



**The 3rd International Conference on
Bioinformatics and Biomedical Engineering
(iCBBE 2009)**

<http://www.icbbe.org>

June 11-13, 2009 Beijing, China



Conference Program Guide (Version 1)

Sponsors:

- IEEE Engineering in Medicine and Biology Society, USA
- Gordon Life Science Institute, USA
- Fudan University, China
- Beijing University of Posts and Telecommunications, China
- Beijing Institute of Technology, China
- Wuhan University, China
- Journal of Biomedical Science and Engineering, USA



Part I Conference Schedule

June 11 ~ June 13, 2009

09:00-20:00	Registration	Location: Lobby, Friendship Palace, Beijing Friendship Hotel, Beijing
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Note: You can register at any time during the conference

Friday Morning, June 12

Time	Activity	Location: 2 nd floor, Ju Ying Ting in Friendship Palace, Beijing Friendship Hotel, Beijing
	Opening Ceremony (Chair: Prof. Kuo-Chen Chou, Gordon Life Science Institute, USA)	
08:00-08:30	Welcome Speech Speaker: President from Beijing Institute of Technology, China Prof. Bin He, President of IEEE-EMBS, USA; University of Minnesota, USA Prof. Kuo-Chen Chou, Gordon Life Science Institute, USA	
08:30-09:15	Plenary Speech 1: <i>Development, characterization and optimization of digital imaging techniques for cancer diagnosis</i> , Prof. Hong Liu , Oklahoma University, USA	
09:15-10:00	Plenary Speech 2: <i>Unravel secrets in biological membrane by NMR spectroscopy</i> , Prof. James J. Chou , Harvard Medical School, USA	
10:00-10:20	Coffee Break	
10:20-11:05	Plenary Speech 3: <i>Systematic Bioinformatics Study in Proteomics</i> , Prof. Fuchu HE , Chinese Academy of Sciences, China	
11:05-11:50	Plenary Speech 4: <i>An informatics approach to evaluate the scientific impact of researchers</i> , Prof. Chun-Ting Zhang , Chinese Academy of Sciences, China	

Friday Noon, June 12

12:00-13:30	Lunch	Location: 1 st floor, restaurant in Friendship Palace, Beijing Friendship Hotel
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Friday Afternoon, June 12

Time	Activity	Location: 2 nd floor, Ju Ying Ting in Friendship Palace, Beijing Friendship Hotel, Beijing
14:00-14:45	Plenary Speech 5: <i>Constrained Imaging: Getting More with Less?</i> , Prof. Zhi-Pei LIANG , IEEE Engineering in Medicine and Biology Society, USA; University of Illinois, USA	
14:45-15:30	Plenary Speech 6: <i>Computational analyses of transcriptional regulatory regions in tunicates</i> , Prof. Kenta Nakai , University of Tokyo, Japan	
15:30-15:50	Coffee Break	
15:50-16:35	Plenary Speech 7: <i>Crystallization propensity of protein chains</i> , Prof. Lukasz A. Kurgan , University of Alberta, Canada	
16:35-17:20	Plenary Speech 8: <i>Individualized Therapy- A generic approach applied to mechanical ventilation support</i> , Prof. Knut Moeller , Furtwangen University, Germany	

Friday Evening, June 12

18:30-20:30	Welcome Banquet	Location: 2 nd floor, Ju Ying Ting in Friendship Palace, Beijing Friendship Hotel
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Saturday Morning, June 13

Time	Activity	Location (1 st floor, Beijing Friendship Hotel)
08:00 - 09:50	Oral_1: Algorithms, Models, Software, and Tools in Bioinformatics	Room 1 in Meeting Hall
	Oral_2: Gene Science and Engineering	Room 2 in Meeting Hall
Coffee Break	Oral_3: Bio-signal Processing and Analysis	Room 3 in Meeting Hall
	Oral_4: Biomedical Imaging, Image Processing & Visualization	Room 4 in Meeting Hall
10:10 – 12:00	Oral_5: Biomedical Devices, Sensors, and Artificial Organs	Room 5 in Meeting Hall
	Oral_6: Biomechanics and Bio-transport	Room 6 in Meeting Hall

Saturday Noon, June 13

12:00-13:30	Lunch	Location: 1 st floor, restaurant in Friendship Palace, Beijing Friendship Hotel
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Saturday Afternoon, June 13

Time	Activity	Location (1 st floor, Beijing Friendship Hotel)
14:00 - 15:50	Oral_7: Any Novel Approaches to Bioinformatics Problems	Room 1 in Meeting Hall
	Oral_8: Protein Science and Engineering	Room 2 in Meeting Hall
Coffee Break	Oral_9: Biomaterials and Bioelectrical Engineering	Room 3 in Meeting Hall
	Oral_10: Biomedical Imaging, Image Processing & Visualization	Room 4 in Meeting Hall
16:10 – 18:00	Oral_11: The Special Session on Psychological Health	Room 5 in Meeting Hall
	Oral_12: The Special Session on Biomathematics and Biostatistics	Room 6 in Meeting Hall

Saturday Afternoon, June 13

Time	Activity	Location (2 nd floor, Beijing Friendship Hotel)
14:00-14:45	Poster_1: Bioinformatics	Building No.1, Beijing Friendship Hotel
14:50-15:35	Poster_2: Biomedical Engineering (1)	
15:40-16:25	Poster_3: Biomedical Engineering (2)	
16:30-17:15	Poster_4: Other Related Topics	

Part II Invited Plenary Speeches

Conference VIP:

Speaker: Prof. Bin He, President of IEEE-EMBS, USA; University of Minnesota, USA

Time: 08:00-08:30, June 12, 2009

Location: 2nd floor, Ju Ying Ting in Friendship Palace, Beijing Friendship Hotel



Dr. Bin He is Distinguished McKnight University Professor, and Professor of Biomedical Engineering, Electrical Engineering, and Neuroscience at the University of Minnesota at Twin Cities (<http://www.tc.umn.edu/~binhe/>). He currently serves as the Director of Center for Neuroengineering, and Director of NIH Training Program on Neuroimaging, at the University of Minnesota. His major research interests include functional neuroimaging, neural interfacing, cardiac functional imaging, cancer imaging, and bioelectromagnetism. Dr. He has published over 140 peer-reviewed articles in leading international journals, and delivered over 150 plenary, keynote, and invited talks. His lab has contributed significantly to electrophysiological source imaging, multimodal biomedical imaging, and brain computer interface techniques. Dr. He is the editor of books entitled “Modeling and Imaging of Bioelectrical Activity – Principles and Applications” and “Neural Engineering” (Kluwer Academic, 2004 and 2005), and served or serves as an associate editor of IEEE Transactions on Biomedical Engineering, IEEE Transactions on Neural Systems and Rehabilitation Engineering, IEEE Transactions on Information Technology in Biomedicine, IEEE Transactions on Medical Imaging, Brain Topography, and International Journal of Bioelectromagnetism. He is also a member of Editorial Boards of IEEE Spectrum, Journal of Neural Engineering, and Clinical Neurophysiology, among others. Dr. He was the recipient of NSF CAREER Award, American Heart Association Established Investigator Award, the University of Illinois University Scholar Award where he was on faculty, and Tejima Prize. He was elected as the president of International Society of Bioelectromagnetism, the president of International Society of Functional Source Imaging, and is the 2009-2010 president of the IEEE Engineering in Medicine and Biology Society (EMBS). Dr. He serves as the Conference Chair of the 31st Annual International Conference of IEEE EMBS to be held from September 2-6, 2009 in Minneapolis (<http://www.embc09.org/>). Dr. He is a Fellow of IEEE and AIMBE, and is listed in Who’s Who in America and Who’s Who in the World.

Conference VIP:

Speaker: Prof. Kuo-Chen Chou, Gordon Life Science Institute, USA

Time: 08:00-08:30, June 12, 2009

Location: 2nd floor, Ju Ying Ting in Friendship Palace, Beijing Friendship Hotel



Dr. Kuo-Chen Chou (周国城) is the chief scientist of Gordon Life Science Institute. He is also an Advisory Professor of several Universities. After graduating from Department of Physics of Nanjing University in 1962, he joined Shanghai Institute of Biochemistry, Chinese Academy of Sciences. Owing to the work in enzyme diffusion-controlled reactions, he was awarded with the Medal of Science and Technology in 1977 by Shanghai Congress of Science & Technology and the National Science Medal in 1978 by China National Academy of Sciences. Subsequently, he was invited to be a Visiting Professor in Lund University of Sweden and Cornell University of USA. He was awarded as “Doctor of Science” by Kyoto University of Japan in 1985 owing to his work in “Low-Frequency Internal Motion of Biomacromolecules and Its Biological Functions”. From 1987 to 2003, he joined Upjohn, Pharmacia, Pfizer as Senior Principal Investigator and Research Adviser. He is Editor-in-Chief of The Open Bioinformatics Journal, Editor-in-Chief of JBiSE, as well as editor or editorial board member of 12 scientific journals such as Medicinal Chemistry, Journal of Theoretical Biology, Journal of Biophysics, Protein & Peptide Letters, and Current Proteomics. Professor Chou has published over 350 papers in the fields of bioinformatics, computer-aided drug design, protein-structural prediction, low-frequency internal motion of biomacromolecules and its biological functions, graphic rules in enzyme kinetics and other biological systems, as well as diffusion-controlled reactions of enzymes. He has been ranked as number 1 author in Hot Papers during 2008 by ScienceWatch. For more information, please visit <http://www.pami.sjtu.edu.cn/people/kcchou/> and <http://sciencewatch.com/ana/fea/09maraprFea/>.

Plenary Speech: Development, characterization and optimization of digital imaging techniques for cancer diagnosis

Speaker: Prof. Hong Liu, Oklahoma University, USA

Time: 08:30-09:15, June 12, 2009

Location: 2nd floor, Ju Ying Ting in Friendship Palace, Beijing Friendship Hotel



Abstract:

Digital imaging techniques have been applied clinically to facilitate cancer screening and diagnosis. The transition from an analog to digital technique expands the potential of medical imaging, and leads to improved diagnosis at potentially lower radiation and/or cost. This presentation analyses contemporary detectors techniques and innovative systems. Methods for characterizing their performance under clinical conditions will also be discussed.

Plenary Speech: Unravel secrets in biological membrane by NMR spectroscopy

Speaker: Prof. James J. Chou, Harvard Medical School, USA

Time: 09:15-10:00, June 12, 2009

Location: 2nd floor, Ju Ying Ting in Friendship Palace, Beijing Friendship Hotel



Abstract:

Cellular membranes house about a quarter of all proteins. These proteins serve a large variety of functions such as cell-cell signaling, selective ion permeation, and transporting metabolites between various cellular compartments. Our understanding of membrane proteins is however limited by the technical challenge of obtaining high resolution views of these molecules. X-ray and electron crystallography have in the past been the dominant biophysical tools for determining membrane protein structures, but they depend on the intrinsic property of proteins to form crystals. We demonstrate that Nuclear Magnetic Resonance is an emerging and versatile tool for determining membrane protein structures, and for revealing the dynamic events coupled to their function. Our examples include ion channels, transporters, and ligand-receptor signaling.

Plenary Speech: Systematic Bioinformatics Study in Proteomics

Speaker: Prof. Fuchu HE, Chinese Academy of Sciences, China

Time: 10:20-11:05, June 12, 2009

Location: 2nd floor, Ju Ying Ting in Friendship Palace, Beijing Friendship Hotel



Abstract:

Data quality is one of the most important issues in large scale proteomic research. In order to identify proteins with high confidence, a pipeline was constructed for the Human Liver Proteome Project (HLPP) data processing, including data collection, database searching, quality control, integration, evaluation and the final presentation. Considering features of the proteomic data and the biologists' requirement, several measures were performed in the data processing: i) strict quality control for every step; ii) evaluating and integrating all the heterogeneous data on the similar confidence by using decoy database searching; iii) obtaining the final non-redundant identified proteins by parsimony rule; iv) providing the trackable and customized filterable datasets in the presentation platform and so on. From the Chinese adult liver sample, there are 6788 non-redundant proteins deduced with two or more unique identifications on 95% confidence. Several data sets could be accessed at the database of human liver proteome (HLP), <http://dblep.hupo.org.cn>. Further analysis reveals that the patterns of chromosomal distribution of the genes corresponding to HLP are highly consistent with that of human liver transcriptome (HLT). The proteins partaking in metabolism, transportation and coagulation, and those containing active domains for metabolism, transportation and biosynthesis are significantly enriched in liver. There is a significantly linear-positive correlation in the abundance of coagulators between liver and plasma.

To evaluate the confidence of experimental data of protein-protein interaction data, a Bayesian model was developed to combine 6 biological evidences, including model organism protein-protein interaction, interacting domain, functional annotation, gene expression, genome context and network topology structure, to assign reliability to the human protein-protein interactions identified by high throughput experiments. This method shows high sensitivity and specificity to predict true interactions from the human high throughput protein-protein interaction datasets. It has been developed into an online confidence scoring system specifically for the human high throughput protein-protein interactions. Users may submit their protein-protein interaction data online, and the detailed information about the supporting evidence for query interactions together with the confidence scores will be returned. The web interface of Princess is available at <http://www.hupo.org.cn/princess>.

In the biological network study, a novel network feature, SigFlux, was developed to evaluate the importance of proteins in signaling networks. Significant correlations were simultaneously observed between SigFlux and both the essentiality and the evolutionary rates of genes. Further classification according to protein function demonstrates that proteins with high SigFlux and low connectivity are enriched in receptors and transcriptional factors.

Signal flow direction is one of the most important features of the PPIs in signalling networks. Based on the pairwise interaction domains, a novel parameter named Protein Interaction Directional Score (PIDS) was defined and then used to predict the direction of signal flow between proteins in proteome-wide signaling networks. This approach obtained a satisfied performance with the accuracy 89.79% and coverage 48.08%. Two other approaches are also presented based on GO function annotation and the support vector machine for protein sequence. Then a Bayesian network was used to integrate multiple data sources and gave likelihood ratio to evaluate the direction of signal flow between proteins. The Bayesian method can achieve the accuracy 98.64% and coverage 67.83% in human protein interaction dataset. When applying this method to the integrated

human protein interactions, a Directional Protein Interaction Network (DPIN) was established. The DPIN is composed of 5,111 proteins and 10,051 interactions, and indicates a large amount of potential signaling pathways. The DPIN is strongly supported by the known signaling pathways from literatures (with the 89.23% accuracy), and further analyses on the biological process annotation, subcellular localization and network topology properties.

Plenary Speech: An informatics approach to evaluate the scientific impact of researchers

Speaker: Prof.Chun-Ting Zhang, Chinese Academy of Sciences, China

Time: 11:05-11:50, June 12, 2009

Location: 2nd floor, Ju Ying Ting in Friendship Palace, Beijing Friendship Hotel



Abstract:

How to evaluate the academic impact of a scientist, a group of scientists, a university or even a country? This is an important issue, because it is not only related to the promotion and funding for individual scientists, but also related to the scientific policy development for a university or a country. In this presentation, I will first present commonly used bibliometrics tools for evaluation purposes, such as the impact factor of a journal, citations of a paper, the h-index, the h-type indices, including the g-index, a-index and dynamic h-index. The e-index, d-index and c-coefficient, the indices recently developed by me to overcome some shortcomings of the h-index, will also be presented. Advantages and disadvantages of these indices will be compared. I emphasize that no quantitative index can replace an objective peer-review, however, these quantitative indices provide necessary information that is helpful for reviewers to make an objective and fair judgment.

Plenary Speech: Constrained Imaging: Getting More with Less?

Speaker: Prof. Zhi-Pei LIANG, University of Illinois, USA

Time: 14:00-14:45, June 12, 2009

Location: 2nd floor, Ju Ying Ting in Friendship Palace, Beijing Friendship Hotel



Abstract:

A classical problem with tomographic imaging is the so-called limited data reconstruction problem, which occurs when physical and temporal constraints prevent sufficient coverage of the data space in the Nyquist sense. Traditionally, image reconstruction is performed using Fourier transform-based models, which often results in significant image artifacts (e.g., spurious ringing and loss of spatial resolution). To address this problem, numerous methods have emerged in the past three decades to incorporate a priori information into the imaging process. This talk will give an overview of recent advances in constrained imaging methods and applications.

Plenary Speech: Computational analyses of transcriptional regulatory regions in tunicates

Speaker: Prof. Kenta Nakai, University of Tokyo, Japan

Time: 14:45-15:30, June 12, 2009

Location: 2nd floor, Ju Ying Ting in Friendship Palace, Beijing Friendship Hotel



Abstract:

Tunicates, which include the ascidians *Ciona intestinalis* and *Ciona savignyi*, are lower chordates sharing basic gene repertoires and many characteristics with vertebrates. Therefore, they have been extensively studied in developmental biology. Especially, *C. intestinalis* is an interesting organism because its genome sequence is determined and comparable in its evolutionary conservation with the draft genome sequence of *C. savignyi*. Moreover, its cell lineage and the gene regulatory network in early developmental stages are basically clarified. Since the average size of its transcriptional regulatory region is much smaller than that of vertebrates, it is also suited for computational sequence analyses. Thus, our group has performed such analyses from various aspects. For example, we constructed a database of tunicate gene regulation, DBTGR (<http://dbtgr.hgc.jp>), which contains experimentally determined knowledge on gene regulation. The TSS/expression data from our so-called RNA-seq analysis using a new-generation sequencer will be added soon. We are also trying to combine the results of sequence analysis with ChIP-chip data to refine the gene regulatory network. I will introduce some of our recent progress.

