

# **Journal of Medical and Biological Engineering**

## **Index Vol. 27 No. 1~Vol. 29 No. 4**

### **2009**

[Vol 29, No 4 \(2009\)](#)

[Vol 29, No 3 \(2009\)](#)

[Vol 29, No 2 \(2009\)](#)

[Vol 29, No 1 \(2009\)](#)

### **2008**

[Vol 28, No 4 \(2008\)](#)

[Vol 28, No 3 \(2008\)](#)

[Vol 28, No 2 \(2008\)](#)

[Vol 28, No 1 \(2008\)](#)

### **2007**

[Vol 27, No 4 \(2007\)](#)

[Vol 27, No 3 \(2007\)](#)

[Vol 27, No 2 \(2007\)](#)

[Vol 27, No 1 \(2007\)](#)

# Journal of Medical and Biological Engineering

## Special Issue on Sports and Exercise Science

Volume 29, No. 4

February 2009

### CONTENTS

<b>A Case Study of Integrated Sport Sciences for an Olympic Archer</b>	<b>164</b>
<i>Tsung-Min Hung, Wen-Tzu Tang, Tzyy-Yuang Shiang</i>	<a href="#">PDF</a>
<b>Effects of Different Footwear on the Metatarsophalangeal Joint during Push-off in Critical Badminton Footwork</b>	<b>172</b>
<i>Yong Wei, Yu Liu, Minlu Tian, Weijie Fu</i>	<a href="#">PDF</a>
<b>Kinematics and Kinetics of Knee and Hip Position of Female Basketball Players during Side-step Cutting with and without Dribbling</b>	<b>178</b>
<i>Ming-Sheng Chan, Chen-Fu Huang, Jia-Hao Chang, Thomas W. Kernozek</i>	<a href="#">PDF</a>
<b>Three Dimensional Analysis of Knee Biomechanics when Landing on Natural Turf and Football Turf</b>	<b>184</b>
<i>Philippa L. Jones, David G. Kerwin, Gareth Irwin, Len D. M. Nokes</i>	<a href="#">PDF</a>
<b>Modulation of Dendritic Cells and NKT Cells by Excessive Exercise in Rats</b>	<b>190</b>
<i>Wang Ru, Chen Peijie</i>	<a href="#">PDF</a>
<b>Effects of 8-week Static Stretch and PNF Training on the Angle-torque Relationship</b>	<b>196</b>
<i>Che-Hsiu Chen, Trevor C. Chen, Hsin-Lian Chen, Ming-Ju Lin, Chang-Jun Wu, Kuo-Wei Tseng</i>	<a href="#">PDF</a>
<b>Research on First Heart Sound and Second Heart Sound Amplitude Variability and Reversal Phenomenon--A New Finding in Athletic Heart Study</b>	<b>202</b>
<i>Wen-Zhu Wu, Xing-Ming Guo, Mei-Lan Xie, Zi-Fu Xiao, Yong Yang, Shou-Zhong Xiao</i>	<a href="#">PDF</a>
<b>Technical Note</b>	
<b>Analyses of Polyurethane Softballs on Variable Humidity Conditions</b>	<b>206</b>
<i>Tsung-Han Liu, Yi-Cheng Chen, Ching-Hui Hsieh, Richard-William Smith</i>	<a href="#">PDF</a>

[Back to Menu](#)

