Gene Transfection Efficiency of PEG-chitosan-PEI copolymers	9
<i>Wei Zhang, Shi-rong Pan, Yu-ting Wen and Xin Luo</i>	
Preparation and physicochemical characteristics of self-assembled nanoparticles of cholesterol succinate modified pullulan conjugates.....	13
<i>Wen-Zhi Yang, Qi-Qing Zhang, Hong-Li Chen, Xue-Ming Li, Qian Jiang, Min-Mao Chen, Fu-Ping Gao, Hui-Zhu Zhang</i>	
Structural investigations of novel triblock cationic copolymer/DNA complexes	18
<i>Yuting Wen, Shirong Pan, Xuan Zhang, Xin Luo, Wei Zhang</i>	
Alginate/hydroxyapatite hydrogel as biodegradable in situ forming scaffold.....	22
<i>Lu Lu, Yusha Qi, Jinhuan Tian and Changren Zhou</i>	
Drug controlled release of novel alginate/poly-L-arginine microcapsules.....	26
<i>Wenguo Wu, Wei Liu, Shibin Wang and Yuangang Liu</i>	
Targeted and Controlled Release of Indomethacin from a Prodrug of Amylose.....	29
<i>Xiang Cai, Liqun Yang, Yifu Huang, Ningfu Peng, Li-Ming Zhang, Qing Wu, Rufu Chen</i>	
In Vitro Study of Alginate/Poly-L-Arginine Microcapsules as a Protein or Anticancer Drug Carrier	32
<i>Qi Lan, Ying Wang, Shibin Wang, Yuangang Liu</i>	
Study of Solanine on Mitochondrion in HepG₂ Cell.....	36
<i>Shiyong Gao, Yubin Ji, Chenfeng Ji, Xiang Zou</i>	
Preparation and Biocompatibility of a Novel Scaffold Made from Small Intestinal Submucosa Powders	40
<i>Juhui Qiu, Guixue Wang and Tao Jiang</i>	

Part 2

Performance Comparison between Two Types of Miniature Axial Flow Pumps for Children.....	44
<i>Ningning Chen, Yu Chang, Bin Gao, Linxi Shi, Ling Li, Xinrui Ma</i>	
Invasive Blood Pressure Monitoring System for Artificial Heart Surgery.....	47
<i>Bin Gao, Linxi Shi, Yu Chang, Xinrui Ma, Ling Li, Ningning Chen</i>	
A Speed Controller Design to a Heart Pump	50
<i>Linxi Shi, Bin Gao, Yu Chang</i>	
A visual prosthesis based on Optic Nerve Stimulation: In vivo Electrophysiological Study in Rabbits.....	54
<i>Liming Li, Mingjie Sun, Pengjia Cao, Changsi Cai, Xinyu Chai, Xiaoliang Li, Panpan Chen, and Qiushi Ren</i>	
A Circuit System Design for Implantable Multi-channel neural stimulator	58
<i>Yan Xi, Qian Du, Hanyan Gong, Nan Tang, Lei Cao, Jinhai Niu, Qiushi Ren</i>	