Plenary Speech: Crystallization propensity of protein chains

Speaker: Prof. Lukasz A. Kurgan, University of Alberta, Canada

Time: 15:50-16:35, June 12, 2009

Location: 2nd floor, Ju Ying Ting in Friendship Palace, Beijing Friendship Hotel



Abstract:

Structural genomics is a world-wide initiative aimed at producing a comprehensive mapping of protein structure space. The resulting knowledge of the protein structures will be vitally important for understanding and manipulating their biochemical and cellular functions. One of the main challenges this initiative faces is that only about 2-10% of pursued protein targets yield high-resolution protein structures. A significant bottleneck in acquiring the structures is the ability to obtain diffraction-quality crystals. The application of current protocols yields crystals for approximately 30% of the input proteins and well-diffracting crystals for even a smaller fraction. This motivated the development of models that can be used to either support or directly predict protein crystallization. Several in-silico methods, including SECRET (Proteins 62:343-55, 2006), OB-score (FEBS Lett. 580:4005-9, 2006), CRYSTALP (BBRC 355:764-9, 2007), and ParCrys (Bioinformatics 24:901-7, 2008), which predict crystallization propensity using the protein sequence as the input have recently been proposed. These methods account only for intra-molecular factors that are encoded in the protein chain, while ignoring inter-molecular factors such as protein-protein, protein-ligand, and/or protein-precipitant interactions, buffer composition, precipitant diffusion method, gravity, etc. In spite of this significant limitation the above methods were shown to succeed in providing useful predictions. In this talk, we will overview the current state-of-the-art in sequence-based prediction of protein crystallization propensity. We will describe our current findings that support the claim that the crystallization propensity can be predicted directly from the protein chain and we will also introduce our new predictor, CRYSTALP2.

Plenary Speech: Individualized Therapy-A generic approach applied to mechanical ventilation support

Speaker: Prof. Knut Moeller, Furtwangen University, Germany

Time: 16:35-17:20, June 12, 2009

Location: 2nd floor, Ju Ying Ting in Friendship Palace, Beijing Friendship Hotel



Abstract:

Evidence based medicine (EBM) has shown a number of advances to medical treatment. But EBM is not commonly accepted because it comes with various problems. One is related to its' statistical nature. Patients are treated as average cases but not as individuals who may reveal large variations of reactions to the same therapeutic actions. In this talk an approach towards individualized therapy is introduced that combines statistical knowledge with reasoning from first principles. Physiological modelling is employed to predict patient behaviour. In a hierarchically organized multi model architecture parameter identification techniques serve as a basis to estimate individual properties not directly accessible at the bedside. For the domain of mechanical ventilation therapy, the most important life saving therapy on ICUs, this general approach will be demonstrated.

Part III Oral Sessions

Saturday Morning, June 13

Oral_1: Algorithms, Models, Software, and Tools in Bioinformatics

1st floor, Room 1 in Meeting Hall, Beijing Friendship Hotel

Time: 08:00-12:00, June 13

Paper ID	Paper Title	Author	Affiliation
95103	An Information Theoretic Viewpoint on HaplotypeReconstruction from SNP Fragments	Huimin Chen	University of New Orleans, USA
90394	Optimization of MISCORE-based Motif identification Systems	Nung Kion Lee	La Trobe University, Australia
90576	KiWi: A Scalable Subspace Clustering Algorithm for Gene Expression Analysis	Obi Griffith	BC Cancer Agency, Canada
95228	Feature selection for tandem mass spectrum quality assessment via sparse logistical regression	Fang-Xiang Wu	University of Saskatchewan, Canada
95607	Integration of Medical Information Systems Based on Virtual Database and Web Services	Yinyao Zhu	Zhejiang University, China
90536	Compressed Pattern Matching in DNA Sequences Using Multithreaded Technology	Piyuan Lin	South China Agricultural University, China
95647	Gene Expression Analysis Using Clustering	Kumar Dhiraj	National Institute Of Technology Rourkela, India
90279	Several Dynamic Models of Large-Scale Insect Cell Infection at Low Multiplicity of Infection	Ruangang Pan	Wuhan University, China
90720	A Computer Simulation for Insulin Injection of Diabetic Patient	Ruiqiang Hu	Harbin Institute of Technology, China
90722	Predictor Profile to assess Recurrence Phenomenon of Suicidal Incidents among Region Based Target Population	Vatsalya Vatsalya	American University, USA
90612	Numerical Simulations of Inspiratory Airflow inHuman Nasal Cavity and Statistic Study of ItsCharacteristic Dimension	Jun Zhang	Dalian Jiaotong University, China
95012	Evolutionary Algorithm based Radial Basis Function Neural Network for Function Approximation	Zhen-Yao Chen	National Taiwan University of Science and Technology, Taiwan (China)

Oral_2: Gene Science and Engineering

1st floor, Room 2 in Meeting Hall, Beijing Friendship Hotel

Time: 08:00-12:00, June 13

Paper ID	Paper Title	Author	Affiliation
90096	Extended iterative nonlinear regression normalization for cDNA gene expression data	Jianping Lu	Soochow University, China
90783	The Inhibitory Effects of Chinese Herbal Effective Fractions on the Expression of EBV Early Antigen	Xiuhua Lv	Beijing University of Technology, China
90911	Scale-specific Similarity Measure for Analysis of Gene Expression Time Series	Li Ying	Jilin University, China
95509	A Residue-Based Cluster Validity Index for Gene Expression Data Biclustering	Chieh-Yuan Tsai	Yuan Ze University, Taiwan (China)
95454	Operon Prediction by Decision Tree Classifier Based on VPRSM	Shuqin Wang	Northeast Normal University, China
90797	BiSAn: A software for efficient computation of transcription factor binding motifs for high throughput gene expression analysis	Mohsin Khan	Brunel University, UK

Paper ID	Paper Title	Author	Affiliation
90730	HMMF: An Hidden Markov Model Based Approach for Motif Finding	Chunmei Liu	Howard University, USA
95555	Separable Parameter Estimation Method for Nonlinear Biological Systems	Fang-Xiang Wu	University of Saskatchewan, Canada
95016	Bioinformatic Analysis of a Suppression Subtractive cDNA Library from the Male Gametophytes of <i>Laminaria japonica</i> Aresch.	Long-Ling Ouyang	Shanghai Ocean University, China
90739	RNA secondary structure and sequence variability of the 3' end of Strawberry mild yellow edge virus genome	LI Li-li	Shenyang Agricultural University, China
90881	Genomic investigation of the role of antibiotics as signal molecules in <i>Pseudomonas aeruginosa</i>	Lixin Shen	Northwest University, China
90267	A software for designing oligonucleotides for PCR-based long DNA synthesis	Marcus Bode	Institute of Bioengineering and Nanotechnology, Singapore
90759	Distinct turn-over patterns of common repeats correlate with genome size differences among cattle, dog and human	George Liu	USDA, ARS, USA

Oral_3: Bio-signal Processing and Analysis

1st floor, Room 3 in Meeting Hall, Beijing Friendship Hotel

Time: 08:00-12:00, June 13

PaperID	Paper Title	Author	Affiliation
90693	Emotion Recognition in Speech of Parents of Depressed Adolescents	Ling He	RMIT University, Australia
90385	A Noise Tolerant Method for ECG Signals Feature Extraction and Noise Reduction	Emna Zoghalmi Ayari	University of Kaiserslautern, Germany
95142	A New Application of Lock In Amplifier-AdaptiveNoise Canceller	Tangji Tong	Nanjing University, China
95310	Brainstem response evoked by speech syllable: A preliminary exploration of experimental and analytical protocols	Yuan-Yuan Su	Southern Medical University, China
90631	Simulate Heart Failure by A Mathematical Model	Yuxian Gong	Zhejiang University, China
90943	Auditory Model of Intensity Discrimination and Vowel Formant Discrimination: Effect of Signal Frequency	Chang Liu	University of Texas at Austin, USA
95568	Detection of respiratory rhythm from photoplethysmography signal using morphological operators	Jin Li	Xi'an Jiaotong University, China
95252	Effect of Contralateral Stimulation on Auditory Filter Bandwidth: A Preliminary Study	Chang Liu	University of Texas at Austin, USA
90523	Determination of lung area in EIT images	Zhanqi Zhao	Furtwangen University, Germany
90939	A Comparison of Baseline Removal Algorithms for Electrocardiogram (ECG) based Automated Diagnosis of Coronary Heart Disease	Fayyaz-ul-Amir Minhas	Pakistan Inst. of Engg. & Applied Sciences (PIEAS), Pakistan
90597	Wrist Pulse Feature Variability Analysis via Spectral Decomposition	Chunming Xia	East China University of Science and Technology, China
90462	A Design Proposal of a Reconfigurable Filter for an Optical Blood Oxygen Analyzer	Nikhil Joglekar	Victoria University, Australia
90845	Stockwell Coherence and its Application in Studying Motor Cortices under the Multi-Source Interference Task	Cheng Liu	York University, Canada
95484	The Effect of Mental States on Blood Pressure and Electrocardiogram	Hari Singh	National Institute of Technology, India
95232	A novel method to study the contribution of stretch reflexes during dynamic voluntary tasks.	John Burne	University of Sydney, Australia

Oral_4: Biomedical Imaging, Image Processing & Visualization

1st floor, Room 4 in Meeting Hall, Beijing Friendship Hotel

Time: 08:00-12:00, June 13

Paper ID	Paper Title	Author	Affiliation
95156	Segmentation of Lung region for chest X-ray images based on medical registration and ASM	Chunyan Wang	South China University of Technology, China
90754	Lateral Resolution Enhancement of Ultrasound Image Using Neural Networks	Hao Yin	Sichuan University, China
90448	CW Detection of Weakly Scattered Light for Transillumination Imaging of Thick Body Part	Kazuto Takagi	Hokkaido University, Japan
90450	Extended Normalized Mutual Information for Lung SPECT - CT Registration	Laszlo Papp	UK-SH Campus Kiel, Germany
90842	Improved T-Snake Model Based Edge Detection of the Coronary Arterial Walls in Intravascular Ultrasound Images	FENGRONG SUN	Shandong University, China
95687	Utilization of Spatial Coherence in Functional Neuroimage-based Classification	Pinaki Mitra	University of Pittsburgh, USA
90397	Hemodynamic effect of calcified plaque on blood flow in carotid artery disease: A preliminary study	Zhonghua Sun	Curtin University of Technology, Australia
95681	Infrared Thermography Based Image Construction for Bio-Medical Applications	V. Umadevi	Indian Institute of Technology Madras, India
95240	Upper Airway Detection in Cone Beam Images	Mehmet Celenk	Ohio University, USA
95551	PARALLEL MAGNETIC RESONANCE IMAGING RECONSTRUCTION USING SIMILARITY-BASED REGULARIZATION	Sheng Fang	Tsinghua University, China
90506	Sigma-delta Receive Beamformer Based on Cascaded Reconstruction for Ultrasound Imaging Application	Jia Hao Cheong	Nanyang Technological University, Singapore
95286	Application of Morphological Operations In Human Brain CT Image With SVM	Alireza Fallahi	Shahed University, Iran
95433	Good Effect of GVF Snake Segmentation By Good Parameters Settings	Guangli LI	East China Jiaotong University, China
90864	Wavelet Fusion in DSA based on Dynamic Fuzzy Data Model	Guangming Zhang	Soochow University, China
95329	How to Reconstruct 3D Coronary Arterial Tree from Two Arbitrary Views	Qin Li	Beijing Institute of Technology, China
95562	Parallel MRI Acceleration Using M-FOCUSS	Dong Liang	University of Wisconsin-Milwaukee, USA
90862	Design and Implementation of A Real-time Capsule Endoscope Image Quality Assessment Method	Zhang Teng	Shenzhen Institute of Advanced technology, China

Oral_5: Biomedical Devices, Sensors, and Artificial Organs

1st floor, Room 5 in Meeting Hall, Beijing Friendship Hotel

Time: 08:00-12:00, June 13

Paper ID	Paper Title	Author	Affiliation
90589	Design of an RF-Wireless Power Supply Module for in-vivo Neural Channel Bridging	Guiyang Li	Southeast University, China
95072	Uniform Microsphere Formation by Liquid Choppers Utilizing PZT Actuator: Theoretical and Simulation Study	Ki-Young Song	University of Saskatchewan, Canada
95133	Estimation of Body Composition in Dialysis Patients using Segmental Bioimpedance	Fansan Zhu	Renal Research Institute, USA
95198	Enhanced perception for visually impaired people	Knut Moeller	Furtwangen University, Germany
90699	CMOS Microelectrode Array for Signal Recording and Stimulating of Neurons Assemble	Haixian Pan	Southeast University, China

Paper ID	Paper Title	Author	Affiliation
90359	A Wearable Device for Physical Activity Monitoring With Built-in Heart Rate Variability	Anh Dinh	University of Saskatchewan, Canada
95646	SoC model Analysis for ECG Data Acquisition with Wireless Sensor Network	Zheyang Li	Beijing Union University, China
95603	Drug Management: How to Provide Drug on Assigned Time?	Sadaf Moharreri	Islamic Azad University, Iran
90286	A Bladder Power Pump Driven by External Electromagnet and Simulated Experimental System	Xiao Li	Guangdong University of Technology, China
95226	Optical Detection of a Competitive Inhibitor of Immobilized Plant-esterase	Changjun Hou	Chongqing University, China
95649	Switch Bridge Architecture of NoC for Wireless ECG Data Acquisition	Jai Liu	Beijing Union University, China
95257	Noninvasive tissue blood oxygenation measurement based on near infrared spectroscopy (NIRS)	Ning Cao	Beijing Institute of Technology, China
90925	Amyloid- β Dynamics Correlate with Neurological Status in the Injured Human Brain	David Brody	Washington University, USA
95441	A 3-D Acceleration-based Control Algorithm for Interactive Gaming Using a Head-worn Wireless Device	Wen Tiexiang	Shenzhen Institute of Advanced Technology, China
90920	Electrical Immuno Nanosensor for Breast Cancer Biomarker Assay	Chenzhong Li	Florida International University, USA

Oral_6: Biomechanics and Bio-transport

1st floor, Room 6 in Meeting Hall, Beijing Friendship Hotel Time: 08:00-12:00, June 13

Paper ID	Paper Title	Author	Affiliation
90384	One Dimensional Modeling and Computation of Blood Flow and Pressure of a Stented Artery	Binu L.S	College of Engineering, Trivandrum, India
90933	A comparison of the flow behaviour in knee articulations as a function of the friction factor	Jose Maria Rodriguez Ielis	Centro Nacional de Investigacion y Desarrollo Tecnológico, Mexico
90344	A Simulator of Human Chest that Simulated Force-Sternal Displacement Relationship during Cardiopulmonary Resuscitation	Xie Xinwu	Institute of Medical Equipment, Academy of Military Medical Sciences, China
90675	MMPs and TIMPs expression and the anterior cruciate ligament repair	Ruyue Xue	Chongqing University, China
90377	Modelling Blood Flow and Analysis of Atherosclerotic Plaque Rupture under g-force	DEEPA T K	College of Engineering, Trivandrum, India
95043	A Human Neck Finite Element Model Based on DICOM Data	Jian-guo ZHANG	Tianjin University of Science and Technology, China
95084	The Development of Color-marker-based spatial calibrating Technique	Wu-Chou Chen	National Taiwan Sport University, Taiwan (China)
95279	A strain energy criterion for trabecular bone adaptation	Bingzhi Chen	Dalian Jiaotong University, China
95582	The Study of the Controllable Parameters on the Hyperthermia Efficiency (A Numerical Study)	Mohammad Bagher Ayani	Ferdowsi university of Mashhad, Iran
95669	Shape selection on the flow drag characteristic passing a streamline fishlike body	Dan Xia	Harbin Institute of Technology, China
95260	Critical conditions for the thermal diagnosis of the breast cancer	Haifeng Zhang	Univ. Sci. & Technol. China, China

Paper ID	Paper Title	Author	Affiliation
95521	Biomechanical study on the stability and Finite-element analysis of stress distribution in reconstructed pelvis with autograft after hindquarter amputation	Mei Jiong	Tongji Hospital Affiliated to Tongji University, China
95650	The Study of Mechanical Properties on Soft Tissue of Human Forearm in Vivo	Jijun SU	Harbin Institute of Technology, China
95585	The effects of Parameters on the Stability of Passive Dynamic Walking	Xiuhua Ni	Harbin Institute of Technology, China
90393	Full Body Wearable Instrumented Motion Analysis System	Yu Zheng Chong	Universiti Tunku Abdul Rahman, Malaysia

Saturday Afternoon, June 13

Oral_7: Any Novel Approaches to Bioinformatics Problems

1st floor, Room 1 in Meeting Hall, Beijing Friendship Hotel Time: 14:00-18:00, June 13