# Journal of Medical and Biological Engineering

Volume 29, No. 3

February 2009

## CONTENTS

- Biomechanical Comparison of A New Stemless Hip Prosthesis with Different Shapes—A Finite Element Analysis** 108  
*Tain-Hsiung Chen, Chen-Yu Lung, Cheng-Kung Cheng* [PDF](#)
- A Multi-stage Recognition System to Detect Different Types of Abnormality in Capsule Endoscope Images** 114  
*Shaou-Gang Miaou, Feng-Ling Chang, Ivanna K. Timotius, Han-Chang Huang, Jenn-Lung Su, Rung-Sheng Liao, Tah-Yeong Lin* [PDF](#)
- Feature Extraction in Digital Fundus Images** 122  
*Giri Babu Kande, P. Venkata Subbaiah, T. Satya Savithri* [PDF](#)
- Pulse Rate Derivation and Its Correlation with Heart Rate** 132  
*Kang-Ming Chang, Keng-Ming Chang* [PDF](#)
- Design and Feasibility Study of Instrumented Shoes for Level Walking and Stair Ambulation** 138  
*Hsieh-Ching Chen, Yu-Ming Chen, Chia-Ling Chen, Yung-Ping Liu, Jye Lee* [PDF](#)
- Chirp Excitation with Third Harmonic Transmit Phasing for SNR Improvement of Tissue Harmonic Generation** 146  
*Che-Chou Shen, Yi-Yuan Chiu* [PDF](#)
- An ATD Neck Model Based on Multi-body Dynamics Subjected to Rear Impact** 152  
*Tsai-Jeon Huang, Jun-Tai Wu* [PDF](#)
- Study of a Novel Knee Training System with Computer Vision Technology** 158  
*Chern-Sheng Lin, Kun-Cheng Li, Chia-Chang Chang, Yih-Chih Chiou, Hung-Jung Shei, Wei-Lung Chen* [PDF](#)

[Back to Menu](#)

# Journal of Medical and Biological Engineering

## Special Issue on Cells and Materials: Focus on Tissue Engineering

Volume 29, No. 2

February 2009

### CONTENTS

- Evaluation of Human Bone Marrow Mesenchymal Stem Cells Seeded into Composite Scaffolds and Cultured in a Dynamic Culture System for Neocartilage Regeneration *in vitro*** 52  
*Shu Wen Whu, Ching-Lin Tsai, Shan-hui Hsu* [PDF](#)
- Novel Wound Dressing of Non-woven Fabric Coated with Genipin-crosslinked Chitosan and Bletilla Striata Herbal Extract** 60  
*Bai-Shuan Liu, Tsung-Bin Huang, Chun-Hsu Yao, Shr-Shin Fang, Chen-Jung Chang* [PDF](#)
- Influences of Nano-sized Type I Collagen Molecules on Hepatocyte Cultures** 68  
*Cheng-Wen Lan, Ioannis Manousakas, Shwu-Jen Chang, Shyh-Ming Kuo, Meng-Heng Lai, Chun-Shien Wu* [PDF](#)
- Effects of Asymmetric Polycaprolactone Discs on Co-culture Nerve Conduit Model** 76  
*Chun-Mei Lu, Chen-Jung Chang, Cheng-Ming Tang, Hsi-Chen Lin, Shu-Chih Hsieh, Bai-Shuan Liu, Wen-Cheng Huang* [PDF](#)
- Controlling Biological Interactions with Surface Entrapment-modified Polyurethane** 84  
*Anand P. Khandwekar, Deepak P. Patil, Yogesh S. Shouche, Mukesh Doble* [PDF](#)
- Characterizing Microporous PCL Matrices for Application of Tissue Engineering** 92  
*Chih-Chang Yeh, Yun-Ting Li, Pei Hsiu Chiang, Chun-Hao Huang, Yiwei Wang, Hsin-I Chang* [PDF](#)
- Fabrication and Cell Affinity of Poly(vinyl alcohol) Nanofibers via Electrospinning** 98  
*Yu-Hsun Nien, Zheng-Bao Chen, Jen-I Liang, Ming-Long Yeh, Horng-Chaung Hsu, Fong-Chin Su* [PDF](#)
- Preparation and Biocompatibility of Polyvinyl Alcohol–Small Intestinal Submucosa Hydrogel Membranes** 102  
*Tao Jiang, Guixue Wang, Juhui Qiu, Lailong Luo, Guoquan Zhang* [PDF](#)

[Back to Menu](#)