Implementation of the Natural Heartbeat Synchronize Control for the Undulation Pump Ventricular Assist Device Using the Inflow Pressure	62
<i>I. Saito, T. Chinzai, T. Isoyama, H. Miura, A. Kouno, T. Ono, H. Nakagawa, S. Yamaguchi-Sekine, W. Shi, Y. Inoue, A. Kishi and Y. Abe</i>	
Development of an Auto Calibration Method for the Implantable Blood Pressure Sensor in the Undulation pump ventricular assist device (UPVAD)	66
<i>W. Shi, I. Saito, T. Chinzai, T. Isoyama, H. Miura, A. Kouno, T. Ono, H. Nakagawa, S. Yamaguchi, Y. Inoue, A. Kishi, Y. Abe</i>	
Part 3	
Coating preparation and drug delayed release of dexamethasone-eluting intravascular stents <i>in vitro</i> and <i>in vivo</i>	70
<i>Yongpeng Chen, Guixue Wang, Xianchun Jin, Lailong Luo, Gang Zhang, Laichun Lu</i>	
Part 4	
A Comparative Study on the Expression of Telomerase Reverse Transcriptase in Different Development Stages of Human Epidermal Stem Cells <i>in vitro</i>	73
<i>Dewu Liu, Peixin Huang, Yuangui Mao, Jianping Chen, Wei Lan, Lianqun Wang</i>	
The Location and the Telomerase Expression of the Different Development Stages of Human Skin Epidermal Stem Cells <i>in vivo</i>.....	76
<i>Dewu Liu, Wei Lan, Peixin Huang, Yuangui Mao, Jianping Chen, Lianqun Wang</i>	
Differentiation of the Human Marrow Mesenchymal Stem Cells into Vascular Endothelium-like Cells <i>in vitro</i>	80
<i>Dewu Liu, Xiangrong Zhang, Xiaoliang Li, Zhian Zhang, Guanghua Guo</i>	
Effect of microstructure on the mechanical properties and biology performance of bone tissue scaffolds using selective laser sintering.....	84
<i>Liulan Lin, Jiafeng Zhang, Li Zhao, Aili Tong, Jian Sun and Qingxi Hu</i>	
Fabrication of porous β-TCP scaffolds by combination of rapid prototyping and freeze drying technology	88
<i>Liulan Lin, Shaohua Ju, Lian Cen, Huicun Zhang, Qingxi Hu</i>	
The property of ion current in human amniotic mesenchymal stem cell (hAMSC).....	92
<i>Bo-jiang Liu, Xue Lin, Lian-feng Chen, Quan Fang</i>	
Part 5	
Power density spectra of the velocity waveforms in Artificial heart valves.....	95
<i>A.A. Sakhaeimanesh</i>	
Mechanotransduction of mandibular condylar chondrocytes under pressure	99
<i>Min Zhang, Yong-Jin Chen, Xin Lv, Jing-Jie Wang, Han-Guo Wang</i>	
Effect of femoral tunnel angle on tunnel enlargement in anterior cruciate ligament reconstructions.....	103
<i>Guang-si Shen, You-jia Xu, Hai-bin Zhou, Wen-xin Niu, Xia Guo, Ming Yin, Zu-quan Ding</i>	
Optimization of Anastomotic Configuration in CABG Surgery	107
<i>Y. Sui, B. Ma, A. Qiao</i>	
Nmerical Simulation of Blood Flow in Stented Aneurysm using Lattice Boltzmann Method.....	113
<i>X.J. Zhang, X.Y. Li and F. He</i>	
Improved Experimental System for Analyzing Biomechanical Properties of Iris Tissue	117
<i>Xuefeng Bo, Haiying Quan, Zhicheng Liu</i>	

Effect of Dynamic Stabilization Device Stiffness on Disc Loading under Compression	119
<i>Q.H. Zhang, E.C. Teo</i>	
An AAA-ICT Used to the Single Trial of SEP	123
<i>Y. Wang, Z.X. Xie, Z.F. Wang, H. Liu and Y.H. Liu</i>	
A Finite Element Study of The Response of Thoracolumbar Junction to Accidental Mine Blast Scenario	129
<i>Q.H. Zhang, J.Z. Li, H.N. Serena Tan, E.C. Teo</i>	
Experimental modeling and biomechanical measurement of flatfoot deformity	133
<i>Wenxin Niu, Yunfeng Yang, Yubo Fan, Zuquan Ding, Guangrong Yu</i>	
Numerical Simulation of A Bidirectional Cavopulmonary Anastomosis Connection with Antegrade Pulmonary Blood Flow	139
<i>Qi Sun, Dawei Wan, Jinfen Liu, Yingzheng Liu, Ming Zhu, Haifa Hong, Qian Wang</i>	
Numerical Study on the Changes of the Pressure Waveform in a Large Artery	143
<i>F. He and X.Y. Li</i>	
A Lumped Parameters Dynamic Model for Cerebral Circulation.....	147
<i>Shengzhang Wang</i>	
The Motion Simulation of Human Lower Extremity Based on Dynamics	151
<i>Jin Li, Qiuju Cheng, Hong Liang, Zhuowei Guo</i>	
Design of Active Artificial Knee Joint.....	155
<i>Liang Song, Xitai Wang, Siyuan Gong, Zengguang Shi, Lingling Chen</i>	
Importance of Anterior Mitral Basal Stay Chords for Left Ventricular Outflow Hemodynamics: A Computational Study.....	159
<i>F. Xiong, J.H. Yeo, K.H. Lim, P. Zhang, Y.L. Chua and W.A. Goetz</i>	
A Theoretical Model for Binary Adhesion of Cells in Flows	164
<i>Ying Fang, Yonghua Lao, Quhuan Li, Cheng Zhu, Jianhua Wu</i>	
A New Structure-Activity Relationship of Linear Cationic α-helical Antimicrobial Peptides	167
<i>Li Liu, Ying Fang, Qingsheng Huang, Qiaoling Pan, Jianhua Wu</i>	
Numerical Simulations of Colliding Particle Distribution in Flow Chamber	171
<i>Yonghua Lao, Jiangguo Lin, Ying Fang, Quhuang Li, Cheng Zhu, Jianhua Wu</i>	
Analysing the effect of gas press's little wave in measuring result of velocity of ultra-sound	174
<i>Xiaoning Wang, Mengsun Yu</i>	
A new respiratory training system for astronauts	179
<i>Chunhua Hu, Hongwei Hao, Bozhi Ma, Yuan Yuan, Fangjun Liu, Luming Li</i>	
Computational Simulation for Osteoporosis at the Basic Multicellular Unit Level	182
<i>H. Gong, Y.B. Fan and M. Zhang</i>	