Paper ID	Paper Title	Author	Affiliation
90328	The Application of Apriori-Gen Algorithm in the Association Study in Type 2 Diabetes	Weidong Mao	Virginia State University, USA
90944	Two lower bounds for self-assemblies at temperature 1	Jan Manuch	Simon Fraser University, Canada
95496	A Wavelet -Fuzzy Approach for Diagnosis the Constitutional Jaundice	Shaker K. Ali	Central South University , China
95610	Parameter Estimation for Nonlinear Biological System Model Based on Global Sensitivity Analysis	Jianfang Jia	North university of China, China
90626	Mutation Patterns in Human Menin	Shaomin Yan	Guangxi Academy of Sciences, China
95691	Towards human-like production and binaural localization of speech sounds in humanoid robots	Robert Wolff	Humboldt-Universität zu Berlin Berlin, Germany
95594	Mobile and Bluetooth Technologies for Telecare and Emergency Announcement	Ching-Sung Wang	Oriental Institute of Technology, Taiwan (China)
90829	Multi-Class SVM Classification of Surface EMG Signal for Upper Limb Function	Navleen Singh Rekhi	Dr B R Ambedkar NIT Jalandhar, India
90532	Visual Metaphors to Support the Diagnosis of Sleep Apnea-Hypopnea Syndrome	Abraham Otero	University San Pablo CEU, Spain
90670	Multiscale Peak Identification for Bacterial SERS Spectra	Tsung-Heng Tsai	Academia Sinica, Taiwan (China)
95694	Quality Assurance of Internal/External Tumor Motion	Qingya Zhao	Midwest Proton Radiotherapy Institute, USA
90486	Accurate Location Tracking Based on Active RFID for Health and Safety Monitoring	Woei Chyn Chu	National Yang-Ming University, Taiwan (China)
90924	A System Architecture for a Telematic Support System in Emergency Medical Services	Michael Protogerakis	RWTH Aachen University, Germany

Oral_8: Protein Science and Engineering

1st floor, Room 2 in Meeting Hall, Beijing Friendship Hotel Time: 14:00-18:00, June 13

Paper ID	Paper Title	Author	Affiliation
90748	Mining Frequent Dense Subgraphs based on Extending Vertices from Unbalanced PPI Networks	Miao Wang	Northwest Polytechnical University, China
90579	Study on preliminary extraction and purification of biofloculant produced by strain F2	Wei Wang	Harbin Institute of Technology, China
90889	Microcosm study on response of soil microorganisms to polycyclic aromatic hydrocarbons contamination	Dan Zhang	Beijing Normal University, China
95471	Enzymatic pretreatment and microwave extraction of asiaticoside from Centella asiatica	Liang Fan	East China University of Science and Technology, China
95120	A bioinformatics analysis for the plasma albumin of lampetra japonica and the evolution of albuminoid gene family	Xinpu Yuan	Liaoning Normal University, China
95634	Predicting Protein-Protein Interactions Using Correlation Coefficient and Principle Component Analysis	Putthiporn Thanathamathee	Chulalongkorn University, Thailand
90603	SMD Simulations of Shear Loading Induced Dissociation of P-selectin/PSGL-1 Complex	Bo Huo	Chinese Academy of Sciences, China
90750	Enzyme Function Classification using Protein Sequence Features and Random Forest	Chetan Kumar	Northwestern University, USA
90971	Protein Secondary Structure Prediction Based on Statistical Dictionaries	Wei Yang	Harbin Institute of Technology, China
90331	Prediction of Protein Secondary Structure Using the Hierarchical Competitive Covering Networks Based on Quotient Space	Junjun Mao	Anhui University, China
95660	Transcriptional Profile of CYP3As and Functional Expression of CYP3A29 from Piglets	Zonghui Yuan	Huazhong Agricultural University, China
90764	Volumetric Visualization and Analysis of Molecular Interaction Field	Li Wang	Zhejiang University, China
90692	DomSVR: Domain Boundary Prediction with Support Vector Regression and Evolutionary Information	Peng Chen	Howard University, USA

Oral_9: Biomaterials and Bioelectrical Engineering

1st floor, Room 3 in Meeting Hall, Beijing Friendship Hotel

Time: 14:00-18:00, June 13

Paper ID	Paper Title	Author	Affiliation
90440	Optimal Transform of Multichannel Evoked Neural Signals Using a Video Compression Algorithm	CHEN HAN CHUNG	National Taiwan University, Taiwan (China)
90403	A Four-Channel Microelectronic System for Neural Signal Regeneration	Shu-Shan Xie	Southeast University, China
90648	Improved Algorithm of Pulse Wave Threshold Denoising Based on Lifting Wavelet Transform	Chendi Wang	Southeast university, China
90110	Improved Adaptive Neural Fuzzy Filter And Its Application In Noise Cancellation	Glaiyol Nazari Golpayegani	Islamic Azad University, Iran
95081	Computer simulation of multichannel CIS strategy for cochlear implant	Linjing Wang	Southern Medical University, China
90287	Chitosan polyelectrolyte nanoparticles as protein delivery systems	Xing Nan	Academy of Military Medical Sciences, China
95245	Simulation on Optical Stimulated Luminescence Based on Two Competition Trap Model	Chi-Wen Hsieh	National Chia-Yi University, Taiwan (China)
90059	The moisture absorption and retention abilities of hyaluronan, chitosan, starch and their quaternary derivatives	Shaoli Yang	Chinese Academy of Sciences, China

Paper ID	Paper Title	Author	Affiliation
90360	TAK1-MAPK-NF κ B signaling pathways regulates induction of TNF- α by wear particles in vitro	Tao Cheng	Shanghai Sixth People's Hospital, China
95009	Roles of Microtubule Bias and Joining in the Self-Organization of Microtubule Driven by Dynein C – A Modeling Study	Qiang Chen	University of Alberta, Canada
95632	Automatic 3D Segmentation of Lung Airway Tree: A Novel Adaptive Region Growing Approach	Kai LAI	University of Science and Technology of China, China
90938	Evaluation on Mechanical Ventilation using Fuzzy Assessment Method	Hui Zhu	Soochow University, China
90922	Type D personality, Psychological Distress and Quality of Life in MI patients.	Iram Gul	Fatima Jinnah Women University, Pakistan

Oral_10: Biomedical Imaging, Image Processing & Visualization

1st floor, Room 4 in Meeting Hall, Beijing Friendship Hotel

Time: 14:00-18:00, June 13

Paper ID	Paper Title	Author	Affiliation
95686	Fast parametric active contour to improve 3D segmentation of tubular structures	David Schwenninger	University Medical Center Freiburg, Germany
95535	3D virtual intravascular endoscopy visualization of coronary artery plaques	Zhonghua Sun	Curtin University of Technology, Australia
90549	Segmentation and Tracking of Confocal Images of Arabidopsis thaliana Root Cells using Automatically-Initialized Network Snakes	VIJAYASHANKAR SETHURAMAN	The University of Nottingham, UK
95071	Quantification of PET and CT Data Misalignment Errors in Cardiac PET/CT: Clinical and Phantom Studies	Padis Ghafarian	Shahid Beheshti University, Iran
90695	A Bayesian Radial Basis Function Model to Link Retinal Structure and Visual Function in Glaucoma	Haogang Zhu	City University London, London, UK
90473	Simulation of Induced Electric Field Distribution Based on Five-shell Spherical Model Used in rTMS	Lina Pu	Chinese Academy of Medical Sciences, China
95701	Automatic Data Processing to Relative Quantitative Analysis of 1H MR Spectroscopy of Brain	Weibei DOU	Tsinghua University, China
90500	Accurate Visual and Haptic Burring Surgery Simulation Based on a Volumetric Model	Ming-Dar Tsai	Chung Yuan Christian University, Taiwan (China)
95640	Early Breast Cancer Detection with Hemi-elliptical Configuration by UWB Imaging	Xia Xiao	Tianjin University, China
95305	Change in cerebral perfusion detected by dynamic susceptibility contrast magnetic resonance imaging: Normal volunteers examined during normal breathing and hyper-ventilation	Ronnie Wirestam	Lund University, Sweden
90108	Application of infrared thermal imaging in the sleep improvement study	Ziru Li	South China Normal University, China
90581	Combined SVM and PCA to Recognize the Brain Function from fMRI Images	Rong Guo	Northwestern Polytechnical University, China
95073	The Influence of X-ray Spectra Filtration on Image Quality and Patient Dose in the GE VCT 64-Slice Cardiac CT Scanner	Mohammad Reza Ay	Tehran University of Medical Sciences, Iran
95682	Fractal Analysis of Creutzfeld-Jakob Disease Frontal Horn Brain Magnetic Resonance Image	Todd Holden	Queensborough Community College of CUNY, USA
95642	Algorithms for correcting velocity vectors in ultrasonic particle image velocimetry	Lili Niu	Northeastern University, China

Oral_11: The Special Session on Psychological Health

1st floor, Room 5 in Meeting Hall, Beijing Friendship Hotel

Time: 14:00-18:00, June 13

Paper ID	Paper Title	Author	Affiliation
95595	Effectiveness of a theory-based HIV-related sexual risk-reduction prevention for female rural-to-urban migrants in Beijing, China :a pilot study	Danhua Lin	Beijing Normal University, China
90905	Motivational Predictors of Job Burnout:Learning goal orientation and the mediating role of intrinsic work motivation	Kai Zhang	Renmin University of China, China
95306	Relationship of Job Satisfaction, Social Support and Subjective Well-being in Catering Enterprise	Lin ZHANG	Ningbo University, China
90878	How does emotional intelligence regulate emotional exhaustion? The mediating role of work stress	Xiaoyu Liu	Renmin University of China, China
95529	Survey and Analysis on Undergraduates' Mental Stressors and Coping Strategies	Xiangrong Liao	Changsha University of Science and Technology, China
95300	The Relation between Different Constructs in Middle Childhood Peer Interaction and Loneliness: A Mediatonal Model	Zongkui Zhou	Huazhong Normal University, China
95549	Work-related Stress and Depression Susceptibility for the Sanitarian Manpower in Country	Wen-jing CHEN	Beijing University of Posts and Telecommunications, China
95181	Trait Anxiety Accentuates the Cortisol Awakening Response	Chuk-ling Julian LAI	City University of Hong Kong, Hong Kong (China)

Oral_12: The Special Session on Biomathematics and Biostatistics

1st floor, Room 6 in Meeting Hall, Beijing Friendship Hotel

Time: 14:00-18:00, June 13

Paper ID	Paper Title	Author	Affiliation
95689	A Novel Clustering-Based Season Factor Approach for Broiler Breeding	Peijie Huang	South China Agricultural University, China
95569	A Mathematical Model of the Dynamics for Anti-HBV Infection Therapy with Chinese Herbs + Adefovir Dipivoxi	Lequan Min	University of Science and Technology Beijing, China
95700	Applications of Motion Analysis System Measuring Micro-Movements in Three-Dimensional Space	Helen Liu	Surrey International Institute, UK
95287	Design of a Portable Near Infra-Red Spectroscopy System for Tissue Oxygenation Measurement	Zhang Yan	Harbin Institute of Technology, China
90582	Modeling and control of cell cycle	Aydin Azizi	Sharif university of technology, Iran
90003	Inhibition of diatom diet on the reproduction of Paracalanus parvus	Jie Li	Qingdao Technological University, China
90031	Bayesian estimation based on beta prior in cure model	Xiaobing Zhao	Jiangnan University, China
90899	The Search of Cell Positioning in Electrorotation measurements	Jun Wang	Huazhong University of Science and Technology, China
90184	On the traveling neuron nets (human brains) controlled by a satellite communication system	Wanyang Dai	Nanjing University, China
90464	Detection and evaluation of gastric motility for erosive gastritis patients	Zhangyong Li	Chongqing University of Posts and Telecommunications, China

Part IV Poster Sessions

Saturday Afternoon, June 13

Poster1: Bionformatics

2nd floor, Building No.1, Beijing Friendship Hotel

Time: 14:00-14:45, June 13

PaperID	Paper Title	Author
90633	Antibody Concentration Based Method for Network Security Situation Awareness	Feixian Sun
90334	Evidence for positive selection in Ser/Thr protein kinases (STKs) genes of Trichodesmium erythraeum	Chengwei Liang
90761	Functional module analysis of Alzheimer disease related genes and microRNAs based on Gene ontology annotation	Zhang Jie
90749	Global differential gene expression in cancers and its implications for building robust diagnostic classifiers	Chen Yao
90713	Kinetic Analysis of Aminoethylisothiurea on Diphenolase of Mushroom Tyrosinase	Shu-Bai Li
90686	Net Analyte Signal Calculation in Near-Infrared Spectra Calibration	Weiling Liu
95534	A measure of semantic similarity between GO terms based on semantic contributions of their ancestors	Jifeng Huang
90684	A novel model for individual dosing regimens against PK-PD correlation	Feng Yingzhu
90681	Optimization of Multiple Control Parameters of Mathematical Model of Cardiopulmonary Resuscitation Based on Genetic Algorithm	Lin Xu
90781	A Novel Algorithm for Estimating Arterial Pressure-dependent Compliance	Xin Sun
90635	Research on Symbiotic System of Manufacturing Enterprises and TPL Based on Symbiotic Theory	Chouyong Chen
90792	Relationship between Vascular Elasticity and Human Pulse Waveform Based on FFT Analysis of Pulse Waveform with Different Age	Huifeng Yang
90600	Modelling on state transfer of DNA automaton	Yihong Qiu
95564	Discovering new drug in ancient herbal compound database by unsupervised pattern discovery algorithm	Jianxin Chen
95571	Modelling the dynamics of Anti-HBV Infection Therapy with Chinese Herbs	Yongan Ye
90555	Algorithms for DNA Sequencing by Hybridization: A Review	Hongwei Xie
90508	Decision tree based predictive models for breast cancer survivability on imbalanced data	Yaqin Liu
90423	Prediction of linear B-cell epitopes using AAT scale	Lian Wang
90417	Common features identification of differently expressed genes related to endemic osteoarthritis disease	Xiaoming Wu
90407	Reconstruction of Probability Phylogenetic Trees with Substitution Models	Jia Weng
90347	Component Vector method and its application in detecting similarities between sequences	Guang-You DUAN
90645	A new trunk subdivision model in BIA	Juan Deng
95163	Novel and Homology MicroRNA Prediction by Using a Bayesian Network Based Program in Strongylocentrotus.purpuratus genome	Zhenlin Wei
95312	Selecting Biomarkers for Ovarian Cancer Detection Using SVD and Monte Carlo Methods	Haifeng Lai
95273	A Biofeedback-based Breathing Induction System	Seung-Hun Park
95263	A Novel Approach for Face Recognition based on Weightiness Image Partition	Guanghui He
95254	Study on the dynamical behavior of mass attitudes	Jinghu Yu
95224	An MM-based Optimization Algorithm for Sparse Linear Modeling on Microarray Data Analysis	Xiaohui Chen
95217	Indigenous microbial diversity in conglomerate oil reservoirs analyzed by PCR-DGGE	Yuehui She
95428	EPBC: Enhanced Possibilistic Biclustering Algorithm with Application to Gene Expression Analysis	Mohamed Mahfouz
95430	Discrete Particle Swarm Optimization with Chaotic Initialization	Qiang LU
90004	Spatial Cluster Analysis based on Evolutionary DNA Computing Technique	Xiyu Liu
95168	Automatic Testing with Diagnostic Resolution for Biomedical Apparatus	Jinhe Wang
90606	MUI: a new functional similarity measure for gene products based on Gene Ontology	Qiang Hu
95155	Scavenging effects of Echinacea. purpurea extract and active ingredient against peroxynitrite	Yunjing Luo

PaperID	Paper Title	Author
95099	New Fast Algorithm on DNA Sequence Alignment	Jing Fan
95056	Mixed Using Artificial Fish - Particle Swarm Optimization Algorithm for Hyperspace Basing on Local Searching	Wei Gao
95055	A New Particle Swarm Optimization based Unscented Particle Filtering	Chunhe Song
95045	DNA computing for Traveling salesman problem	Liu Xikui
95037	An Efficient Hardware-Based Approach for Molecular Folding Calculations via System-on-Chip	Wen-Tsai Sung
90968	Subcellular Locations Prediction of Proteins Based on Chaos Game Representation	Nana Li
95431	Revel of Premature Site-dependent Ventricular Vulnerability in Simulated Ischemic Tissue	Hong Zhang
90160	Testing the relative content of berberine of cortex phellodendri chinensis in vivo by multispectral imaging method	Jing Zhao
90072	Computational Identification of PpsR and FnrL Regulatory Elements in Four Purple Bacteria	Chengwei Liang
95672	3D Protein Structure Similarity Comparison Using a Angular-Invariant Feature Registration Method	Ying Zhou
90088	Hierarchical Clustering of Gene Expression Data with Divergence Measure	Weixiang Liu
95633	A Practical Exponential-time Algorithm on Sorting by Short Block-moves	Qingsong Xie
95557	Three-dimensional simulation of pathogen particles spread around buildings	Xue-Yi You
90257	Research on Characteristic Extraction of Human Gait	Shan Yang
95643	When and where does the reentry Start in Long-QT syndrome? —A computer simulation study	Yinbin Jin
95621	Discovering syndromes in Coronary Heart Disease by cluster algorithm based on random neural network	Jie Wang
90173	The Transient Characters of the Directed Motion of Protein Motors	Wu Weixia
90252	An agent-based modeling approach at molecular scale for biochemical networks: simulating from stochastic molecular events	Jun Qing Niu
95690	DPBC: Distance Based Possibilistic Biclustering with Application to Gene Expression Analysis	Mohamed Mahfouz
90128	The identification of human cryptic exons based on SVM	Gang Su
90291	Quantitative structure-activity relationship of sesquiterpene lactones with anti-ulcerogenic activity	Huajun Luo
90112	Developing coarse-grained force fields for PNIPAM single chain from the atomistic model	Zilu Wang
90297	The Second Analytical Model for the Power Dissipation Within the cell Membrane in Suspensions Exposed to DC Electric Fields	Yurong Qin
90120	New Results on Cell Metabolic Networks	Qinghua Zhou
90313	Study on the Temporal and Spatial Change Evolutions of Thermal Environment in Harbin	Wenliang Li
95698	SPSAS: A Segment-Based Protein Sequence Analyzing System	Kan Liu
90652	Protein-protein relationship measurement based on MELK data for Polymyositis	Fang-Zhen Li
90189	Structure of Stearoyl ACP Desaturase of Pistacia Chinensis and Other Plants Was Predicted by Bioinformatics Methods	Ming-wang SHI
90488	Cloning and Characterization of Duck (Anas platyrhynchos) MyoD1 Gene and Comparison with Other Vertebrates	Liang Li
90785	Isolation and Identification of Leaf Blight Pathogen from Camellia oleifera	Zhou Gouying
95685	Isolation and Characterization of a Cinnamoyl-CoA Reductase cDNA from Camellia oleifera	Xiaofeng Tan
95216	Similarity/dissimilarity analysis of DNA sequences based on a 3D graphical representation	Huang Hailan
90623	Analysis rDNA ITS sequence of two high quality strains of Agaricus bisporus	Liu Jun-ang
95036	Graphical Representation of DNA Sequence with Degeneracy Tends to Zero	Liu Xikui
90176	Bayesian Testing for Multiple Motif in Biological Sequences Based on Moment Estimate	Qian Liu
95192	cDNA cloning, sequence analysis and homology modeling of S20-RNase in Chinese white pear (Pyrus bretschneideri Rehd.)	De-yi Yuan
95191	Cloning and Sequence Characterization of SFBB (S-Locus F-Box Brothers)-Gamma Genes in Chinese Sand Pear (Pyrus pyrifolia Nakai.)	Xiao-feng Tan
95102	Interspecific relationships and origins of Taxus and Cephalotaxus	Da Cheng Hao
95190	Identification and sequence analysis of four S-RNase genes in plumcot (Prunus simonii Carr.)	Jinghua Duan
90102	An effective combined-enhancer for the PCR amplification of GC-rich longer DNA sequences	Fang Liu