# Journal of Medical and Biological Engineering

Volume 29, No. 1

February 2009

## CONTENTS

<b>Constructing Neuronal Structure from 3D Confocal Microscopic Images</b>	<b>1</b>
<i>Ping-Chang Lee, Hsiu-Ming Chang, Chih-Yang Lin, Ann-Shyn Chiang, Yu-Tai Ching</i>	<a href="#">PDF</a>
<b>A New Multi-direction Tester for Evaluation of the Spinal Biomechanics</b>	<b>7</b>
<i>Ti-Sheng Chang, Ching-Wei Cheng, Chien-Shiung Wang, Hung-Yi Chen, Jia-Hao Chang</i>	<a href="#">PDF</a>
<b>Far Infrared Ray Irradiation Induces Intracellular Generation of Nitric Oxide in Breast Cancer Cells</b>	<b>15</b>
<i>Ting-Kai Leung, Chi-Ming Lee, Ming-Yu Lin, Yuan-Soon Ho, Ching-Shyang Chen, Chih-Hsiung Wu, Yung-Sheng Lin</i>	<a href="#">PDF</a>
<b>Effects of Shades and Ceramic Thickness on Color Masking of One Machinable Feldspathic Ceramic</b>	<b>19</b>
<i>Hai Feng Xie, Feimin Zhang, Chen Chen, Yang Xia</i>	<a href="#">PDF</a>
<b>Identification of Cardiac Dysfunction Using a Normalized Spectrum of Oscillometric Pulses</b>	<b>25</b>
<i>Shih-Fang Huang, Yuan-Ching Kuo, Liang-Hsiung Huang</i>	<a href="#">PDF</a>
<b>Effect of Drying Method on the Characteristics of Genipin Cross-linked Gelatin Films</b>	<b>29</b>
<i>Bai-Shuan Liu, Chun-Hsu Yao, Walter Wang, Sanboh Lee, Chun-Chiang Lo, Chien-Kuo Liu, Yueh-Sheng Chen</i>	<a href="#">PDF</a>
<b>Intuitive GA and Lyapunov to Promote Molecular Docking Efficiency for Drug Design</b>	<b>39</b>
<i>Wen-Tsai Sung</i>	<a href="#">PDF</a>
<b>Technical Note</b>	
<b>A Physiological Signal Monitoring System Based on an SoC Platform and Wireless Network Technologies in Homecare Technology</b>	<b>47</b>
<i>Jzau-Sheng Lin, Shi-Yuang Huang, Kuo-Wen Pan, Shao-Han Liu</i>	<a href="#">PDF</a>

[Back to Menu](#)

# Journal of Medical and Biological Engineering

Volume 28, No. 4

December 2008

## CONTENTS

- A Preliminary Attempt to Understand Compatibility of Photoplethysmographic Pulse Rate Variability with Electrocardiogramic Heart Rate Variability** 173  
*Ping Shi, Sijung Hu, Yisheng Zhu* [PDF](#)
- Evaluation of Ultra-thin Acid-etched Titanium Foils as Guided Tissue Regeneration Membrane** 181  
*Bai-Shuan Liu, Tsung-Bin Huang, Chen-Jung Chang, An-Yu Tai* [PDF](#)
- In Vitro* Estimation of Glenohumeral Joint Center of Rotation** 191  
*Jia-Hao Chang, Ar-Tyan Hsu, Guan-Liang Chang* [PDF](#)
- Noise Effect on the Performance of Nakagami Image in Ultrasound Tissue Characterization** 197  
*Po-Hsiang Tsui, Chih-Kuang Yeh, Chien-Cheng Chang* [PDF](#)
- An *in-vitro* Experiment on Lysing Adipose Tissue by Shock Waves** 203  
*Shen-Min Liang, Chun-Neng Yeh, Jing-Jou Yan, Long-Ray Wan, Jing-Wei Lee* [PDF](#)
- A Modified Geometric-based Active Contour Model for Lung Segmentation in Magnetic Resonance Images** 211  
*Alireza Osareh, Bitu Shadgar* [PDF](#)
- Reconstructed Volume Loss on Cone-beam Computed Tomography Images of Moving Targets** 223  
*Hsiao-Ling Chao, Wei-Li Chen, Chih-Chung Hu, Jian-Kuen Wu, Jason Chia-Hsien Cheng* [PDF](#)
- Technical Note**
- Heart Rate Extraction from Photoplethysmogram Waveform Using Wavelet Multi-resolution Analysis** 229  
*Tsu-Hsun Fu, Shing-Hong Liu, Kuo-Tai Tang* [PDF](#)

[Back to Menu](#)