Part 6

Synthesis, Characterization and Cell-uptake of Porphyrin-capped Gold Nanoparticle	186
<i>Lü Feng, Liu Tianjun, Wu Li</i>	
Preparation of nanoparticle of methoxy poly(ethylene glycol)/ poly(ϵ-caprolactone)/ methoxy poly(ethylene glycol) triblock copolymer for drug delivery applications.....	190
<i>N.V. Cuong, C.H. Chen, Y.T. Chen and M.F. Hsieh</i>	
Biological responses of endothelial cells to aligned nanofibers of MWNT/PU by electrospinning	194
<i>Z.Z. Han, H. Kong, J. Meng, C.Y. Wang, S.S. Xie, H.Y. Xu</i>	

Preparation, Characterization and Cellular Biological Impact of Water Soluble Multiwalled Carbon Nanotubes.....	198
<i>J. Meng, M. Yang, L. Song, H. Kong, C.Y. Wang, R. Wang, C. Wang, S.S. Xie, H.Y. Xu</i>	

Hapten-Modified Tumor Vaccines Enhance Lymphocytes' Cytotoxicity Against Human Breast Cancer Cells.....	202
<i>W. Wang, Y. Hu, Z. Sun, J.H. Duan, S.C. Chen and X.-D. Yang</i>	

Part 7

A New Heuristic Weighting Function for FDK-based reconstruction of Cone Beam Tomography	206
<i>Han Zheng, Zikuan Chen, Yan Kang, Jiren Liu</i>	

Elementary Design and Implementation of Liver Treatment Planning System	210
<i>Hong-jian Gao, Shui-cai Wu, Yan-ping Bai and Chun-lan Yang</i>	

Deformation-Based Morphometric study on Blind men's brain structures.....	213
<i>Chunlan Yang, Shuicai Wu, Yanping Bai, Hongjian Gao</i>	

Automated detection of exudates on color fundus image using region merging by k-NN graph.....	216
<i>Wei Lin, Hongzhi Liu, Mantao Xu and Jiwu Zhang</i>	

An Investigation of Interpolation Methods in Rebinning Circular Cone-beam data into Parallel-fan-beam Data.....	221
<i>Feng Han, Nianming Zuo, Jiwu Zhang, Xiaochuan Pan</i>	

A Novel Fast Marching Segmentation Algorithm for Pulmonary Nodules in Chest Radiographs	225
<i>Qiyong Guo, Mantao Xu and Jiwu Zhang</i>	

Approximate algorithms for $2N+1$ sources cone-beam CT along saddle trajectories	229
<i>Yang Lu, Jun Zhao</i>	

Using Fast Marching in Automatic Segmentation of Retinal Blood Vessels	233
<i>Chao Liu, Huihai Lu and Jiwu Zhang</i>	

A Robust Fiber Tracking Method in Diffusion Tensor Imaging.....	237
<i>Lifeng Song, Zikuan Chen and Wei Xing</i>	

Detection of blood vessels in retinal images using improved iterative threshold probing of a matched filter response	241
<i>Yongli Wang, Huihai Lu, Mantao Xu and Jiwu Zhang</i>	

An Auto-Reference, Auto-Correlation and Adaptive Interference Cancellation Theories and Techniques (AAA-ICT) Used to the Single Trial of Slow Cortical Auditory Evoked Potentials	245
<i>Zhengxiang Xie, Hong Li, Zhifang Wang, Ying Wang, Yuhong Liu</i>	

Study on the Algorithm of Surface Reconstruction of Defective Bone Based on Delaunay Triangulation	250
<i>Fei You, Qingxi Hu, Qi Lu and Yuan Yao</i>	

An Anisotropic Diffusion Model for Medical Image Smoothing by Using the Lattice Boltzmann Method	255
<i>Yu Chen, Zhuangzhi Yan and YueHong Qian</i>	

Lung region segmentation based on multi-resolution Active Shape Model.....	260
<i>Chunyan Wang, Shengwen Guo, Jianbo Wu, Qiong Liu, Xiaoming Wu</i>	

A Fast Doppler Ultrasound Simulator Based on RF Beamlines.....	264
<i>Minghui Zhen and Dong C. Liu</i>	