PaperID	Paper Title	Author
90183	Prokaryote Gene Data Classifier Design Based on SVM	Xiaoxia Li
90231	The cDNA Segment Cloning and Bioinformatics Analysis of SREBP-2 Gene in Goose	Chun Chun Han
90498	Evolution of the major histocompatibility complex genes in fish	Xuemei Qiu
90273	Phylogenetic analysis of four <i>Vibrio</i> strains of pathogenic bacteria based on hemolysin genes and 16S rRNA genes	Xiuli Wang
90515	Analysis of SSR Marker of Wheat Mutants of Genetic Transformation Mediated by Ion Beam	Tie-gu Wang
90524	Cloning and bioinformatics analysis of genomic DNA sequences of <i>Gastrodia tuber</i>	Jun Tao
90590	Cloning and Molecular Characterization of a SKP1 Gene from <i>Brassica napus</i>	Heng Yin
90414	Secondary effluent treatment by pilot-scale constructed wetland and the character of its microbial communities	Guo Jifeng
90715	Geometrical Comparing the Avian Influenza Virus in different hosts	Yan-ling YANG
90277	Phylogenetic analysis of members of the order Laminariales based on rbcL genes and 5.8S rRNA genes	Zeyu Zhang
95355	The Research on exoL of Succinoglycan Biosynthesis Gene in Biofloculant Producing Bacterium F2	Bing Yu
95383	Cloning, Bioinformatics Analysis and Functional Identification of A Novel Small Heat Shock Protein Gene from <i>Camellia oleifera</i> Seed	Hongpeng Chen
95365	Identification and Functional Analysis of Carotenoid Biosynthetic Genes in the Extremely Radioresistant Bacterium <i>Deinococcus radiodurans</i> Genomes	Qiao Yang
90210	Computational prediction of conserved microRNAs from <i>Solanum tuberosum</i>	Wenzheng Yang
90068	An ALE-index based algorithm facilitated prediction of success for polymerase chain reactions	Zhizhou Zhang
90201	Z curve analysis on repeat long regions of Marek's disease virus 1	Chuanzhen Jiao
90071	Relationships among three House Dust Mites Based on Molecular Data	Yubao Cui
90188	Isolation and Functional Analysis of LOX gene from seeds of Wild soybean	Ming-wang SHI
90339	Semi-Parametric Polynomial Inverse Regression for Dimension Reduction and Its Application in Microarray Data	Zhang Guofen
95244	Analysis of Seven Polyacrylamide(PAM)-Degrading bacterias using PCR-DGGE Method	Yuehui She
95631	Cloning, expression analysis and sequence characterization of a monoterpene synthase gene, PaLis, from apricot (<i>Prunus armeniaca</i>)	Qi-rui Wang
90413	Performance of an enhanced membrane bioreactor (EMBR) by adding aerobic denitrification strains in treating high NH ₄ ⁺ -N wastewater	Guo Jifeng
95339	Cloning, characterization and application of the promoter region of the alkaline protease gene in <i>Bacillus alcalophilus</i> PB92	Kun Chen
95327	Generation of the antibody selectively against a novel thyroid hormone receptor beta isoform	Ying Liu
95239	<i>Streptomyces</i> ST66 Amylomaltase Gene Cloning and Expression and Production of Cycloamylose	Wang Shuixing
90008	Effects of hyperbaric oxygen with free radical antagonists on the expression of extracellular matrix and matrix metalloproteinase -2 in rat liver treated by CCl ₄	Pingsheng Chen
95309	A Supervised SVD Approach to Ovarian Cancer Chemotherapy Response Prediction with across Factor Normalization	Yan Chen
95295	Experimental Study of Chitosan Mediated in vivo igf-1 Gene Transfection for The Treatment of Cartilage Defect	Ronglan Zhao
95235	Artificial Neural Network Prediction for Cancer Survival Time by Gene Expression Data	Yen-Chen Chen
95204	Microvessel Damage May Play an Important Role in Tumoricidal Effect for Murine A549 Lung cancer Cells with Lung cancer In Vivo	Hong Li
90801	A Gene Technology Inspired Paradigm for User Authentication	Feixian Sun
90351	The Expression of Bovine Enterokinase Catalytic Subunit in Methylophilic Yeast <i>Pichia pastoris</i>	Zhenjiang Fang
90290	Selection of Feature Genes and Construction of Regulatory Network on Colon Carcinoma	Qiang Bo
90479	Application of a New Similarity Measure in Clustering Gene Expression Data	Gangguo Li
90592	Effect of Overfeeding on the Transcriptional Expression of aP2 Gene in Landes Goose liver	Shengyan Su
90240	Influence of gene dose on in vitro culture responses of purple coneflower (<i>Echinacea purpurea</i> L.)	Dahanayake Nilanthi

PaperID	Paper Title	Author
90232	Effect of exogenous cholesterol on cholesterol accumulation and mRNA expression of SREBP-2 and HMGR in goose primary hepatocytes	Chun Chun Han
90776	The Enhancement of drug sensitivity of human AFP-producing gastric carcinoma cell line FU97 to arsenic trioxide Using AFP as targeting siRNA	Yanfei Jia
90655	Transcriptional Regulation of Human Gene Coexpression Network	Ivan Krivosheev
90671	Withdrawal from chronic ginsenoside Rb1 treatment alters GABAA receptor mRNA levels of cultured rat hippocampal neurons	Yijun Tang
90200	Influence of B ring structure on cell cycle inhibitory activities of flavonols in a human oesophageal adenocarcinoma cell line (OE33)	Qiang Zhang
90846	Expression of Fas ligand contributes to formation of immune escape in Esophageal Carcinoma	Shiying Zheng
90710	CTFMiner: A method to predict candidate disease genes based on the combined network topological features mining	Lina Chen
95137	Cloning and expression of ESAT-6 Gene of Mycobacterium bovis in Escherichia coli	Xiuyun Jiang
90772	Gene network study revealed molecular links among genes for alcohol metabolism and breast cancer susceptibility	Liangyu Meng
90322	Preliminary Study on the Expression of BGT gene in Transgenic Birch	Fansuo Zeng
90837	The experimental study of lung carcinoma vaccine modified by human B7-1 and IFN- γ genes	Shiying Zheng
90857	The proliferative inhibition and apoptotic mechanism of Saikosaponin D in human non-small cell lung cancer A549 cells	Dong Jiang
90904	Physiological Identification of Salt Tolerance in Transgenic Tobacco Expressing Genes Related to Plant Trehalose Metabolism	Bei Guo
90928	Inference of Large-Scale Gene Regulatory Networks Using GA-based Bayesian Network and Biological Knowledge	Pegah Tavakolkhah
95026	A new structure learning method for constructing gene networks	Zhihua Du
90148	Construction of Gene Regulatory Networks Based on Genetic Algorithm of Greedy Equivalence Search Mechanism	Qiang Bo
90137	Relationship between proliferating cell nuclear antigen gene expression amount and growth rate of Skeletonema costatum	He Shan-ying
95131	Modeling of ATM accumulation and ATM-mediated oscillation of p53	Zhi-guang Guo
90192	An Improved Fourier Method for DNA Sequence Classification	Baoshan Ma
95637	Strong Association Rules Mining Without Using Frequent Items for Microarray Analysis	Miao Wang
95573	Unravelling gene networks from steady-state experimental perturbation data	Luwen Zhang
95419	Transformation and Construction of RNAi Expression Vector of Plant Trehalase Gene	Bei Guo
90604	Chaos game representation for discriminating thermophilic from mesophilic protein sequences	Hu Xue-Hai
90982	A Two-Dimensional Electrophoresis Protocol to Interrogate Protein Discrepancies in Mesocarp and Putamen during Prunus persica Fruit Development	Yi-Ming WANG
90983	Using nonlinear energy operator index as pseudo amino acid compositions for predicting protein subcellular location	Xiaoli Guo
90550	Information Loss and Noise Inclusion Risk in Mimotope based Epitope Mapping	Jian Huang
95013	A graph theoretic algorithm for removing redundant protein sequences	Pengfei Liu
90620	A death-survival switch in cell: cross talk between Akt and p53	Chang-qing Yuan
90707	Analysis of the Interactions between the N-terminal Peptide of gp41 and T20 Using Molecular Dynamics and Free Energy Calculations	Jian Jun Tan
90484	A Study of Cross-linkage of Formaldehyde with Human Serum Albumin	Bo Li
95539	Wavelet Transform Based Protein Decoy Discrimination	Minxin Chen
90330	Expression and functional characterization of chitinase gene, CHI58 related to biocontrol in Chaetomium cupreum	YanJun Wang
90249	Predicting co-complexed protein pairs based on communication model using diverse biological data	Kuan Zhang
90293	Prediction of protein quaternary structural type with functional domain and pseudo amino acid composition	Xuan Xiao
90817	Bioinformatics Analysis of Amyotrophic Lateral Sclerosis Associated Amino Acid Mutations	Xiaochun Wang

PaperID	Paper Title	Author
90673	The wettability and topography of self-assembled protein monolayer linked by alkanethiols	Zhengjian Lv
90704	Network parameters of protein structure and the folding rate	Haiyan Li
90487	Prediction of protein-protein interactions using symmetrical encoding scheme	Qingshan Ni
90302	DNA Length and Cationic Cofactor Dependent Strand Transfer Activity of HIV-1 Integrase	Hongqiu HE
90157	Purification and Some Properties of Superoxide Dismutase from <i>Aloe saponaria</i> (Ait) Haw.	Tang Yunming
95144	Using Singular Value Decomposition and Discrete Fourier Transform to Characterize Protein Structure and Build Fast Fold Recognition	Jian-Yu Shi
95641	using a fuzzy support vector machine classifier to predict interactions of membrane protein	Peiying Zhao
90172	cDNA cloning and bioinformatic analysis of self-incompatible S34-allele from Chinese Pears	Yanling Zeng
95612	A support vector machine-based method for predicting chemokine receptors types	Jiang Zhenran
90894	Enzyme Design by Chemical Modification of Papain Lysine	Li-Min Zhu
90346	StrandPairsViewer: a toolkit for visualization and analysis of amino acids pairs in protein sheet structures	Ning Zhang
95517	Effect of N-terminal and C-terminal Deletion of Cry1Ie of <i>Bacillus thuringiensis</i> on its Expression and Purification	Huicong Shen
90773	Two receptor based pharmacophore models for HIV-1 integrase DKA inhibitors	Xiao-Yi Zhang
90349	Comparative analysis of two-component signal transduction systems in six <i>Synechococcus</i> strains	Xiaowen Zhang
90367	Application of Engineered Carrot Antifreeze Protein in the Cryopreservation of Rice Cells by Adsorbing into Ice surface to Inhibit Recrystallization	Dang-Quan ZHANG
90363	Improved Prediction Method of Protein Contact Based on RBF Neural Network	Sun Pengfei
90530	Study on the Resistance and the Binding Mode of HIV-1 Integrase to NSC158393	Ming Liu
95525	Determination of BSA by its enhancement effect on Second Order Scattering of Chrome Azurol S	Mei Yan
90940	Using logistic regression method to predict protein function from protein-protein interaction data	Qingshan Ni
90880	Expression of EV71-VP1 Protein and Preparation of its Polyclonal Antibody	Shengjun Wang
95596	Comparing the effects of different force fields on computed structural character of H1 peptide	Zanxia Cao
90735	Molecular Dynamics Simulation of HIV-1 gp41 and the N554D/S649A Double Mutation for Drug Resistance to Enfuvirtide	Jian Jun Tan
90863	Protein Sequences Analysis Based on Smoothed PST	Yong Liu
90884	The Analysis of the Plywood Formaldehyde-emission Loose	MA Qing-zhi
90868	A Clustering Algorithm for Gene Expression Data Based on Graph Theory	Xiaoming Du
95533	An Efficient Subsequences Mining Algorithm	Hongyan Pan
95322	A new strategy to prepare competitive template in quantitative competitive PCR	Bei Sun
90266	Liver Focus Detections Based on Visual Attention Model	Li Ma
95606	A non-random gait through the human genome	Moli Huang
90077	Research on Calculation of Oil Residues Produced and Discharged by Vessels Sailing in Jiangsu Coastal Areas	Sha Zhengrong
95498	Fetal Signal Reconstruction Based on Independent Components Analysis	Yapeng Lee
90956	Band Selection for Biomedical Hyperspectral Data Studies Using Genetic Algorithms	Chunni Dai
90936	A Real Data Simulation Study of Computerized Adaptive Testing of Chinese Soldier Personality Questionnaire	Yebing Yang
90610	Expression Of Bovine Prochymosin Gene In <i>Lactococcus Lactis</i>	Daqing Sun

Poster 2: Biomedical Engineering (1)

2nd floor, Building No.1, Beijing Friendship Hotel

Time: 14:50-15:35, June 13

PaperID	Paper Title	Author
95123	Identification and Characterization of stx2 Converting Bacteriophage from Shiga-toxin-producing <i>Escherichia coli</i> O157 Strains of Animal Origin	Yaxian Yan
95652	Preparation of Calcium Phosphate-Based Bone Repair Materials	Hua Liu

PaperID	Paper Title	Author
90634	Biomimetic Fibrous Extracellular Matrix for Cartilage Tissue Engineering	Yun Qi
90874	Novel affinity membrane chromatography technology: purification of pepsin using immobilized reactive dye ligands	Tianxiang Chen
90807	Papain Immobilization on Chitosan-coated Nylon Membrane: Preparation and its Application in Cystatin Separation	Nie Hua-Li
90682	Microwave-assisted Synthesis of a Brush-like Copolymer of Poly(D,L-lactide) Grafted onto Chitosan	Binghong Luo
90242	Expression and Affinity Purification of Small Molecule Functional Peptide of Hirudin in E. coli	Songbin Ben
90376	Preparation and characterization of ultrafine Eudragit L100 fibers via electrospinning	Xia Xia Shen
90361	Biological Effect of Titanium's Surface Roughness on Periodontal Ligament Cells	Zhen Gao
95600	Properties of the Fast Setting Calcium Phosphate Cement Scaffold	Hua Liu
90422	Preparation of Papain-carried Wood Cellulose Fiber in Ionic Liquid by Wet Spinning	Xue-lian Li
90703	A study on the fabrication of porous scaffold cross-linked with genipin	Jun-Sheng Tian
90343	The influence of amino and hydroxyl of chitosan on hydroxyl radical scavenging activity	Fang Dong
95101	Isotherm, kinetic and thermodynamic analysis of bromelain adsorption on Reactive Blue 4 immobilized composite membranes	Sai Nan Su
95157	The properties of a compound nerve scaffold based on acellular-matrix and poly (lactide- co-glycolide)	Xiaozhen Dai
90912	Biocompatible Polymeric Hydrogels with Tunable Adhesion to both Hydrophobic and Hydrophilic Surfaces	Muxian Shen
95100	Improving the stability of cellulase by immobilization on chitosan-coated magnetic nanoparticles modified with α -ketoglutaric acid	Yuting Zhou
95028	Preparation and characterization of medicated PAN/PVP composite fibers for better drug release profiles	Deng-Guang Yu
90332	Purification of Alginate for Tissue Engineering	Yusha Qi
90190	Preparation and characterization of PLA ultrasound contrast agents by combining an ultrasound method and a Shirasu Porous Glass (SPG) membrane emulsification technique	Zhenqing Hou
90357	Surface modification of electrospun nylon nanofiber based dye affinity membrane and its application to papain adsorption	Hai-Tao Zhang
95127	Study on the blending solution behavior and membrane properties of sodium alginate and chitosan	Xin Meng
90768	Characterization of icarrin and icariin-2-hydroxypropyl- β -cyclodextrin inclusion complex- loading poly (L-lactic acid) scaffolds	Ye Zhang
95238	Synthesis and properties of fluoralkylpolysiloxane modified polyurethane	Rui Weng
95271	Synthesis and Characterization of A Novel NaturalMacromolecule Antibacterial Material	Sun Jianhua
90786	Drug release properties of poly (D, L-lactic acid) PDLLA modified genipin cross-linked chitosan/gelatin scaffold	Jun-Sheng Tian
90135	The moisture absorption and retention abilities of quaternized carboxymethyl chitosan	Fengping Miao
90637	Effects of tetrandrine-loading poly(L-lactic acid) film on the behavior of chondrocytes in vitro	Yuan-Lu Cui
95218	Improvement of ϵ - poly-L-lysine production by Streptomyces albulus TUST2 employing a feeding strategy	Shiru Jia
90044	Resveratrol induces human hepatoma cancer cells HepG-2 apoptosis via mitochondria pathways	Zhang Xiu-Juan
95284	Research and application of microbial flocculants in sewage treatment and sludge dewatering	Rongli Yu
90751	Synthesis and Characterization of $\text{NH}_4\text{V}(\text{Gly})_3(\text{PO}_4)_2 \cdot \text{H}_2\text{O}$	Bo Wei
95178	Preparation and evaluation of chitosan-coated alginate/gelatin sustained releasing microspheres containing berberine hydrochloride in vitro	Qiang-Song Wang
95177	ATPS-Modified Polyurethane withBlood Compatibility	Rui Weng
95377	CaCO_3 -Templated Microcapsules to Carry Heparin via Layer-by-layer Self-assembly†	Xinrong Liu
95453	Preparation and Characterization of Bacterial Cellulose Tube	Shiru Jia
95579	Performance Improvement for Biomedical Material---Bacterial Cellulose	Yuan-yuan JIA
95704	Investigation of Resistivity's Abnormity and Moduli of Elasticity Softening in NiTi Shape Memory Alloy	Feiming Chen
95588	The Neurophysiologic Difference Between Shy and Nonshy Undergraduates in Early Face Processing: an ERP Study	Lei Han