# Journal of Medical and Biological Engineering

## Special Issue on Brain Informatics

Volume 28, No. 3

September 2008

### CONTENTS

<b>Measurement of Diffusion Fractional Anisotropy with T2 Contrast to Reduce Noise</b>	111
<i>Jiun-Jie Wang, Hsiang-Yang Ma, Yau-Yau Wai, Yung-Liang Wan, Tzuu-Kang Chyi</i>	<a href="#">PDF</a>
<b>Nonlinear Registration Based on the Approximation of Radial Basis Function Coefficients</b>	119
<i>Jia-Xiu Liu, Yong-Sheng Chen, Li-Fen Chen</i>	<a href="#">PDF</a>
<b>Quantitative Evaluation of Brain Magnetic Resonance Images Using Voxel-based Morphometry and Bayesian Theorem for Patients with Bipolar Disorder</b>	127
<i>Yong-Sheng Chen, Li-Fen Chen, Ya-Ting Chang, Yung-Tien Huang, Tung-Ping Su, Jen-Chuen Hsieh</i>	<a href="#">PDF</a>
<b>Sensory Modulation in Cingulate Motor Area by Tonic Muscle Pain: A Pilot Study</b>	135
<i>David M. Niddam, Jen-Chuen Hsieh</i>	<a href="#">PDF</a>
<b>Peri-tumoral Fractional Anisotropy Mapping as a Prognosticator and Treatment Guidance of Brain Tumors: A Feasibility Study</b>	139
<i>Ching-Po Lin, Wan-Yuo Guo, Kun-Hsien Chou, Ming-Teh Chen, Min-Hsiung Chen, Yu-Shu Yen, Yi-Ping Chao, Donald Ming-Tak Ho</i>	<a href="#">PDF</a>
<b>Using Independent Component Analysis to Detect Active Regions in Brain fMRI for Tactile Stimulation</b>	147
<i>Chung-I Huang, Yu-Ping Huang, Chou-Ching Lin, Yung-Nien Sun</i>	<a href="#">PDF</a>
<b>ICA-based Analysis of Movement-related Modulation on Beta Activity of Single-trial MEG Measurement Using Spatial and Temporal Templates</b>	155
<i>Chi-Hsun Wu, Po-Lei Lee, Yu-Te Wu, Jen-Chuen Hsieh</i>	<a href="#">PDF</a>
<b>Enhancement of Signal-to-noise Ratio of Peroneal Somatosensory Evoked Potential Using Independent Component Analysis and Time-frequency Template</b>	161
<i>Chih-I Hung, Yea-Ru Yang, Ray-Yau Wang, Wen-Ling Chou, Jen-Chuen Hsieh, Yu-Te Wu</i>	<a href="#">PDF</a>
<b>Designing a Brain-computer Interface Device for Neurofeedback Using Virtual Environments</b>	167
<i>Nan Yan, Jue Wang, Mingyu Liu, Liang Zong, Yongfeng Jiao, Jing Yue, Ye Lv, Qin Yang, Hai Lan, Zhongye Liu</i>	<a href="#">PDF</a>

[Back to Menu](#)

# Journal of Medical and Biological Engineering

Volume 28, No. 2

June 2008

## CONTENTS

- Finite Element Analysis of the Effects of Sizes of Acetabular Components on the Initial Stability of the Acetabular Cup** 59  
*Jui-Ting Hsu, Ming-Tzu Tsai, Chih-Han Chang, Lih-Jyh Fuh, Kuo-An Lai, Zi-Ling Liu, Ming-Gen Tu, Heng-Li Huang* [PDF](#)
- The Constructs of Kinematic Measures for Reaching Performance in Stroke Patients** 65  
*Jyh-Jong Chang, Yu-Sheng Yang, Wen-Lan Wu, Lan-Yuen Guo, Fong-Chin Su* [PDF](#)
- The Analysis of Confounding Factors in Volume Reconstruction of 3DCRT with Spiral Mode CT Simulation** 71  
*Jian-Kuen Wu, Chiao-Ling Tsai, Feng-Ming Hsu, Chun-Wei Wang, Wen-Yih Tseng, Chia-Hsien Cheng, Gwo-Jen Jan* [PDF](#)
- A Specialized Robot for Ankle Rehabilitation and Evaluation** 79  
*Chou-Ching K. Lin, Ming-Shaung Ju, Shu-Min Chen, Bo-Wei Pan* [PDF](#)
- Application of Quality Function Deployment in Design of Mobile Assistive Devices** 87  
*Kuen-Horng Tsai, Chun-Yu Yeh, Hsin-Chang Lo, Chun-Ting Li, Chan-Peng Cheng, Guan-Liang Chang* [PDF](#)
- Leg Crossing Posture on Pulse Transit Time and Heart Rate Variability** 95  
*Kang-Ming Chang, Keng-Ming Chang* [PDF](#)
- Measurement of Cerebral Blood Flow and Oxygen Saturation Using Laser Doppler Flowmetry and Near Infrared Spectroscopy in Ischemic Stroke Rats** 101  
*Li-Fu Liu, Chih-Kuang Yeh, Chih-Hung Chen, Tak-Wah Wong, Jia-Jin Jason Chen* [PDF](#)
- Effects of Amorphous Calcium Phosphate on Periodontal Ligament Cell Adhesion and Proliferation *in vitro*** 107  
*Weibin Sun, Feimin Zhang, Jiuyu Guo, Juan Wu, Wenlei Wu* [PDF](#)