Volumetric Non-rigid Registration via Thin-plate Spline Model	269
<i>F. Babapour, A. Abbaspour, R. Zoroofi, S.H. Akhlaghpoor</i>	

Interactive Display Methods for Ultrasound Strain Imaging	273
<i>Fei Luo and Dong C. Liu</i>	

Adaptive Spatial Processing for Autocorrelation-based Ultrasound Color Flow Imaging	278
<i>Qiang Wang and Dong C. Liu</i>	
Rationalized Gain Compensation for Ultrasound Imaging	282
<i>Mingwang Tang and Dong C. Liu</i>	
Interactive Frequency Compounding to Medical Ultrasound Images.....	286
<i>Xiaoming Zhou and Dong C. Liu</i>	
Study on a novel tumor cell recognition system based on orthogonal image moments	290
<i>Haiping Ren, Aizhen Liu, Ziliang Ping and Dongting Bai</i>	
Deformable Mesh based Motion Tracking for Ultrasound Strain Imaging	293
<i>Zhiqiang Jiang and Dong C. Liu</i>	

Part 8

Development of a noninvasive glucose measurement system based on orthogonal twin polarized lights and its primary experimental investigation.....	298
<i>Hong Wang, Baoming Wu</i>	
Effect of Interface Characteristics of Substrates on Performance of Biosensors Based on Supported Mimetic Biomembranes	302
<i>Shengping Liu, Yongbo Wu, Yunlong Wei</i>	
A Novel Taste Sensor Based on Ion Channels Incorporated in Nano-lipid Bilayer Membranes	306
<i>Qingjun Liu, Jinjiang Yu, Zongbin Liu, Wei Zhang, Ping Wang and Mo Yang</i>	
Micro-Electrode Cell-Based Biosensor Using Electrochemical Impedance Spectroscopy for Cancer Research.....	309
<i>Qingjun Liu, Jinjiang Yu, Hui Yu, Lidan Xiao, Ping Wang and Mo Yang</i>	
Piezoelectric Biosensor Based on Olfactory Receptor Expressed in a Heterologous Cell System for Drug Discovery	313
<i>Chunsheng Wu, Haimin Tan, Hui Yu, Luhang Zhao, Ping Wang</i>	
A Flexible Thin-film Microelectrode for Optic-Nerve Visual Prosthesis.....	317
<i>Xiaohong Sui, Yinghui Li, Yijing Xie, Ting Liang, Wei Chen, Yiliang Lu, Gang Li, Kai Wang, Qiushi Ren</i>	
Study of enzyme biosensor for monitoring carbamate pesticides in seawater	323
<i>Shu-ping Zhang, Lian-gang Shan, Yi Zheng, Lli-yi Shi</i>	

Part 9

Spectral analysis of heart rate variability applied in the exercise of professional shooting athletes	326
<i>J.J. Zhuang, X.L. Huang, X.B. Ning, M. Zou and B. Sun</i>	
Using EMG to Evaluate Muscular Fatigue Induced during Video Display Terminal Keyboard Use Task	329
<i>Haijun Niu, Ran Li, Guanglei Liu, Fang Pu, Deyu Li, Yubo Fan</i>	
The ERP Signal Analysis of Visual Influences on Auditory Intensity Perception	333
<i>R. Cai, Z. Li, Y. Li, Y. Qiu, Y. Zhu, S. Tong</i>	
Dipole Analysis of Eye Movement Artifacts from the EEG	337
<i>Weidong Zhou</i>	
BLDA Approach for Classifying P300 Potential.....	341
<i>Anhu Huang, Weidong Zhou</i>	