PaperID	Paper Title	Author
95220	Research on the Neural Dipole Localization Using a Method Combining SVM with Nonlinear Dimensionality Reduction	Jianwei Li
90459	Activity-dependent synaptic plasticity and the patterning of hemisegmental spinal cord network activity	Yan Jia
90888	Preliminary Analysis on Electrophysiological Signals of Canine Cerebral Cortex and Corticospinal Tracts	Xiao Han
90887	Thyroid Disease Diagnosis Based on Genetic Algorithms using PNN and SVM	Fatemeh Seiti
90639	Spike sorting using a cognitive method based on fuzzy concepts	Jun Zhuang
90278	Microstructured Topography Enhanced the Responsiveness of Voltage-gated Calcium Channels in H945RB.3 Human Neural Progenitor Cells	Ze-Zhi Wu
90725	Quantitative Measure of Population Adaptation of Retina Ganglion Cells' Light Response	Wen-Zhong Liu
95293	Classification of Alcoholics and Non-Alcoholics via EEG Using SVM and Neural Networks	Mohammad Reza Nazari Kousarizi
90683	Comparison of VBM and DBM methods by Study of Blind men's brain structures	Chunlan Yang
95146	Anesthesia Control Based on Intelligent Controllers	Niusha Eshghi
90109	Antioxidants alleviated withdrawal syndrome in heroin administrated mice	Xuan Yuan
90472	Based on the time-frequency analysis to distinguish different epileptiform EEG signals	Guo Hua
90666	Design and Experiment of Motor Function Mapping of Rat's Spinal Cords	Xiao-Yan Shen
90471	A New Device to Study Fatigue Performance and Mathematical Model to analyze relationship between Textile Parameters and Fatigue of Textile Scaffold for Stent-Graft	Hui-jing ZHAO
90745	Communication Protocols with Testing Prototype for the Detection of Parametric Faults	Jinhe Wang
90570	Application of polyvinyl alcohol (PVA) macro-encapsulated islets in islet transplantation	Zhi Qi
90744	Development of An Instantaneous Blood Pressure measuring System at the Wrist Based on the Volume-Compensation Method	Shumei Gao
95258	Design and Fabrication of Micromixer With Piezoceramic Buzzer	Yaw-Jen Chang
90850	Magnetic Field Distribution and Application of a Transcranial Magnetic Stimulation for Drug Addicts	Yu Chang
90306	The System of Portable Fat Detector With Dual-wavelength Near-infrared Light	Weijun Song
95052	The Analysis and Simulation of microstrip Spiral Antenna for Microwave Hyperthermia	YongXing DU
90545	A Novel Method of Measuring the Depth of Manual Chest Compressions During CPR	Guang Zhang
90851	Hemodynamic Performance of a Miniature Axial Blood Pump Caused by Motors	Yu Chang
90654	Improved Fly-back Charging Circuit for External Defibrillator	Weijiao Li
90078	Blending sulfonated polyethersulfone to improve the blood compatibility of polyethersulfone membrane	Haitao Wang
95343	Long Term Sensibility of the Ni-Co Protein Chip	Yaw-Jen Chang
90054	A novel method for gas classification by means of an array of carbon nanotubes gas sensors	Zikai Zhao
90771	Design and implementation of an improved BCI System based on alpha rhythm	Bing Wei
95318	An Automatic Instrument for Brachial and Ankle Systolic Pressure Measurement Using Photoplethysmography	Xin Sun
90037	A Fast Method to Detect Helicobacter pylori in Oral Bacteria Plaque Samples through Chromaticity Analyzed	Yang Zhang
90314	Method to Design Low-power Embedded Processor for Wireless Endoscope	XU Xinfeng
90636	Experimental study of gas discharge using aligned multi-walled carbon nanotube electrode	Jing Li
90791	Machine vision for automated inspection of surgical instruments	Shuyi Wang
95639	A Novel Method Evaluating Vascular Resistance Based on Fourier Analysis for Pulse Waveform	Huifeng Yang
90162	A new biochip applied to examine the ankylosing spondylitis	Lei Luo
95134	Recent Progress in Challenges of Wireless Biomedical Sensor Network	Lili Zhang
90301	A Controller Design for an Axial Flow Blood Pump Based on Back-EMF without Delay	Gao Bin
90154	Novel 3DP drug delivery devices with complex structures for linear drug release profiles	Deng-Guang Yu
95121	The characteristics of ultrasound speed and attenuation in progressive trypsin digested articular cartilage	SUN Feng
90250	Electrospun biodegradable nanofiber mats for controlled release of herbal medicine	Jie Han

PaperID	Paper Title	Author
90381	Design of a Permanent Magnet with Hexagonal Cavity for Small Animal Magnetic Resonance Imaging	Zhi-wen Liu
90454	Four Cylinder Halbach Array for Magnetic Navigation System	Tang Xiao-ying
95067	Novel Optical Nanobiosensor Based on Localized Surface Plasmon Resonance Assembled with Gold Colloid Nanoparticles	Ling Zhang
95060	Measurement of the Biotin Concentration Using QCM Biosensors	Yaw-Jen Chang
95231	Finite Element Analysis of LTI Carbon hip joint head	Lan Chen
90233	Sustained-release floating drug delivery systems prepared using three-dimensional printing	Xiao-Fei Zhang
90430	Study of Simulated Phosphene Size Based on Tactile Perception with Three Distributions	Shu Ling
90111	Dynamic Monitoring of PEG-mediated Cell Fusion by RT-CES System	Huihua Deng
90891	Chemical composition and healthy care properties of Cinnamomum camphora by GC/MS	LI KAI-FU
90858	A Body Sensor Networks Development Platform forPervasive Healthcare	Wang B.
90138	The Effects of Long – term Winter Swimming on Lipid and Hemorheology of Senile Males	Qinghong Xia
95450	Low Power dual-core Holter System Based on MSP430 and ARM7	Yawei Tang
90495	A model for the transmission of dengue	Hui Wan
95135	A New Cuff Unit for Measuring Instantaneous Blood Pressure at the Finger Artery By local Pressurization	Yilin Song
90402	Therapeutic effect of vascular dermatosis with intense pulse light PhotoDerm	Lijun Qiu
95386	Design and Analysis of Parallel Woven Structure-based Flexible Resistive Pressure Sensor	Long-Fei Li
90915	An integrated rehabilitation of urban water environment in Guilin City, China	Yuansheng Pei
90895	A Space Mapping Deformation Technology for Dental Surface Restoration	Shuxian Zheng
90466	Design Multiparameter Anaesthesia Depth Monitor	Wei Wang
95504	HRV and DBP in Monitoring the Short-term Effect of Wood-based Materials on Human Physiologic System	Haipeng Yu
95614	Quasi-Static Field Modeling and Validation for Intra-Body Communication	Gao Yue Ming
90084	Medical Digital Assistant: A Grassroot Solution for Chinese Rural Healthcare	Jiehui Jiang
90514	Design of automatic fall detector for elderly based on triaxial accelerometer	Jiewen Zheng
90669	Research on Anti-interference for RF Communication in Wireless Capsule Endoscope	Dechun Zhao
90193	Stasis-dispelling and vessels-freeing Capsuleimproves hemorheology in mice with cerebral ischemia	Jiantao Lv
90295	Quantitative Assessment Reseach of Water Resources System Vulnerability of Shanxi Province	Cuisong Yu
90106	Design and Realization of Distributed Wireless Telemedicine Monitor Center Based on Virtual Instruments	Tan Xin
90746	A Gait Rehabilitation and Training System based on Task Specific Repetitive Approach	Muhammad Kamrul Hasan
90465	A prototype of wearable respiration biofeedback platform and its preliminary evaluation on cardiovascular variability	Zhengbo Zhang
95469	Research of the Soft Judgment And Driving Decision-Making in the Process of Limb Rehabilitation Training	Wei LIANG
95599	Application of evoked potential in acute stroke in rats	YANG SHAO
95565	Clinic study of correlation between myeloperoxidase and acute coronary syndrome	Yanwei Xing
90525	The Multiplicity of Intelligent Agent Based Healthcare Sensor Decision Network	Zhifeng Dai
90840	Design of User Interface in Portable Health Monitoring System	Weifeng Liu
90871	Establishment of Rheological Model of the Essential Oil of Cinnamomum camphora Wood -Emission	PENG Wen-li
95176	The Bionic Design and Intelligent Control of Multi-axis Artificial Leg	Fei Li
95296	The Location Error Analysis and Compensation for Needle Driven Robot	Qinjun Du
90248	3D FE Model Reconstruction and Numerical Simulation of Airflow in Human Upper Airway for the Healthy Person and Patient with OSAHS	Chi Yu
90541	Workspace Analysis of the Needle Driven Robot	Qinjun Du
95636	Study on a New Type of Rotated Insertion Colonovideoscope Robot	Qingkai Liu
90382	A Novel Robotic Assistant for Reducing Hand-held Surgical Tool Tremor in Surgical Navigation	Wenqiang Zhang

PaperID	Paper Title	Author
90337	An investigation into self locking condition of a cam structure medical micro-valve	Meilei Lv
95412	Mechanical Optimization Design of Intelligent Bionic Leg	Hualong Xie
95699	Analysis of Energy Conversion, Focusing, and Dissipation in Kidney Stone Pulverization with Focused Shock Wave	Jin Xiangrui
90510	Biodegradable gelatin/ β -tricalcium phosphate composite microspheres as localized delivery of growth factor-Velvet Antler Polypeptides by water-in-oil (W/O) emulsion process	Yanchuan Guo
90392	Composting of Sewage Sludge with Sawdust on a Pilot Scale	Lu Yanjun
90516	Antioxidant Properties of Different Solvents Extracts from Three Edible Mushrooms	Guoying Lv
90789	Evaluation on Application Potential of Gigantochloa ligulata for biomedicine	PENG Wan-xi
90476	Py-GC/MS analysis on medical components of Benzene/Ethanol Extractives of Fresh Ormosia henryi Leaves in Autumn	PENG Wan-xi
90787	Determination of Pyrolytic By-products of Dendrocalamus barbatus Organism Body by GC/MS	Wu Yi-qiang
90820	Effects of Enhanced UV-B Radiation on the Cell Mitosis of the Callus in Wheat	Mei-Ping Zhang
90821	Analysis of Biomedical Components of Camellia oleifera Leaf and Kernel Hull by GC/MS	Qi-Mei LIU
90432	Variations between two rice genotypes in root secretion of organic acids and plant Pb uptake	Jianguo Liu
95511	Head-space gas chromatographic analysis for the volatile flavor compounds from submerged culture broth of Ganoderma sinense (a medicinal fungus)	Gao-Qiang Liu
95590	Mathematical Description of the Lac Operon Regulation in Diauxic and Non-diauxic Growth on Glucose and Lactose	Lili Lu
90507	Effect of Asparagus saponins on HepG2 Apoptosis and mitochondrial membrane potential and ROS Level	Yubin Ji
90843	Normobaric Hypoxia-induced Brain Damage and Mechanism in Wistar Rat	DingYu Hu
90815	Effect of matured compost as a bulking agent and inoculating agent on Composting of Municipal Solid Waste	Lu Yanjun
90489	Study on Loop-mediated Isothermal Amplification Assay for Detection of Salmonella in Meat Products	Wang Yu
95508	Synthesis ,Characterization and Scale Inhibition of Biodegradable Polyaspartic Acid Derivative	Yuhua Gao
90501	Replicative Senescence is Present in Cardiac Microvascular Endothelial Cells	Liang Cao
90395	Study on Antagonism of Taurine In calcium overloaded myocardial cells of heart failure rat	Zhang Xiaodan
90504	The Protective Role of PDGF-BB Gene Transfer After Myocardial Infarction	Yao Yao
90834	Expression of Caspase-3 Gene in Gastric Adenocarcinoma Cell Line SGC-7901 via Ad-FasL	Shiying Zheng
95268	Regeneration of smooth muscle cells from bone marrow——Use of mesenchymal stem cells for tissue engineering and cellular therapeutics	Nan Wang
90632	Effect of Chitosan Coating on the Antioxidant Enzymes and Quality of 'Dashu Early Ripening' Plums	Zhilei Zhao
95042	The Model of the Δ^1 -dehydrogenation of 3-ketosteroid Substrates by Arthrobacter globiformis ATCC 31250	Yi Zhang
95162	HPLC-ESI-MS/MS Research on DNA Interstrand Cross-Links Formed by 1,3-Bis-(2-chloroethyl)-1-nitrosourea	Bao-Qing Bai
95459	Effects of Mechanical Stretch on growth and metabolism of cardiomyocytes in vitro	Yong Guo
90171	Immunomodulation activity of lectin isolated from Musca domestica (housefly) pupae	Xiaohong Cao
95440	Preparation and evaluation of implantable chitosan-collagen-soybean phosphatidylcholine film impregnated with mitomycin C-PLA- nanoparticles	Mei Feng
95227	Anthocyanins from purple sweet potato are hypolipidemic and antioxidative in rats	Xiao-ling Lv
90097	Variations Among Rice Genotypes and Cultivars on Root Oxidation and Pb Uptake	Jianguo Liu
90094	The Wavelet Method for Solving the Two-Dimensional Cardiac Ventricle Tissue Model	Guo Qi
90090	Structure characteristics of antibacterial compound isolated from the secondary metabolites from Streptomyces roseogilvus var. marinus	Liu Yun
90389	Induction of Growth Arrest and DNA Damage-Inducible Genes in Human Hepatoma HepG2 Cells by 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	Yanqun Liu
90079	Induction of Apoptosis in HepG2 Cells by Solanine	Shiyong Gao