[Back to Menu](#)

# Journal of Medical and Biological Engineering

Volume 28, No. 1

March 2008

## CONTENTS

<b>Intelligent Hybrid Methods for ECG Classification-A Review</b>	<b>1</b>
<i>Liang-Yu Shyu, Weichih Hu</i>	<a href="#">PDF</a>
<b>Quantitative Gait Analysis after Unilateral Knee Arthroplasty for Patients with Bilateral Knee Osteoarthritis</b>	<b>11</b>
<i>Hsuan-Ti Huang, Chung-Hwan Chen, Jyh-Jong Chang, Lan-Yuen Guo, Hwai-Ting Lin, Wen-Lan Wu</i>	<a href="#">PDF</a>
<b>A Power Assignment Mechanism in Ka-band OFDM-based Multi-satellites Mobile Telemedicine</b>	<b>17</b>
<i>Chin-Feng Lin, Kuo-Tseng Chang</i>	<a href="#">PDF</a>
<b>A Recognition Machine for CpG-islands Based on Boltzmann Model</b>	<b>23</b>
<i>Ho-Ming Lai, Yung-Yen Chiang, Ching-Chi Hsu, Fan Wu</i>	<a href="#">PDF</a>
<b>ECG Feature Extraction and Classification Using Cepstrum and Neural Networks</b>	<b>31</b>
<i>Kuo-Kuang Jen, Yean-Ren Hwang</i>	<a href="#">PDF</a>
<b>A Feasibility Study of an Eye-writing System Based on Electro-oculography</b>	<b>39</b>
<i>Jang-Zern Tsai, Chong-Kuan Lee, Chao-Min Wu, Jin-Jei Wu, Ko-Pei Kao</i>	<a href="#">PDF</a>
<b>Effect of Omega Phase on Mechanical Properties of Ti-Mo Alloys for Biomedical Applications</b>	<b>47</b>
<i>Wen-Fu Ho</i>	<a href="#">PDF</a>
<b>Differences in Reaching Performance Between Normal Adults and Patients Post Stroke-A Kinematic Analysis</b>	<b>53</b>
<i>Jyh-Jong Chang, Yu-Sheng Yang, Lan-Yuen Guo, Wen-Lan Wu, Fong-Chin Su</i>	<a href="#">PDF</a>

[Back to Menu](#)