A GPRS-based Wrist Type Pulse Wave and Body Temperature Monitor for Children Healthcare.....	344
<i>Yanhui Chen, Junnan Han, Kai Wu, Xiaoming Wu, Jing Zhou</i>	
Design of Physiological Parameter Acquisition and Communication Module Based on CC2430.....	348
<i>Qi Zhao, Kai Wu, Jianbo Wu, Xiaoming Wu</i>	
Improved System of Artificial Heart Valve Detector Based on Windows XP.....	352
<i>Cheng Lu, Xiaogang Hu, Xi Zhang, Jianyu Wang, Shuo Wang</i>	
Wireless monitoring system via ZigBee in ICUs.....	357
<i>Shaojie Lin, Qiong Liu, Xiaoming Wu, Shanglin Li and Zhicong Zhao</i>	
Largest Lyapunov index of EHRV for analyzing status of cardiovascular system.....	361
<i>Xia Li, Tianliang Kang, Jinghua Liu, Xin Tian</i>	
Wavelet transform for on-off switching BCI device.....	363
<i>C.S. Li and H. Wang</i>	
Optimization of the Coil to Focalize the Electrical Field Induced by Magnetic Stimulation in the Human Brain.....	366
<i>Lina Pu, Tao Yin, Hao An, Song Li, Zhipeng Liu</i>	
A miniature telemetric system base on chip nRF24E1for recording EEG activity in freely moving rat.....	373
<i>Zhanping Wang, Chong Luo, Chunpeng Zhang, Yang Xia</i>	
Spatial Sensitivity of NIRS Tissue Oxygenation Measurement using a Simplified Instrument.....	377
<i>R. Liu, X. Liu, F. Scopesi, G. Serra, J.W. Sun, P. Rolfe</i>	
Adaptive Liver Segmentation from Multi-slice CT Scans.....	381
<i>J. Liu, Q. Hu, Z. Chen and P. Heng</i>	
Investigation of multifunctional cell physiological analysis instrument based on integrated chip.....	385
<i>Hua Cai, Shi Zhu, Hui Yu, Lidan Xiao, Zhaoying Hu, Wei Zhang, Ping Wang</i>	
AMS Based Spectrum Subtraction Algorithm with Confidence Interval Test.....	389
<i>Xin Ma, Weidong Zhou</i>	
System of magnetic coupled PPM transcutaneous wireless communication.....	392
<i>Weiming Wang, Bozhi Ma, Hongwei Hao, Luming Li</i>	
SPME-GC analysis of alkanes and aromatic hydrocarbons in human breath to screen lung cancer.....	396
<i>Hao Yu, Ping Wang</i>	
Application of Independent Component Analysis on Artifacts Removal in the Time-Frequency Analysis of Transient Evoked Otoacoustic Emissions.....	399
<i>Ying Zhao, Liang Dong, Qiushi Ren, Xinyu Chai</i>	
Based on the FPIA of high-throughput gene and protein detection analysis system.....	404
<i>Ni Yuan, Ju Zhang, Lihong Yang, Yanhai Guo, Zhili Chen, Guoshao Chen</i>	
Thresholding-based Wavelet Packet Methods for Doppler Ultrasound Signal Denoising.....	408
<i>Jiangfeng Yu, Dong C. Liu</i>	
Physiological Monitoring in the Ventilated Neonate: A Rationale.....	413
<i>P. Rolfe, F. Scopesi, J.W. Sun, G. Serra</i>	
Research on Multi-Parameter Physiological Monitor Based on CAN Bus.....	417
<i>Le Yang, Peng Yang, Aiying Tian, Xin Guo</i>	
The Study of C0 Complexity on Epileptic Absence Seizure.....	420
<i>Yi Zhou, Lingli Xie, Gaohang Yu, Fang Liu, Yi Zhao, Yu Huang</i>	

Research of Virtual Nerve Induce Electrical Signal Auto-check Technology	426
<i>Min Wu, Zhi-hui Wei, Li-ming Tang, Yu-bao Sun, Tie-bing Liu</i>	
Development of Implantable Neuro-Stimulator Used for Brain and Nerve Stimulation	430
<i>L.M. Li, H.W. Hao, B.Z. Ma, X.W. Wen, F.J. Liu, C.H. Hu</i>	

Part 11

3D Vessel Tree Reconstruction from Rotational C-arm Projections by Multi-view Stereo Reconstruction	434
<i>Wei Zhang, Zikuan Chen and Xuefeng Zhang</i>	
Implementation of Convolution/Superposition Model of Photon Dose Calculation	442
<i>Jiandong Li, Tie Zhang</i>	
Quality assurance of helical tomotherapy intensity modulated radiation therapy	447
<i>Shouping Xu, Xiaowu Deng, Xiangkun Dai, Lianyuan Wang, Yunlai Wang, Chuanbin Xie, Ruigang Ge, Hanshun Gong</i>	
Electron spectrum reconstruction as nonlinear programming model using micro-adjusting algorithm	451
<i>Gui Li, Aidong Wu, Hui Lin, Yican Wu</i>	

Part 12

Effect of EMP on Superoxide Dismutase and Malondialdehyde in K562 cells	455
<i>Xue-Jun Xie, Gui-Ying Zeng, Yao Guo, Guo-Zheng Guo, Li-Hua Zeng, Dong-Qing Ren</i>	
Hsps expression in three human glioma cell lines after radio-frequency field exposure	458
<i>G.R. Ding, X.W. Wang, K.C. Li, J. Miyakoshi and G.Z. Guo</i>	
Effects of Electromagnetic Pulses on the Rat Testis	461
<i>Lihua Zeng, Chang-xu Zou, Jie Zhang, Xiao-Wu Wang, Dong-Qin Ren, Yu-Rong Li, Guo-zhen Guo</i>	
Effect of EMP on lipid peroxidation of human gastric cancer cells MKN28	466
<i>Yongbin Chen, Guozhen Guo</i>	
Effects of electromagnetic pulse on the vimentin of mice testes	469
<i>Xiao-Wu Wang, Chang-Hong Shi, Gui-Rong Ding, Tao Zhao, Li-Hua Zeng, Jie Zhang, Xue-Jun Xie, Guo-Zhen Guo</i>	
Study on behavior of male rat 3 months after electromagnetic pulse irradiation.....	473
<i>Yu-Hong Qi, Dong-Qing Ren, Xiao-Ming Su, Li Zhang, Kai-Dong Liu, Guo-Zhen Guo</i>	