PaperID	Paper Title	Author
90177	Identification and Algae-lysing Characteristics of One Algicidal Bacterium FDD1 on <i>Microcystis aeruginosa</i>	Mu Ruimin
90664	Py-GC/MS Analysis on Biomedical Components of <i>Phyllostachys pubescens</i>	WU Yi-qiang
90646	PROTOPLAST FORMATION AND REGENERATION CONDITIONS OF <i>STREPTOMYCES GILVOSPOREUS</i>	Jianmei Luo
90029	Comparison for Antitumor Activities of some Chinese Medicinal Herb Extracts	Li Juan
90023	An Alternative Lidocaine Hydrochloride Liposomal Gel Formulation : Preparation, Percutaneous Permeation and Release Kinetics	Xue-nong Zhang
90014	Anti-tumor activities of extracts from the medicinal plants <i>Pinellia ternata</i> and <i>Pinellia pedatisecta</i>	Li Juan
95344	Antifungal Activity of Chitosan against <i>Colletotrichum gloeosporioides</i>	Liu Jun-ang
90012	Studies on inhibition of juglone on sarcoma 180 in mice	Yubin JI
95349	Establishment of a cellular model for Alzheimer's disease by overexpressing Swedish-type mutated APP695	Tao Ma
95374	Enhanced production of biomass and polysaccharides in <i>Ganoderma lucidum</i> SCIM 0818 by the addition of palmitic acid	Gao-Qiang Liu
95373	Potential toxicity of chronic creatine supplementation in mice	Lin Wang
90640	Detection of Differentially Expressed Genes in Cultured Epidermal Stem Cells Derived From Children and Adult Skins by cDNA Microarray Technique	Dewu Liu
95611	The research on the CD138 immune magnetic beads for multiple myeloma cells sorting	Jijun Zhang
95592	Effects of water and chloroform extracts of Chinese medicinal insects on polysaccharides production by <i>Ganoderma sinense</i> in submerged fermentation	Gao-Qiang Liu
90716	Sudy on Purification Technique of Biological Chinese Herbal Medicine in Micro/Nano Particles of Chinese-fir Cells	Yi-qiang WU
90325	The study on Biotransformation of Paeonol and interrelation with Cytochrome P450 enzymes	Wen lan LI
90324	Primary studies on the chemical constituents of Jinkuishenqi Pills metabolized in vivo by LC-MS	Wen lan LI
95601	Activation energy of solute migration in a gas-solid chromatography	Dali ZHANG
95158	Anti-inflammatory Activity of Salvianic acid A through the Inhibition of Nuclear Factor- κ B Activation in Peritoneal Macrophage	Jun Yuan
95608	Transplantation and Fate of Tissue Engineered Skins Comprising Human Epidermal Stem Cells and Acellular Amniotic Membrane	Dewu Liu
90323	3-Dimension (3-D) culture of endothelial cells in vitro	Xiaoyan Li
95096	Effect of <i>Veratrum nigrum</i> L. Var. <i>ussuriense</i> Nakai alkaloids on expression of ICAM-1 and E-selection in lung injury induced by hepatic ischemia/reperfusion in rats	Xiao-Feng Tian
95615	Research on Characterization and Biocompatibility of Bacterial Cellulose Tissue Engineering Scaffold	Zhou YuLai
90220	Oxyresveratrol from <i>Ramulus mori</i> attenuates alloxan-induced liver damage in mice	Zuofa Zhang
95172	Stress Response to Hypoxia in Wistar Rat: LA, MDA, SOD and Na ⁺ -K ⁺ -ATPase	Dingyu Hu
95090	Effect of Microcystins on Corn studied using FTIR Spectroscopy	Xiao Hailing
90246	Propylene Carbonate as a Green Solvent for Kinetic Resolution of Secondary Alcohols Catalyzed by <i>Candida antarctica</i> Lipase	Xiao-Mei Wu
90274	Optimization of mRNA display for identifying peptides that bind with thymidylate synthase RNA	Yan Song
90527	Study on Measuring BUA of Cancellous Bone Based on M-sequence Signal	Chichao Zheng
90649	Tissue Flow Detection Based on Fuzzy Logic Processing	Haijing Liu
90539	Application of Agilent 2100 Bioanalyzer in detection of foodborne pathogens <i>Salmonella</i>	Jian-zhou JING
90617	Medical Image Retrieval Based On Nonsampled Contourlet Transform and Fractal Dimension	Qidong Zhang
95572	Study on the Imaging Resolution of Ultra-Wideband Microwave Imaging for Breast Cancer Detection	Xu Liu
90643	An Eigenvector-based Corresponding Points Auto-Detection Algorithm for Non-rigid Registration of CT Brain Images	Tao SUN
95570	Measurement Data Correction for Emission Tomography	Hao Wu
95546	An Improved Helical Cone-beam CT Image Reconstruction	Yang Gao

PaperID	Paper Title	Author
95559	Research on 2D slices to 3D display technique of craniotomy operation	Lin Xiao-mei
90518	Automatic Detection and Characterization of Funnel Chest Based on Spiral CT	Laszlo Papp
90542	Ultrasonic Image Analysis and 3-D Reconstruction for Minimally Invasive Surgery	Qinjun Du
95664	A New Two-Stage Hierarchical Framework for Mammogram Retrieval	Weiwei Wang
90803	A Medical Image Registration Method Based On Gravity Optimization	Yina Qiu
90798	Liver Segmentation from CT Images Based on Region Growing Method	Yufei Chen
95424	Real-time gray and coordinate statistics methods of medical CT image	Zhanli Hu

Poster 3: Biomedical Engineering (2)

2nd floor, Building No.1, Beijing Friendship Hotel

Time: 15:40-16:25, June 13

PaperID	Paper Title	Author
90243	White Matter Fiber Tract Segmentation Using Nonnegative Matrix Factorization	Xuwei Liang
90185	Image-based Approach to Generation of Offset Curves from Point Cloud	Yingjie Zhang
95648	The Identification of Breast Mass based on Multi-agent Interactive Information Fusion Method	Fangqing Peng
90174	A Counting Algorithm for Overlapped Chromosomes	Wenzhong Yan
90150	GPU Acceleration of PROPELLER MRI Using CUDA	Hongyu Guo
95659	Modified Phase Zero Method for Ultrasound Freehand Strain Imaging .doc	Zhiqiang Jiang
95661	Medical Image Fusion Based on An Improved Wavelet Coefficient Contrast	Zhang-shu Xiao
95598	The method based on functional connectivity for the analysis of age effects on hippocampus	Zhang Jian-ge
95663	Gaussian Pyramid Based Multi-Scale GVF Snake for Mass Segmentation in Digitized Mammograms	Hongwei Yu
95620	Detection of Red Blood Cell in Urine Micrograph	Gu tao Cao
95671	Clutter Removal of Doppler Ultrasound Signal Using Double Density Discrete Wavelet Transform	Peng Li
90085	3D Fast Level Set Image Segmentation Based on Chan-Vese Model	Jianyuan Dong
90070	CT Image Segmentation by using a FHNN Algorithm Based on Genetic Approach	Jia-Xin Wang
90055	Variational Model on Wavelet Domain for PET/CT Image Fusion	Lei Tong
90046	NONINVASIVE ESTIMATION of PULMONARY VASCULAR RESISTANCE by COLORM-MODE CHOCAR-DIOGRAPHY ASSISTED with COMPUTER	Yuqi Zhang
90039	A Novel Approach for Tongue Image Extraction Based on Combination of Color and Space Information	Mingfeng Zhu
90017	Texture Analysis of Ultrasonic Image Based on Wavelet Packet Denoising and Feature Extraction	Yali Huang
90007	Chest Radiographic image Enhancement based on Multi-scale Retinex Technique	Shuyue Chen
90006	Tomographic Reconstruction with Membrane-Plate Hybrid Prior	Yan Yong
95662	Automatic Time Gain Compensation in Ultrasound Imaging System	Mingwang Tang
90316	Biological Denitrogen in Floating Media Deep Bed Filtration Process	Fan Ronggui
90480	A New Approach for Edge Detection of Color Microscopic Image Using Modified Pulse Coupled Neural Networks	Yide Ma
90416	Morphological Postprocessing for Color Flow Imaging in Medical Ultrasound	Paul Liu
90396	The adsorption of protein molecules at a crystal/solution interface observed by an improved TIRFM	Guoliang Dai
90380	Wavelet Denoising Arithmetic Research Based on Small Hepatocellular Carcinoma CT Image	Bing-gang Ye
90378	A Hybrid Segmentation Approach Based on Fuzzy Connectedness and Voronoi Diagram	Anrong Yang
90364	Development and Validity of Tissue Biomechanics Modeling for Virtual Robot Assisted Orthopedic Surgery System	Wang Monan
90345	Registration of Diffusion Tensor Images Based on Hybrid Optimization Method	Wen LI
90342	Study of the eye's image processing for the determination of driver's fatigue	Zhi-Wei Chou
90341	The study of auto-focus system for biomedical digital microscope	Chen-Song Chiang
90805	Active Contours Base On Maximum Gravity Optimization Algorithm	Linpeng Jin
90326	Biological Image Fusion Using A SWT Based Variable-weights Selection Scheme	Tianjie Li

PaperID	Paper Title	Author
95558	Enhance fMRI Data Analysis by RAICAR	Guozhen Dong
90650	Three-dimensional Virtual Surgery Based on CT Images	Limei Song
90311	The Application of Independent Component Analysis in CT Image De-noising	Tang Jingtian
90304	A New Method of Microscopic Images' Automatic Mosaicing	Yongwei Ma
90292	3D Interpolation of Image Elastic Deformation Using Delaunay Triangulation	Xuan Yang
95604	Fingerprint Image Segmentation using ModifiedFuzzy C-Means Algorithm	Jiayin Kang
90282	Dynamic Persistence of Ultrasound Images after Local Tissue Motion Tracking	Xiaoying Li
90264	Description of Boundary Irregularity On Multi-scale Local FD for Melanomas	Li Ma
90254	Mathematical Morphology Based Enhancement for Chromosome Images	Wenzhong Yan
90237	Segmentation of Complicated Liver Lesion Based on Local Multiphase Level Set	Luo Zhaohui
90509	cDNA Microarray Image Processing using Morphological Operator and Edge-enhancing Diffusion	Guirong Weng
90340	Study of Recognition and Tracking of Paramecium using an Image Analytic Method	Yu-Sing Yeh
95031	Three-Dimensional Image Surface Reconstruction Based on Sequence Images	Dan Yang
95023	A RFID Authentication Protocol Based on Infinite Dimension Pseudo Random Number Generator for Face Recognition System	Qiaoling Tong
95011	The Study of Subharmonics Generation Emitted from Micro-bubble for Monitoring of HIFU Therapy	Jiwen Hu
95003	Monitoring cortices response to acupunctures with a functional near infrared imaging system	Yanping Chen
90984	The effects of UVB irradiation on the fluorescence intensity of reactive oxygen species and mitochondria in mouse 3T3 fibroblasts	Dongwu Liu
90976	A New Algorithm in the Application of Parameter Optimization in Radiotherapy	Cao Mingyong
90972	Principle and Realization of Nano-molecular Probe in Molecular Imaging Technologies	Bing-gang Ye
90909	A Fast and Robust Super Resolution Method for Intima Reconstruction in Medical Ultrasound	Yuguo Dai
90908	Three-dimensional digital atlas construction of Chinese brains by magnetic resonance imaging	Jianhua Lu
90890	Automated Synthesis of 18F-Fluoroacetate Using Explora FDG4 Module	Li-Quan Sun
90736	Regularization in Tomographic Reconstruction Using Proximal Forward-Backward Algorithm	Liyan Wang
90865	Adaptive Curve Region based Motion Estimation and Motion Visualization of Cardiac Ultrasound Imaging	Tian Cao
95053	A Novel Approach for Plant Embryonic Cells Serial Section Images Registration	Dong Liang
90860	Calibration of Thickness Measurement Errors of Hip Joint Cartilage from MR Images	Yuanzhi Cheng
95513	K2DPCA plus 2DPCA: An Efficient Approach for Appearance Based Object Recognition	Chengbo Yu
90830	texture Segmentation Based on Permutation Entropy	Li Yi
90816	The Research of Radiotherapy Treatment Planning System Based on CT Image	Junsheng Wu
90806	Sound Speed Optimization Based on Acoustic Point Spread Function	Huanhuan He
95514	FPCA: An Efficient Approach for Appearance Based Object Recognition	Chengbo Yu
90767	A Novel Coordinate Transformation-Based Texture Mapping Algorithm	Zhao Yue
95526	Face Recognition Based on the Statistics Methods	Lijing Zhang
90742	The Digital Image Watermarking Algorithm Based On Hyperchaos And DCT	ZHANG Yu-bo
90869	A New Algorithm for Segmentation of Brain MR Images with Intensity nonuniformity Using Fuzzy Markov Random Field	Bin Li
95188	Analytical Cone Beam SPECT Reconstruction with Non-uniform Attenuation	Junhai Wen
95360	Embedded Medical Image Coding Using Quantization Improvement of SPIHT	Wentao Wang
95351	Coarse-to-Fine Particle Segmentation in Microscopic Urinary Images	Jiye Qian
95347	Noninvasive temperature imaging using permanent MRI	Yuhua Peng
95317	Four Order Adaptive PDE Method for MRI Denoising	Bibo Lu
95276	Detection of Disk in the MRI Spine Image with reconstructing coronal plane	Yanli Zha
95403	A Modified Water Fat Separation Algorithm Based on Region Growing	Hongjun Tian

PaperID	Paper Title	Author
95406	A Magnetic Induction Tomography System Using Fully Synchronous Phase Detection	Ye Li
95229	Improved Compound Vector Field Based Active Contours Model	Yang Gao
95225	Alleviate the Effect of Illumination Variation in ICA Subspace	Zheng Zhen
95490	Detection and Identifying of Meat Fresh Degree Based on Adipose Tissue	Peiyuan Guo
95194	The ill-posed problem and regularization in parallel magnetic resonance imaging	XiaoFang Liu
95044	Algorithm design of image segmentation in Port Wine Stains photodynamic therapy binocular surveillance system	Xiaoying Tang
95179	Blood Flow Velocity Estimation from Ultrasound Speckle Tracking Using Chirp Signals	Hui Liu
95164	Optimization of Fiber Positions for Optical Tomography based on the Equation of Radiative Transfer	Jing Meng
95145	Wall-Adherent Cells Segmentation Based on BP Neural Network	Di Fan
95143	Contour Extraction and Processing Approaches for Glioma Cell	Zhen Zhou
95136	Linking Image Segmentation to 3D Mesh Generation Based on Medical Images	Jianjun Du
95467	Reconstruction Method of Magnetic Induction Tomography based on Filter Back-Projection	Li Ke
95472	Medical ultrasound image segmentation Based on improved watershed scheme	Liang Li
95075	DT-MRI White Matter Fiber Tractography with Global Constraints: An Unsupervised Learning Approach	Xi Wu
95062	Metal Artifact Reduction in CT-Based Attenuation Correction of PET Data Using the Virtual Sinogram Concept	Mehrsima Abdoli
95061	Edge Detection and Image Segmentation Based on Cellular Neural Network	Tang Min
90974	Automatic Segmentation of Coronary Angiograms Based on Probabilistic Tracking	Shoujun Zhou
95422	Estimation of Ultrasound Attenuation and Its Application to Tissue Heterogeneity Study Using Nonlinear Least Square Data Fitting	Xiaoying Li
90656	Comparisons of Several New De-noising Methods for Medical Images	Lu Zhang
90680	Segmentation of Brain MR Images Based on t-mixture Model	Haifeng Zhao
90678	Image Segmentation Based on PDEs Model: a Survey	Xin Jiang
90662	The Impedance Property of Electrode Used in Electrical Bio-impedance Measurement	Wei Yan Gong
90705	A novel finite element modeling method for periodontal ligament of Impacted Maxillary Tooth	Bin Wu
90667	Detection of the Intimal and Adventitial Layers of the Carotid Artery based on Snakes	Haijing Liu
90674	Modeling for Rehabilitation of Collapsing Femoral Head Based on 3D Statistical Shape Knowledge	Weiwei Song
90732	Ultrasonic Liver Tissues Classification for Radiofrequency Tumor Ablation Treatment Evaluation	Shen Sun
90540	Remote Sensing of Human Body by Stepped-Frequency Continuous-Wave	Yong Shun Zhou
95005	SEMG De-noising based on the Lifting Wavelet Transform	Zhi-zeng Luo
95408	Research of Meridian Diagnosis System Based on SVM	Guoxia Zhang
90981	Visualizing Analysis of the Rice Protein OsPCBP and its Homogenous Proteins Based on the Hydrophobicity	Qiusheng Zhang
90050	Research and Simulation on Human Blood Circulation Dynamics System	Man Bao
90647	Estimation of Concerted Activities Based on Subsequence Distribution Discrepancy Calculation	Xue Liu
90101	Numerical Simulation of the Interaction between Intracranial Pressure and Cerebral Blood Flow	Liwei Xu
95128	Comparison of Different approaches to ICP Dominated pulse extraction	Xiao Hu
95308	An Preliminary Investigation of Speech-Evoked ABR with Two Stimulus Intensities	Qiu-Yang Fu
90442	Analysis of Magnetic Stimulation at Acupoint of Shenmen(HT7) on EEG using Nonlinear Approach	Yuehua Geng
90312	Classification Method of EEG Signals Based on Wavelet Neural Network	Hongyu Sun
90622	Systolic and Diastolic Time Interval Variability Analysis and Their Relations with Heart Rate Variability	Chengyu Liu
95264	Effect of Clinical Depression on Automatic Speaker Identification	Sheeraz Memon
95591	Laboratory Study on Effect of White-Mud Desulfurization Sea-Water to Alga	Yingjie Sun
90350	Pattern Classification for Doppler Ultrasonic Wrist Pulse Signals	Lei Zhang
95107	An Image Evaluation Method for Electrical Impedance Tomography Based on Gradient Error	Jinghua Lv
90567	Analysis of Relationship between Apoptosis and Changes of Ca ²⁺ in HepG-2 Induced by CSA with Laser Scanning Confocal Technology	Ji Yubin