# Journal of Medical and Biological Engineering

Volume 27, No. 4

December 2007

## CONTENTS

<b>Acetic Acid as a Cell Nucleus Contrast Agent in Third-harmonic Generation Microscopy</b>	<b>161</b>
<i>Wen-Jeng Lee, Che-Hang Yu, Shih-Peng Tai, Hsin-Yi Huang, Chi-Kuang Sun</i>	<a href="#">PDF</a>
<b>Dual Snake-Based Vessel Wall Detection for MSCT Coronary Artery Analysis</b>	<b>165</b>
<i>Shyh-Roei Wang, Chun-Liang Tung, Ming-Ting Wu, Yung-Nien Sun</i>	<a href="#">PDF</a>
<b>WLED-Based Low Coherence Interferometry in the Visible Wavelength Range</b>	<b>173</b>
<i>Hui-Chuan Cheng, Chi-Kuang Sun</i>	<a href="#">PDF</a>
<b>Quantitative Analysis of Backward Generation and Backscattering for Epi-collected Second Harmonic Generation in Biological Tissues</b>	<b>177</b>
<i>Shi-Wei Chu</i>	<a href="#">PDF</a>
<b>Precision Assessment of Subjective Post-Processing in Clinical Proton MR Spectroscopy: Example of Pediatric Patients with Epilepsy</b>	<b>183</b>
<i>Yih-Hwen Huang, Chao-Ying Wang, Cheng-Wen Ko, Hsiao-Wen Chung, Cheng-Yu Chen</i>	<a href="#">PDF</a>
<b>Extraction of Quantitative Optical Properties from Polarization-sensitive Optical Coherence Tomography</b>	<b>191</b>
<i>Wen-Chuan Kuo, Ming-Wei Hsiung, Po-Nien Yang</i>	<a href="#">PDF</a>
<b>An EEG Spike Prescreening Algorithm Using RBF ANN with Multi-Channel Correlation</b>	<b>199</b>
<i>Cheng-Wen Ko, Yue-Der Lin, Gwo-Jen Jan, Hsiao-Wen Chung, Shing-Ming Sung</i>	<a href="#">PDF</a>
<b>Development of Functional Near Infrared Spectroscopy System for Assessing Cerebral Hemodynamics of Rats with Ischemic Stroke</b>	<b>207</b>
<i>Gwo-Ching Chang, Kuan-Ju Wang, Ching-Huang Hsu, Jia-Jin Jason Chen</i>	<a href="#">PDF</a>

[Back to Menu](#)

# Journal of Medical and Biological Engineering

Volume 27, No. 3

September 2007

## CONTENTS

<b>A Study of Image Quality Analysis for a Cutaneous Capillary Imaging System</b>	110
<i>Chih-Chieh Wu, Kang-Ping Lin, Being-Tau Chung</i>	<a href="#">PDF</a>
<b>Extraction of an Arterial Stiffness Index from Oscillometry</b>	116
<i>Shing-Hong Liu, Jia-Jung Wang, Zu-Chi Wen</i>	<a href="#">PDF</a>
<b>Electroencephalographic Study of Mental Fatigue in Visual Display Terminal Tasks</b>	124
<i>Shyh-Yueh Cheng, Hsiao-Yu Lee, Chi-Min Shu, Hong-Te Hsu</i>	<a href="#">PDF</a>
<b>Heart Rate Response during Rapid Intravenous Injection of Ionic Iodinated Contrast Media for CT</b>	132
<i>Shing-Hong Liu, Kang-Ming Chang, Shih-Chung Yang</i>	<a href="#">PDF</a>
<b>The Study of Positive Correlation Between Bone Frame Mineral Density and Volume Fraction in Cortical Bone</b>	136
<i>Hsiao-Che Lin, James Shih-Shyn Wu, Jui-Pin Hung, Wei-Cheng Yeh, Jian-Horng Chen</i>	<a href="#">PDF</a>
<b>A Chaos-based Visual Encryption Mechanism in JPEG2000 Medical Images</b>	144
<i>Chin-Feng Lin, Wen-Thong Chang, Ching-Yi Li</i>	<a href="#">PDF</a>
<b>Using Motion of the Whole-Body Center of Mass to Assess the Balance during Gait of Children with Spastic Cerebral Palsy</b>	150
<i>Rong-Ju Cherng, Li-Shan Chou, Fong-Chin Su, William J. Shaughnessy, Kenton R. Kaufman</i>	<a href="#">PDF</a>
<b>Rubber Band Selection for a Dynamic Splint for Flexor Tendon Repair – A Finite Element Study</b>	156
<i>Shan-Yu Huang, Yang-Hua Lin, Chien-Lin Liu, Shun-Hwa Wei, Chi-Kuang Feng, Chen-Sheng Chen</i>	<a href="#">PDF</a>

[Back to Menu](#)