Part 13

Research of Environmental Control systems for Disabled people	476
<i>Chunjing Tao, Xiaoyu Zhang and Xitai Wang</i>	
The reference research of exercise therapy of residual limb in post-operative of lower limb amputation.....	480
<i>Xiaoyu Zhang, Qidong Liu, Chunjing Tao and Huiru Gu</i>	
Analysis of Emotional Expression of Finger Braille	484
<i>Y. Matsuda, I. Sakuma, Y. Jimbo, E. Kobayashi, T. Arafune and T. Isomura</i>	
A Research on EMG Signal and Plantar Pressure Information for AK Prosthetic Control	488
<i>Tengyu Zhang, Peng Yang, Qidong Liu, Lingling Chen and Jie Liu</i>	
Pixelized Images Recognition in Simulated Prosthetic Vision	492
<i>Ying Zhao, Yukun Tian, Huwei Liu, Qiushi Ren, Xinyu Chai</i>	

Artificial Horse for Rehabilitation	497
<i>C.Y. Li, H.T. Gao, Y.B. Ma, C. Liu and H. Wang</i>	
Effect of Shank Curve of High-heeled Shoe on the Plantar Pressure Distribution.....	500
<i>Y. Cong, Y. Luximon and M. Zhang</i>	

Part 14

Effects of Qinglongyi Polysaccharide on complex biochemisty function with the core of Band 3 on Erythrocyte	503
<i>Chenfeng Ji, Yubin Ji, Xiang Zou, Feng Xiao</i>	
Studies on Effect of Saponins of Asparagus on Tumor Cell Apoptosis and its Mechanisms of Action.....	507
<i>Yu-Bin Ji, Lei Yu, Lang Lang, Chen-Feng Ji</i>	
Effects of electric pulses on apoptosis induction and mitochondrial transmembrane potential of cancer cells.....	511
<i>Fang-Yi Jiang, Li-Ling Tang, Chao Zeng, Huan Liu, Ke-Dao Liang, Yan Mi, Cai-Xin Sun</i>	
Preparation and Release Efficiency of Poly (lactic-co-glycolic) Acid Nanoparticles for Drug Loaded Paclitaxel	514
<i>You Ling, Yueshan Huang</i>	
Effects of Paclitaxel on human lung cancer cell lines in vitro and in vivo	518
<i>Lihua Zeng, Changxu Zou, Xuejun Xie, S. Kizaka-Kondoh, M. Hiraoka, GuoZhen Guo</i>	
Magnetoviscous Effect of Magnetic Fluid Targeting Drug Delivery System.....	524
<i>Dong Cao, Jun Yi, Hui Cao, Wei Liu, Shi Ying Yuan</i>	
Effects of Asparagus Polysaccharide on GPA and Band 3 from Erythrocyte Membrane of S₁₈₀ Mice	528
<i>Yubin Ji, Chenfeng Ji, Xuejun Chen</i>	
Study on S180 Tumor Mice Erythrocyte Membrane Function of Sargassum Fusiform Polysaccharides.....	531
<i>Yubin Ji, Chenfeng Ji, Chong Wang</i>	

Part 15

Enhancement of Liposome Delivery Efficiency Via Cell Membrane Permeability by ultrasound exposure	534
<i>Fang Yang, Ning Gu, Di Chen, Junru Wu, Xiaoyu Xi, Dong Zhang</i>	
Numerical Analysis of a Deformable Model for Ultrasound Border Detection	537
<i>Xiaoyan Liao and Dong C. Liu</i>	
Noninvasive Temperature Estimation Using B-Scan Image For Thermal Therapy	542
<i>Wei Li, Tao Kan, Xiangling Xiao, Jinghai Niu</i>	
The design of noninvasive temperature measure system and software	546
<i>Kan Tao, Wei Li, Xianglin Xiao and Jinghai Niu</i>	
Doppler US Nutrient Artery Waveform Change in Assessment of Non-pregnant Uterus Response to Oxytocin	551
<i>Li-qun Sun, Jian-zhong Zou, Wen-zhi Chen, Zhi-biao Wang</i>	
The Effects of Acoustic Interface Layer on Biological Focal Region By High Intensity Focused Ultrasound	555
<i>Quanyi Li, Liyuan Fu, Faqi Li</i>	