PaperID	Paper Title	Author
90836	EEG Nonlinear Feature Detection in Brain-Computation Interface	Li Yi
90627	A noise elimination method for ECG signals	Hongyan Xing
90374	EEG De-noising Based on Wavelet Transformation	Lanlan Yu
95391	Incorporating Error-Rate-Controlled Prior in Modelling Brain Functional Connectivity	Junning Li
90051	STUDY on NONINVASIVE AUTO-ESTIMATION of PULMONARY ARTERIAL PRESSURES by DOPPLER ECHOCARDIOGRAPHY AUDIO SIGNAL PROCESSING SYSTEM	Yuqi Zhang
90398	An Extended Frequency Splitting Method for Ultrasound Color Flow Imaging	Yundeng Pan
90406	Adaptive Multiple Snapshots with Matrix Pencil Method for Color Flow Imaging	Yundeng Pan
95593	Comparison of self-recirculation and sequencing recirculation in bioreactor landfill	Yingjie Sun
95381	a new neural signal collecting circuit with high signal to noise rate performance	Yi Ren
90418	Study on Wavelet Energy Entropy and its Application to Bioelectrical Signal De-noising	Zhi-zeng Luo
90383	Wrist-pulse Signal Diagnosis using ICPulse	Lei Zhang
95328	Extraction of FECG Based on Time Frequency Blind Source Separation and Wavelet De-noising	Ming MA
95442	A Low-Offset and Low-Power CMOS Front-End Circuit for Physiological Signal Acquisition	Zhang Jin Yong
95443	A CMOS Discrete-Time Reconfigurable Analogue ASIC for Low Power Biomedical Signal Filtering	Wang Lei
90766	Feature Extracting of Weak Signal in Real-Time Sleeping EEG with Approximate Entropy and Bispectrum Analysis	Yuerong Wang
95524	Microemulsion Sensitized Determination of BSA by Resonance Rayleigh Scattering Method	Jinghua Yu
90208	MUAP Classification Based on Wavelet Packet and Fuzzy Clustering Technique	Xiaomei Ren
90491	Wavelet Transform and Bagging Predictor Approaches to Cancer Identification from Mass Spectrometry-based Proteomic Data	Jian-qiang DU
90511	Effect of Qinglongyi Polysaccharide on Cation Concentration in Erythrocyte of S180 Mice	Yubin Ji
95624	Model Research for Epileptic Prediction based on Improved Chaos Operator of Lyapunov	Xiaona Huang
90300	New Threshold and Shrinkage Function for ECG Signal Denoising Based on Wavelet Transform	Ying Yang
90260	Research of Brain-Computer Interface based on the Time-Frequency-Spatial Filter	Yu Xunquan
90032	A Research on EOG Feature Parameters Extraction Based on Linear Predictive Coding Model	Zhao Lv
95493	A BOD BIOSENSOR USING SALT-TOLERANT Bacillus licheniformis FOR SEA WATER	Jiansheng Cui
90526	STFT-Based Comparative Studies of Heart Sound Signals	Tianhua Chen
95086	Temporal and Spatial Properties of the Retinal Ganglion Cells' Response to Natural Stimuli Described by Treves-Rolls Sparsity	Ying-Ying Zhang
90453	Detecting QRS Complexes of Two-channel ECG Signals by Using Combined Wavelet Entropy	Boqiang Huang
90653	Time-frequency analysis of primary component vector in click-evoked otoacoustic emissions under different stimulus intensities	Ying Zhao
95703	Study on Fuzzy Comprehensive Evaluation Model for Electro-acupuncture Analgesia	Wangshen HAO
95152	RF Power Amplifier of NMR System	Tang Xiao-ying
90239	H-1 NMR-based metabolomics study of urine and serum samples from diabetic db/db mice	Jingjing Xu
95693	Preliminary Research on Calibration Equipment for Measuring Inhomogeneity of Magnetic Field of Medical Nuclear Magnetic Resonance	Bing Han
90659	MRI Reconstruction From 2D Partial k-Space Using POCS Algorithm	Jiaming Chen
90335	Application of a BP Network Based on PCA in ECG Diagnosis of the LVH	Guangchen Liu
90584	3D Medical CT Images Reconstruction based on VTK and Visual C++	Wang Hongjian
90838	Simulation of Temperature Field of Permanent Magnet	Yuhua Peng
90179	Studies of Sports Bra Based on Biomimetic Analyses of Females Breasts	Lixia Chang
95024	Characteristic of Gas-Solid Two-Phase Flow in the Human Upper Respiratory Tract Model	Xiuguo Zhao
90618	Simulation of pathogen transport around buildings based on three-dimensional model	Wei Liu
95247	Myocardial Reperfusion Improves Ventricular Isovolumic Relaxation in Patients with Acute Myocardial Infarction	Chun-Peng Liu

PaperID	Paper Title	Author
90178	Selection of Boundary Conditions in Numerical Investigation of Arterial Flow	Fan He
95183	Sublethal Toxicity Effects of P-CNB on POD and CAT Activity in Liver of Brocarded Carp	Hongyan Shen
90105	Temperature Rise Simulation During a Kirschner Pin Drilling in Bone	Yung-Chuan Chen
95097	Simultaneous Determination of Five Water-soluble Components of Danshen in Rabbit Plasma and its Application to Pharmacokinetics	Jinchan Yuan
90677	Digital marker tracing combined with center-of-mass algorithm in analyzing viscoelasticity characteristic of lum-bosacroiliac complex	Haoxuan LV
90929	Compliance Effect on Amplitude and Phase of Cranio-spinal CSF Flow Measured by MRI	Rong-Wen Tain
90691	Emotion Recognition in Spontaneous Speech within Work and Family Environments	Ling He
90329	A Review of Insect Inspired Aircraft	Xingyao Yan
90446	The stability analysis of different reconstruction methods after total sacrectomy	Yan Yu
90429	4-Hydroxyphenylacetic Acid as a Monophenolase Inhibitor and a Diphenolase Activator on Mushroom Tyrosinase	Jian-Gang Xie
90425	3-D Finite Element Method Modeling and Contact Pressure Analysis of the Total Knee Joint in Flexion	Xushu Zhang
90839	Hyperosmotic stress induced actin filaments varying in Arabidopsis thaliana suspension cells	Lanchun Shi
90426	In vivo monitoring the intraocular pressure of anterior chamber in normal rabbits	Xuefeng Bo
90896	Finite Element Analysis of Stress Distribution of Cemented Stem After Total Hip Replacement	Xiao-Wen Zheng
90651	Study on the Center of Resistance of ToothBased on Spatial Kinematics	Zhigang Wei
95548	Simulation of Stent Expansion by Finite Element Method	Jie Yang
90717	The Experimental Study on the Functions of Non-muscle Myosin II in Dividing Mammalian Cells	Xiaona Li
90875	Development and validation of a three-dimensional finite element model of lumbo-pelvic-femoral complex	Rui Zhu
95291	A Nonlinear Model for the Circle of Willis Based on Hemodynamics	Yun'an Hu
90813	Blind Extraction of FECG Combining Periodicity and Kurtosis	Ming MA
90534	Modeling and Analysis of Liquid Penetration into Soft Material with Application to Needle-Free Jet Injection	Kai Chen
90461	Incessant Change of Mandibular Growth in Untreated Subjects with Class III Malocclusion	Pao Hsin Liu
95321	Determination of S-catechol-O-methyltransferase Activity in rat tissues using High-PerformanceLiquid Chromatography withElectrochemical detection	Lina Yang
90456	Contact Characteristics of Anatomical and Symmetrical Unicompartmental Knee Prostheses	Chien-Wei Liu
90065	Age-Related Changes in Viscoelasticity of Rabbit Knee Articular Chondrocytes	Zhang Quan you
90882	Comparative Analysis of the Biomechanics of Sit-to-stand Movement in Normal and Obese Teenagers	Lianqing Yu
90741	A Least Squares Based Parameter Identification of The Mesic Respiratory System Model	Ya-Jie Liu

Poster 4: Other Related Topics

2nd floor, Building No.1, Beijing Friendship Hotel

Time: 16:30-17:15, June 13

PaperID	Paper Title	Author
90980	Antitumor immunity induced by recombinant vaccine alpha-fetoprotein-heat shock protein 70 complex	Wang Xiaoping
90493	Effect of Asparagus polysaccharide on the number and activity of erythrocyte complement receptor 1(CD35) of S180 mice	Chenfeng Ji
90496	Study on HepG-2 Apoptosis Induced by Saponins isolated from Asparagus and the Effects on the Activities of Cas-pase-3,8,9	Chenfeng Ji
90424	Respiratory Motion Prediction Based on Maximum Posterior Probability	Jun Yang
95538	Tanshinone II-A induced apoptosis of HepG2: involvement of p53, Bcl-2 and Bax	Pingqing Wang
95584	The Research of the Effects of Ultralow Frequency Pulsed Electromagnetic Field on Cancer Treatment	Jianyong Guo
90427	Real-time Image-guided Radiation Therapy: A Survey	Shoujun Zhou

PaperID	Paper Title	Author
90753	Expression of human Differentiated embryo-chondrocyte expressed gene 1 in Gastric carcinoma and its correlation with STAT3	Yan Zheng
90366	Combined bacterin induced mice bearing S180 to produce IL-12 (p70)	Xiaoting Luo
95654	Aquaporin-1 Deletion in Mice Inhibits Hepa1-6 Hepatocellular Carcinoma Growth	Yong Jiang
95575	The role of VASP in Gastric Carcinoma	Xiaochun Peng
95676	MRTF-A Decreases the Anti-tumor Effect of Tamoxifen on MCF-7 Human Breast Cancer Cells	Zhi-Peng Liu
95115	An assay method for the prediction of tumor promoting potential of environmental carcinogens using 293 cells	Rui Zhao
95635	Rapid detection of HLA genes expression in Peripheral Blood Mononuclear Cell of Gastric Cancer Patients by reverse transcriptase polymerase chain reaction	Yi Zhang
95531	Down-regulation of Aquaporin-1 in W489 Colon Cancer Cells Inhibits Cell Migration	Yong Jiang
95124	Expressions of Notch1 and Cyclin D1 in Breast Hyperplasia and Cancer	Ke Jin
95523	Aquaporin-1 Activity of Plasma Membrane Affects MCF-7 Mammary Carcinoma Cell Migration	Yong Jiang
90415	Transcription factor AP-2 inhibits survivin expression	Mengjie Zhang
95174	The Effect of Calcium on the Salicylic Acid - Induced Thermotolerance in Young Grape Plants (Vitis vinifera L.) and is Associated with Ca ²⁺ -ATPase in Plasma Membrane	Yueping Liu
95625	Kidney damage associated with tumor	Huang Xi
90638	Nonlinear stochastic dynamical system of bio-dissimilation of glycerol to 1,3-propanediol in batch culture and its viable set	Lei Wang
95375	A KINETIC MODEL OF THE EFFECTOR CELL RESPONSE TO CANCER	Lin LI
90227	Mathematical Relation between Types, Effect of Genes and Molecular Marker Genotype	Xue-Bin LI
90202	Application of Self-Organizing Feature Map clustering to the classification of woodland communities	Jin-tun Zhang
90777	Study on P-CNB Induced SOD and CAT Activities in Brocarded Carp Liver	Hongyan Shen
95337	SNAREs-related Pathways in Rat Brains under Simulated Microgravity Environment	Gaofei Hu
95515	Photosynthetic Yield Model and the Response to Environmental Factors for five Mangrove Species	Da-gang Mu
95542	Possible Mechanism of Dual-peak Response in Retinal Ganglion Cells: a Computational Study	Chao-Feng Cai
90140	Correlations among Cartilage Erosion, IgA level, Red Blood Cell and Platelet Counts in 436 rheumatoid arthritis patients with path analysis	Aiping Lu
90755	Seeking potential biological network shared in rheumatoid arthritis and ulcerative colitis through text mining	Xiaorong Ding
95149	A mathematical model for anti-HBV infection combination therapy with lamivudine and adefovir divipoxil	Qizhi Xie
90368	On the Spread of Invasive Plant Species: A Viewpoint from Control	Chun-Qing Wu
95501	Proteome Characteristic Pattern Study of Unstable Angina with Blood Stasis Symptom based on least angle regression algorithm	Zhao Hui Hui
90870	A novel data transformation method for serologic diagnosis of schistosomiasis japonica	Xiaoming Tu
90388	A Delayed Barbour's Two-Host Model for Schistosomiasis	Longxing Qi
95261	The Research of the Social Stability Based on Measure of Gross National Happiness	Hengqing Tong
95256	Correlation Between TCM Subjective Symptoms And Biomedical Parameters in 500 Hypertension Patients with Biostatistics Approach	Xuejie Han
90443	Quantile regression and Box-Cox transformation's logical integration in fitting some kind of biostatistical data	Yongsheng Yuan
90089	A new mathematical model for nanotoxicology study	Yu Han
90698	The Influence of Co-contraction to the Arm Impedance during Free Planar Movement	Chunjiang Fu
90434	A delayed stage-structured predator-prey model with impulsive perturbations on predator	Wei Wang
90372	Isolate Control For An SIR Model With Nonlinear Saturation Infectious Force	Yang Guang
90827	Alternating Projection Algorithm of Linear Regression Method with Convex Constraint in Psychological Dimension Analysis	Hengqing Tong
95020	The Application of Quantile Regression in the Analysis of Influential Factors of Uric Acid	Yueli Han

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95587	Biomarker Discovery from Proteomic Data Based on Wavelet Package Transform and AdaBoost	Jianqiang DU
90303	Work Stressors, Chinese Coping Strategies, and Job Performance in the Greater China	Luo Lu
95076	A Study on the Relations among Distress Disclosure, Non-supportive Social Responses and Anxiety of College Students	Chu-Mei Lan
95170	Emotional Intelligence as Intervention to Organizational Health	Chin-yi Chen
95147	An Examination of Computational Model of Interpersonal Mental Health	Kazuhiko Shibuya
95628	Stressful Life Events, Coping Strategies and Mental Health Problems Among Chinese Vocational College Students	Lin Qiu
95114	Application of psychological methods to control the physiological functions of the human body and treat diseases	Yueliang Zhou
95586	Occupational Stress Intervention Model Incorporating Macro-Environment Stressors: Evidence from Manufacturing Industries in Taiwan	Chin-Yi Chen
95540	Which Counseling Skills Are More Important for Peer Counselors from High Schools: Comparison of Training Effects	Xiaozhong Huang
90902	The Analysis of the Plywood Formaldehyde-emission Creep	LI KAI-FU
95530	The Effects of Aging and Tumor on Source Retrieval	Aiqing Nie
95140	PingYu Capsule activates cAMP/PKA/CREB signaling pathway in rat hippocampus: A possible mechanism for antidepressant-like effect	Jun-Sheng Tian
95491	The Psychometric Properties of Children's Impact of Event Scale Administered via Mobile Phone	Zhu Zhuo-Hong
90658	Symptom-based Experiencing Therapy	Guofeng Deng
95583	Internet Addiction and Mental Health Status of Chinese College Freshmen	Guofeng Deng
90492	Neural mechanisms of 1-back working memory in intellectually gifted children	Duan Xiaoju
95658	Mindfulness - new perspectives in Behavioral-cognitive Therapy	Cornelia Eugenia Munteanu
95022	Analysis of Relationship between Psychological Health and Life Qualities of Internet Addicts by SEM	Hengqing Tong
90049	Effect of pH on cell yield of anaerobic granular sludge	YUE Xiuping
90025	Evaluation on Layout and Building of Ecological Lakeshore in Suzhou Taihu Lake National Tourism Resort	Hong Zhang
95292	OligoChip To Identify HLA-B*5101: Association Study In Male Patients with Behcet's Disease	Yan Zheng
90022	Preparation of Irisquinone Hydroxypropyl- β - Cyclodextrin Inclusion Complex and its thermodynamic stability	Xuenong Zhang
95393	An Independent Component Analysis (ICA) Based Approach for EEG Person Authentication	Chen He
90660	Whey Alcohol Fermentation with Mixed Yeast Cultures	Jianming Wang
90080	Characteristics of seasonal and spatial variations of proanthocyanidins content in <i>Elaeagnus angustifolia</i> and effect of salicylic acid on its accumulation	Fansuo Zeng
95027	Preparation and Characterization of Fluorinated Organic/Inorganic Composite Particles	Rui Weng
95262	Dynamics model of bacterial regrowth in a laboratorial drinking-water distribution networks	Qing Wu
90156	Studies on the Morphology Development and Autolytic Process of Peach Endocarp Cell During Pit Hardening Process	Ai-Zhen YANG
95242	Nuclear localization of lectin receptors of central cells of <i>Nicotiana tabacum</i> L.	Kefeng Fang
95409	The Role of the Plant Hormones IAA and Ethylene on Split-Pit Formation of Peach Fruit	You-nian WANG
95234	Detection of <i>Haplosporidium nelsoni</i> in oysters from China coast	Wang Zhongwei
90672	Effects of Ultrasound on pH and Conductivity of K_2HPO_4 Solution	SongQing Hu
90127	Biosorption of cadmium and zinc from aqueous solution by rice bran	Chen Yunnen
95427	The Adsorption of Microcystins by Polyvinylchloride (PVC) Ultrafiltration Membrane	Weiyang Li
90130	Equilibrium and kinetics of ammonia nitrogen biosorption from wastewater by spent grains	Chen Yunnen
95461	Effect of Poplar Forest on Snail Control in Dongting Lake Area	Jianfeng Zhang
95209	Pb accumulation and tolerance of ten cultivars of Cruciferae	Wenshan ke