# Journal of Medical and Biological Engineering

Volume 27, No. 2

June 2007

## CONTENTS

- Study of Magnetic Levitation Technique for Use in a Wireless Capsule Endoscope** 57  
*Cheng-Chi Tai, Ming-Kun Chen, Ching-Hsing Luo* [PDF](#)
- Design of an Actively Assistive Communication Device for a Multiple Handicapped Person** 65  
*Ching-Tien Shih, Ching-Hsiang Shih, Ching-Hsing Luo* [PDF](#)
- Development of Virtual Reality Environment for Tracking Rat Behavior** 71  
*Hsiao-Yu Lee, Ming-Dar Kuo, Deng-Qing Chang, Yi-Shiang Ou-Yang, Jia-Jin Jason Chen* [PDF](#)
- A Numerical Estimation of Energy Expenditure for Wheelchair Users** 79  
*Ching-Hua Chiu, Wei-Ting Hsu, Ming-Hua Hsu, Shu-Lan Chuang, Jin-Cherng Wang, Tai-Yen Hsu* [PDF](#)
- The Evaluation of Female Breast Symmetry by Calculating Related Physics Parameters** 87  
*Shuh-Ping Sun, Ko-Wen Hsu, Jing-Shyr Chen* [PDF](#)
- A Low-Power Mash Sigma-Delta Modulator with Digital Canceling Circuit for Biomedical Application** 91  
*Chen-Ming Hsu, Ho-Yin Lee, Ching-Hsing Luo* [PDF](#)
- Dosage Effect of CdSe Quantum Dot-Induced Cell Death Mode in Human Mononuclear Cells** 97  
*Nion-Heng Shiao, Hsiang-Yu Lu, Wen-Hsiung Chan* [PDF](#)
- An Eye-Tracking Human-Machine Interface Using an Auto Correction Method** 105  
*Chern-Sheng Lin, Chao-Ning Chan, Yun-Long Lay, Jyh-Fa Lee, Mau-Shiun Yeh* [PDF](#)

[Back to Menu](#)

# Journal of Medical and Biological Engineering

Volume 27, No. 1

March 2007

## CONTENTS

<b>Microfluidic Devices for the Synthesis of Nanoparticles and Biomaterials</b>	1
<i>Lung-Hsin Hung, Abraham Phillip Lee</i>	<a href="#">PDF</a>
<b>Genipin Cross-linking of Type II Collagen-chondroitin Sulfate-hyaluronan Scaffold for Articular Cartilage Therapy</b>	7
<i>Chih-Shen Ko, Chun-Hsien Wu, Hsin-Ho Huang, I-Ming Chu</i>	<a href="#">PDF</a>
<b>Cell Migration on Nanophase-Separated Poly(carbonate urethane)s</b>	15
<i>Shan-Hui Hsu, Chien-An Chen, Chi-Nan Chao, Chung-Huang Chen, Jeng-Jiann Chiu</i>	<a href="#">PDF</a>
<b>Improvement in the Properties of Chitosan Membranes Using Natural Organic Acid Solutions as Solvents for Chitosan Dissolution</b>	23
<i>Po-Hui Chen, Ya-Hsi Hwang, Ting-Yun Kuo, Fang-Hsuan Liu, Juin-Yih Lai, Hsyue-Jen Hsieh</i>	<a href="#">PDF</a>
<b>Liposomes Incorporated with Cholesterol for Drug Release Triggered by Magnetic Field</b>	29
<i>Li-Ping Tseng, Hong-Jen Liang, Tze-Wen Chung, Yi-You Huang, Der-Zen Liu</i>	<a href="#">PDF</a>
<b>Effect of Drug-Polymer Interaction on Drug Diffusion through Polymeric Membranes</b>	35
<i>Ching-Ya Wang, Yung-Hsu Wu, Da-Ming Wang</i>	<a href="#">PDF</a>
<b>Evaluation of Chitosan-g-PEG Copolymer for Cell Anti-Adhesion Application</b>	41
<i>Shwu-Jen Chang, Cheng-Chie Niu, Che-Fu Huang, Shyh-Ming Kuo</i>	<a href="#">PDF</a>
<b>Application of Bamboo Charcoal Particles in Blood Purification: Cytotoxicity and Absorption Capability Assessments</b>	47
<i>Ming-Fa Hsieh, Chin-Liang Shyu, Shin-Huie Huang, Wei-Chieh Wang, Wen-Chi Chen</i>	<a href="#">PDF</a>
<b>A Brief Review on Development of Liposome in Taiwan</b>	53
<i>Pei Kan</i>	<a href="#">PDF</a>

[Back to Menu](#)