Part 16

Certification of Biomedical Engineering Technicians and Clinical Engineers: Important or Not.....	558
<i>James O. Wear</i>	

Part 17

- The Computer Model in View of Hemodynamic Effects of Electro Ventilation Double Pump CPR..... 562**
Xiaoming Wu, Yanru Zhang, Lin Xu, Hengxin Yuan

Part 18

- The research of the community healthcare network based on ZigBee technology 567**
Jihong Chai, Hongli Yang
- A Design of Mobile Monitoring System Based on Tradition Chinese Medicine 571**
Zhicong Zhao, Qiong Liu, Xiaoming Wu, Shaojie Lin and Jumei Zhang
- A ZigBee-based wearable Cardio-Pulmonary Monitor for Mobile Health Care..... 574**
Junnan Han, Yanhui Chen, Dongsheng Xiong, Xiaoming Wu
- Development of telemonitoring system for PCG by telephone transmission..... 577**
Dong Wang, Xingming Guo, Shouzhong Xiao and Ming Ke
- Research in Development on Wireless Health Care of Infants..... 580**
Lili Zhang, Li Lao, Kai Wu, Qiong Liu and Xiaoming Wu
- The research of medical services sharing platform base on semantic web services..... 584**
Yuan Yao, Hai Wang, Qing-xi Hu, Gao-chun Xu, Di Wu
- HealthED: An Opened Integrate Healthcare IT Architecture 588**
Y. Yao, Q. Wang, Z. Sun and Q.X. Hu

Part 19

- Study of the Ballistocardiogram signal in non-contact life detection system based on radar 594**
Jianqi Wang, Guohua Lu, Xijing Jing, Yang Zhang, Hao Lv
- Research and application of physical protection technology and equipment against biological contamination
in mainland of China 598**
Z. Wang, J.Q. Yang, J.C. Qi, Y.D. Wang, S.Q. Chen, S. Xia
- PI3K-Mediated Epithelial Sodium Channel Activity by Regulating the Apical Membrane Morphology
of Renal Epithelial Cells..... 603**
YanJun Zhang, Liying Ma, Bo Xu, J. Gorelik, D. Klenerman, M. Lab, C. Edwards, Y. Korchev
- A Novel Method of Prokaryotic Promoter Regions Prediction with Feature Selection: Quadratic Discriminant
Analysis Approach..... 608**
Yaohua Du, Taihu Wu
- The vitro and vivo study of Poly (3-hydroxybutyrate) microspheres 615**
Feng Tian, Yong-Liang Zhao, Chang-Jun Liu, Fan Li, Nan Xing

Part 20

- Designing “Diagnostic ultrasound device” course in high-vocation education of BME..... 623**
Hao Yu, Rong Song, Quan Su, Hongli Yang, Jun Han, Jihong Chai, Qingping Zhang
- ECG-Analyzing Experimental System Based on Virtual Instrument..... 626**
Jun Han, Hao Yu, Hongli Yang

Undergraduate Education on Biomedical Engineering of Comprehensive University in China.....	629
<i>Xiaohong Weng</i>	
Bioinformatics Education in Medical College.....	633
<i>Xiaolin Yang, Zhengguo Zhang</i>	
Exploring Teaching Methods on Biomedical Courses in Engineering Universities.....	636
<i>Zhuowei Guo, Jin Li, Hong Liang, Guang Tang, Keshen Li, Liwei Zhang, Kuan Luan, Liang Guo</i>	
Build a Characteristic Specialty to Cultivate Persons with Ability in Biomedical Engineering.....	639
<i>Ling Li, Huafu Chen and Nini Rao</i>	
Integrated Training Model on Biomedical Engineering Undergraduates' Innovation Ability	641
<i>Ting Liu, Xin Tian</i>	
Biomedical Engineering Characteristics of Training Model of Education and Training Programme of Reform and Practice	645
<i>Xu Zhang, Zhicheng Liu, Yalin Ye, Xiaopeng Han, Anyu Chen</i>	
Prosthetics and Orthotics Engineering Professionals Training Mode and Curriculum Research and Development	648
<i>Zhicheng Liu, Xu Zhang, Yalin Ye, Anyu Chen, Xueqian Guo</i>	
 Part 22	
The Effect of Acupuncture at Point Neiguan on the Pulse Picture for Patients with Arrhythmia.....	651
<i>Jialiang Chen, Tao Wang and Yuebo Wu</i>	
Primary Study on the Parameters and Methods to Evaluate Needling Sensation and Maneuvers in Acupuncture	655
<i>Ying Li, Yu Zhang, Zhipeng Liu, Tao Yin</i>	
Development of Implantable stimulating system used for electroacupuncture	660
<i>C.S. Niu, Y. Yu, H.W. Hao and L.M. Li</i>	
Study of Acupuncture Manipulation Parameter Based on Data Mining Technique.....	663
<i>Yin-e Hu, Hua-yuan Yang</i>	
A fMRI Study on Electroacupuncture Intervening Heroin Abstainers' Cognitive Attention	668
<i>Ping Xu, Yingping Jiang, Daoying Geng, Yan Wang, Guanghua Lu</i>	
Effects of Acupuncture On Mitochondria of Muscle Cell In Rats of Acute Swimming Exercise.....	678
<i>Ming Gao, Huayuan Yang, Tangyi Liu, Le Kuai</i>	
Determination of Indirect Moxibustion's Temperature and Research on Thermal Conduction Model	681
<i>Huayuan Yang, Hu Yine, Zhuicheng Hu</i>	
Quantitative Analysis of Different Consciousness Process Based on Multi-index Dynamic BEAM Technology	685
<i>Yihe Zhang, Chi Chen, Yafei Liu and Jianfen Xu</i>	
Study of the urinary metabolite profile associated with osteoarthritis and the correlation with its TCM syndromes.....	691
<i>Li-Xi Chu, Song-Bin Yang, Wei Jia, Yun-Ping Qiu, Ming-Ming Su</i>	
Research on the Cun-Guan-Chi Pulse Detecting System	697
<i>Wei-chang Tang, Cong-ying Liu, Yu-ping Zhao</i>	
Traditional Chinese Medical Informatics and Virtual Body	700
<i>Shi Cheng, ChangYue Li, Shiqi Fang</i>	

Study on Brain FMRI of the Mechanism of Tuina Analgesia	703
<i>Zhengyu Li, Xiwen Sun and Juntao Yan</i>	
Qualitative Frequency Response Calibration of Sonocardiography System to Sense Wrist Pulse	707
<i>Yih-Nen Jeng and Shang-Yin Lee</i>	
The Effect of Electric Acupuncture on the Retinal Ganglion Cells in Rabbits with Acute High Intraocular Pressure.....	711
<i>Wenxin Zhou, Jingying Yang, Yong Xia, Hongwei Wang, Genying Guo, Jing Zhang</i>	
Quantitative Research on Analgesic Effects of Electroacupuncture at Multiple Factors Parameters in Rats of Adjuvant-Induced Arthritis	715
<i>Le Kuai, Huayuan Yang, Jie Jiang</i>	
 Part 23	
Computer-Aided analyzing system in root canal therapy	720
<i>Hu Qingxi, Song Chenxia, Yao Yuan, Lu Qi</i>	
The Research of an Optimized Boolean Operation Algorithm for Skull Defect Mending.....	725
<i>Yuan Yao, Fu Wu, Qing-xi Hu, Gao-chun Xu, Fei You</i>	
Study on the Application of Rapid Prototyping in Assistant Surgical Planning.....	729
<i>Di Wu, Qingxi Hu, Qi Lu, Gaochun Xu</i>	
Augmented Reality Interactive Interface for Defective Bone Repair System	733
<i>Yuan Yao, Xiu-xiang Pang, Qi Lu, Qing-xi Hu</i>	
Computer Aided Analysis in Maxillary Sinus Surgery	737
<i>Qing-xi Hu, Qin Xu, Yuan Yao, Qi Lu, Yuan-zhi Xu, Jiao-jiao Wang, Qi-xiang Yang</i>	
MRI Compatible Rigid-flexible Outer Sheath Device Using Pneumatic Locking Mechanism for Endoscopic Treatment	741
<i>Siyang Zuo, N. Ymanaka, K. Masamune, H. Liao, K. Matsumiya, T. Dohi</i>	
Development of interactive three-dimensional autostereoscopic image for surgical navigation system using Integral Videography	745
<i>Tran Huy Hoang, Hongen Liao, K. Matsumiya, K. Masamune, T. Dohi</i>	
Distortion Correction of Wedge Prism 3D Endoscopic Images.....	750
<i>Y. Takata, T. Torigoe, E. Kobayashi, I. Sakuma</i>	
Intraoperative Local Demarcation System of Brain Tumor Based on 5-Aminolaevulinic Acid Induced Porphyrin Fluorescence	754
<i>T. Ando, M. Noguch, K. Shimaya, K. Wang, E. Kobayashi, H. Liao, T. Maruyama, Y. Mulagaki, H. Iseki and I. Sakuma</i>	
Author Index.....	759
Subject Index	765