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90136	Protective effects of three flavones on human hepatocytes injury induced by hydrogen peroxide or carbon tetrachloride	Xinhuai Zhao
95193	Bio-effects of ultrasound: Inhibitory effects on ultrasound induced apoptosis by cyclosporin A and fructose supplementation	Yi FENG
95255	A Simple Method for Measuring Methanol Content in Gas Field Wastewater	Nairui Liu
90353	Flux Balance Analysis Within Physiologically Feasible Region	Haoran Zheng
90706	The Breadth First Search Traversing Algorithm of the Graphs in DNA Computer	Chunde YANG
90877	Purification and Identification of Compounds with in Vitro Antitumor Activity from <i>Rabdosia Serra</i> (Maxim) Hara	SongQing Hu
90556	Simulating Effects of Temperature and Moisture on Carbon Emission of Permafrost Peatland in Mohe, China	Wang Xianwei
90373	Ecological Risk Assessment of Lijiang Environment, Guilin City Section, South China	Chunqing Guo
90903	Urban Water Sustainable Utilization	Han Cui
90362	Compilation of College Students' Self-actualization Questionnaire for Undergraduates	Hui Ai
90711	Preparation of Biopolymers Nanoparticles by Ultrasound Atomization	Kuan Wei Lee
90907	Experimental Study of Simultaneous Flue gas Desulfurization and Denitrification by New-style Complex Absorbent	Yi Zhao
90832	Effect of sludge loading rate on adsorption performance of anaerobic granular sludge In Adsorption-Biodegradation Anaerobic Sequencing Batch Reactor	Yun Duan
90564	Using Milk of Lime for Neutralization Precipitation in a High Density Sludge Process to Treat Acid Mine Drainage of a Gold-Copper Mine	Chen Ming
90348	Relationship of Pacific SSTa to Summer Extreme Precipitation Events over Eastern China	Jinhu Yang
90910	Study on Micro-Biological Degradation of Diesel Oil cooperated with Plants	Ying Xiong
90969	Preliminary Study on the Acaricidal Mechanism of Methyl Palmitate to <i>Tetranychus cinnabarinus</i>	You-nian WANG
95033	The fermentation conditions of β -carotene by the red yeast mutant RG-6p	Sui-Lou Wang
90906	Adaptation analysis of artificial introduction of mangrove in Wenzhou, China	Yuqin Song
90784	The efficiency of onsite wastewater system with new filler for the treatment of septic tank effluent	Junying Nie
90724	Ecological vulnerability assessment in the middle and lower reaches of the Hanjiang River Basin	Hailin Zhang
90512	Effect of Juglone in Qinglongyi on cell cycle status and apoptosis in A-549 cells	Xiang Zou
90723	Removal of Tetracycline and Oxytetracycline in Water by a Reverse Osmosis Membrane	Weiyang Li
90499	The effect of <i>Asparagus officinalis</i> polysaccharide on erythrocyte of S180 mice played in immunological reaction of lymphocytes	Xiang Zou
95581	Investigation on Incineration of Salty Organic Wastewater	Jingying Ma
90554	EFFECTS OF MERCURY ON ANAEROBIC GRANULAR SLUDGE ACTIVITY	Xu Hongying
90485	Sintered flue gas semidry processing desulphurization ash as cementing materials	Guo Bin
95004	Gradient force evolution through a piecewise cylindrical vector beam	Xiumin Gao
90788	Determination of The Optimal Adsorption Time In Adsorption - Biodegradation Anaerobic Sequencing Batch Reactor	Yun Duan
90537	Inhibition action on Xanthine Oxidase by biflavonoids from <i>Selaginella labordei</i>	LI Li
90823	Continuous Bio-hydrogen Production Using Activated Carbon as Solid Carriers from Molasses Fermentation	Jing Tang
90452	Design for Human Aural Health: Noise Pollution Prevention and Control in Urban Dwellings Design of China	Zhao Xiang
90445	Determination of diffusion coefficients in sandy sediments using resistivity techniques	Dongsheng wang
90439	The Air crew Cosmic Radiation Effective Dose Calculation Using CARD	Ying-Jin FENG
90437	Distribution and Speciation Analysis of Heavy Metal Elements in Urumqi Urban Soils	QIAN Yi
95519	A TaqMan based real-time PCR assay with the internal amplified control for the detection of <i>Enterobacter sakazakii</i> in infant formula	Xudong Su
95077	Hyperlipidemia in male aircrew members of civil aviation and analysis of influence factors	WeiRu Chen
90970	Assessment the Contact Toxicity of Methyl Palmitate on the Carmine Spider Mite	You-nian WANG

PaperID	Paper Title	Author
95478	Study on immunological examination in Blood with two Streptococcus suis serotype 2 strains Infection in Miniture Swine Model	Li Cui
90241	Life Loss Evaluation of Dam Failure Based on VOF Method	Jia-qian Luo
95476	Research on Biology Ceramsite's Preparation and Performance with Tungsten Tailings	Feng Xiujuan
90685	Study on bacteria in water and biofilm of a pilot distribution networks	Qing Wu
95618	The Numerical Model of Predicting the Salt Intrusion in the Pearl River Delta	Peng Hou
95054	Simulation of the Nonlinear Acoustic Field Generated by a Concave Spherical Transducer in Multi-layer Mediums	Jiwen Hu
90224	Environmental risk evaluation based on dam-break flood numerical simulation	Ling Huang
95050	Structure Differences of the Natural Insect Enemy Complex between Jujube Orchards Intercropped with Pasture and No Pasture	You-Nian WANG
95087	Fabrication and Thermal Features of a Novel Microdevice—a Microchannel Surrounded by a Microsolenoid	Jiang Jiahuan
95630	Trend and factors influencing suicides in rural areas of Kermanshah (Iran) during 7 years (2000-2006)	PARIVASH SAFAIE
95554	Effect of GA3 and S3307 on Content of Taxol and its' Precursors of Taxus cuspidate in vitro	Dong Xuehui
95536	Phoslock: An Effective Technology for Effective Dissolved Phosphorus Removal in Extensive Water Bodies under a Wide Range of Chemical Conditions	Liu Yungen
95108	Microbial Community Structure of Biological Contact Oxidation Process Used in Landscape River	Shuying He
95466	The semantic search based on UIMA	Qi Cao
90245	Establishment of the callus culture of Elaeagnus angustifolia to produce proanthocyanidins and effect of UV-B radiation on its accumulation	Fansuo Zeng
90230	Analysis on the damage mechanism of inner tennis elbow by using of finite element methods	Jia Tianqi
95010	Three-dimensional intensity distribution by a pure phase plate	Xiumin Gao
90697	Research progress on phosphorus removal in substrates of constructed wetlands	Dun-Qiu Wang
90309	Effects of Frequency and Number of Elements on Acoustic Fields Generated by a Spherical Ultrasound Phased Array Hyperthermia Applicator	Ji Xiang
95015	Effects of ultra high-pressure treatment on the red yeast strain RG-8	Sui-Lou Wang
95018	Structure Identification of an Acaricidal Active Ingredient From Green Walnuts Husks (Juglans regia)	You-Nian WANG
95019	Acaricidal Activity of Methyl Palmitate to T. cinnabarinus	You-Nian WANG
95480	Inter-species infection of purified Eperythrozoon from pig to mice: study on haematological and immunologic system	Fei Yu
90289	Study on the Moisture Content of Loess Stratum in Xi'an Region	Xu Qinxuan
95464	An Optimized Algorithm for Task Scheduling Based On Activity Based Costing in Cloud Computing	Qi Cao
90281	Synthesis of eco-friendly ionic liquids by microwave irradiation and their applications in Michael addition	Zhao Dishun
90605	Detection Of Viable Listeria monocytogenes In Dairy Products By Real Time Reverse-transcription PCR	Bing Yan
90694	Removal of Microcystins by Ultrafiltration Membrane without Pre-treatment	Weiyang LI
90261	Synthesis and chareacterization of optically active macromolecular prodrugs with chemo-enzymatic protocol	Jing Quan
90259	Enzymatic synthesis and study of novel ester of ferulic acid as a novel anti-carcinogenesis agent with free radical scavenging properties	Yan Zheng
90607	Multiplex PCR detection by rapid obtaining pathogens in raw milk with filtration	Wei Liu
95487	Simulation analysis of water resource system in Henan province China affected by the South-to-North water transfer	Chen Nanxiang
90696	Study of Key Parameters of Thermal Flow Reversal Reaction	Zhenqiang Gao
90133	Stepwise Confidence Intervals Procedures for Toxicological Studies from Grouped Samples	Gang Yu
95629	The influential factors of body image among high school students	Fan Ping
95426	College Students' Domain-specific Self-determination	Xuelian Chen

Part V: Instructions for Presentations

Oral Presentation

Devices Provided by the Conference Organizer:

- Laptops (with MS-Office & Adobe Reader)
- Projectors & Screen
- Laser Sticks

Materials Provided by the Presenters:

- PowerPoint or PDF files

Duration of each Presentation (Tentatively):

- Regular Oral Session: 15 Minutes of Presentation, 5 Minutes of Q&A
- Keynote Speech: 40 Minutes of Presentation, 5 Minutes of Q&A

Poster Presentation

Materials Provided by the Conference Organizer:

- X Racks & Base Fabric Canvases (60cm × 160cm, see the figure below)
- Adhesive Tapes or Clamps

Materials Provided by the Presenters:

- Home-made Posters

Requirement for the Posters:

- Material: not limited, can be posted on the Canvases
- Size: smaller than 60cm × 160cm
- Content: for demonstration of the presenter's paper

Requirement for the Presenters:

- Stand beside his (her) Poster through the Session, and discuss with the readers about his (her) paper



Part VI Hotel Information

1. About Hotel

Located in the central area of Zhong Guan Cun High-tech Garden, Beijing Friendship Hotel is in No. 1 South St. of Zhong Guan Cun in Haidian District with some famous site scene like Summer Palace, Winter Palace and Xiangshan, there are also some well-known universities including Beijing University and Tsinghua University. As the largest garden hotel in Asia, Beijing Friendship Hotel is recorded into World Architecture Annals published by Cambridge in UK for its large area and typical folk style. Its Chinese taste may be found in its garden architectures, and more history might be discovered with more understanding.

Address: 1 Zhongguancun South St. Beijing 100873, P.R.China

2. Hotel Map



3. How to get to the hotel

15km to city center (about 20 minutes)

10km to coach station (about 10 minutes)

10km to railway station (about 10 minutes)

40km to airport (about 20 minutes)

The Study of the Controllable Parameters on the Hyperthermia Efficiency

(A Numerical Study)

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Abstract—The aim of this article is to propose a useful scheme, to achieve ideal hyperthermia using spatial heating sources. To do this, the effect of the variation of some of the controllable parameters such as the heating source power, the heating duration, the heating source type, and the cooling system parameters, upon the temperature distribution was investigated. The tissue under treatment is a superficial cancerous tissue with no significant blood vessel. So the Pennes bioheat transfer equation was used to simulate the treatment phenomena. Fully implicit control volume method was used to solve the transient one dimensional Pennes equation. The results show that by selecting appropriate values for controllable parameters, hyperthermia treatment could be done ideally.

Keywords—Bioheat transfer; control volume; Hyperthermia; Numerical Method; Pennes

I. INTRODUCTION

Hyperthermia is a therapeutic procedure used to raise the temperature of a cancerous region of the body [1], to destroy it thermally [2] or enhance other cancer therapy methods such as chemotherapy or radiotherapy [1, 3-6]. Ideal hyperthermia is achieved whenever the temperature of the tumoral tissue is above cytotoxic temperatures while healthy tissues temperature lies into the safe range [5-8]. Predicting the temperature history of tumoral and neighboring healthy tissue during hyperthermia treatment is very important to gain the ideal hyperthermia [6]. Modeling the hyperthermia-induced temperature history, needs an accurate description of the mechanism of bioheat transfer [7]. The most important mechanisms that affect the bioheat transfer are as follows: conduction heat transfer in tissue, heating source's power deposition pattern characteristics, and heat exchange between blood flow and tissue [8]. There has been a great deal in the literature about heat exchange between vascular system and tissue [6-12]. As an example the effect of thermally significant blood vessels on hyperthermia treatment, has been studied by some of researches [8-12]. K. Khanafer et al. [8] showed that the main parameters which cause the temperature non-uniformity in the heated tissue are the significant blood vessels. T.L. Horng et al. [9] showed that the heat exchange from vessels with diameters larger than 0.5mm could not be modeled by using the conventional perfusion term. T.C. Shih et al. [10] studied the effect of thermally

significant blood vessels on thermal dose of tissue during hyperthermia treatment. J.Zhou and J. Liu [11] studied the effect of thermally significant blood vessels during laser hyperthermia treatment. I.D. Santos et al. [12] studied the effect of variable heat transfer coefficient in thermally significant blood vessels. P.Yuan [6] in his study about thermally equilibrated and non-equilibrated behavior in biological bodies, showed that for the vessels with diameters less than 30 μ m, the heat exchange between blood and tissue is equilibrated and using the conventional, one equation bioheat transfer models are completely reasonable.

The microwave [1, 2, 13-15], the ultrasound [1, 2, 8, 10, 14, 15], and the laser [1-4], etc. are the most popular apparatus used as heat source in hyperthermia treatment. Simulating thermal response of the living tissue during the hyperthermia treatment has been studied by a lot of researchers, Z.S. Deng and J. Liu [2] solved the one dimensional Pennes equation with a spatial source term and convection boundary condition on the skin surface, by using the Green functions method. C. Thiebaud and D. Lemonnier [5] solved the three dimensional Pennes equation for a hyperthermia case by using the electromagnetic source, and obtained the optimum electromagnetic field. M. Junich et al. [3] solved the Pennes equation by using laser heat source. K.Khanafer et al. [8] investigated the effect of pulsatile blood flow and heat deposition pattern on the hyperthermia treatment.

In all of the previous studies, there has been no effort to increase the treatment efficiency. In practical cases tumoral tissue may be located in any distance from the skin surface. To enhance the hyperthermia treatment, the controllable parameters should be effect upon the maximum tumor lesion. In this study it has been shown that changing special parameters, such as heating pattern characteristics, cooling system characteristics and heating duration have effect upon the maximum lesion location. By controlling the maximum lesion location, treatment efficiency could be increased to a large extent.

II. PHYSICAL MODELING

The tissue under treatment is assumed to be superficial. Main assumptions are as follows: the tissue is composed of

only one layer with mean properties. Thermo physical properties and vascular structure of normal and tumoral tissues are identical. No significant blood vessel (vessel with diameter larger than 30 μ m [6]) pass through the tissue under treatment. Perfusion is assumed to be uniform through time and space. Also the vascular temperature entering to the capillary system, T_b , is assumed to be constant.

III. MATHEMATICAL MODELING:

Geometrical model of tissue under treatment is shown in Fig. 1. Characteristic length of the tissue is assumed to be large so that the effect of external heating source could be neglected at the end of domain($x=L$). Then the thermoregulation system behavior becomes dominant. As demonstrated in many studies [2, 15] the reasonable length is from 0.02m to 0.03m. Then $L=0.03$ m was used in this study.

The 1D Pennes [16] bioheat transfer equation is as follows:

$$\rho_t c_t \frac{\partial T}{\partial t} = k_t \frac{\partial^2 T}{\partial x^2} + \rho_b c_b \omega_b (T_b - T) + Q_m + Q_r(x, t) \quad (1)$$

where T , ρ_t , c_t , and k_t are the temperature, density, specific heat, and thermal conductivity of the tissue respectively. Also ρ_b , c_b , ω_b are density, specific heat, and perfusion rate of blood respectively. T_b is the arterial temperature which is assumed to be constant as explained before. Q_m is the metabolic heat generation and $Q_r(x, t)$ is the external heat source. It is also assumed that the tissue temperature is initially at 37°C.

The appropriate boundary conditions are as follows:

$$x = 0 : -k_t \frac{\partial T}{\partial x} = h(T - T_f) \quad (2)$$

$$x = L : T = 37^\circ C \quad (3)$$

where T_f is the cooling fluid temperature that flows on the skin surface and h is the heat transfer coefficient between skin surface and the cooling fluid. The external spatial heating source which could be microwave, laser or ultrasound is modeled using the Beer's equation (cited [2]):

$$Q_r(x, t) = \eta \cdot P_0(t) \exp(-\eta \cdot x) \quad (4)$$

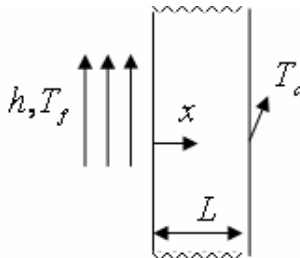


Figure 1. Geometrical model of the tissue under treatment

where η is the scattering coefficient and is the characteristic parameter of spatial heating source and P_0 is the power of heating source.

IV. THERMAL DOSE CALCULATION

The tissue lesion content is quantized using the thermal dose concept, which is a function of temperature and heating duration [9]. The thermal dose equation, proposed by Sapareto, cited in [9], is as follow:

$$EM_{43}(\text{min}) = \int_0^{t_f} R^{T-43} dt \quad (5)$$

which for $T > 43^\circ C$, $R=2$ and for $37^\circ C < T < 43^\circ C$, $R=4$. The critical value for tissue necrosis is $EM_{43}=240$ min [9].

V. NUMERICAL SOLUTION

The governing equation was discretized for a uniform grid by the control volume approach with the full implicit method. A TDMA method was used to solve the discretized governing equation. The grid size and time step are chosen $\Delta x = 3 \times 10^{-4}$ m and $\Delta t = 1$ s respectively.

VI. RESULTS AND DISCUSSION

In this study 1D Pennes equation was solved to model the treatment of a superficial tumor with hyperthermia. Thermo physical properties of the tissue and blood are as follows [2]: $\rho_t = \rho_b = 1000 \text{ kg/m}^3$, $c_t = c_b = 4200 \text{ J/kgK}$, $k_t = 0.5 \text{ W/mK}$, $\omega_b = 0.0005 \text{ ml/s/ml}$, $Q_m = 3380 \text{ W/m}^3$, $T_b = 37^\circ C$ and $L = 0.03$ m.

To verify the solution, the dependency of the result to the grid size is studied. Fig. 2 shows the thermal dose distribution versus x , for different grid sizes. By increasing the grid number to more than 100, the variation of the thermal dose with respect to x approximately is independent of mesh size so that the number of grid is set to be 100 in this study.

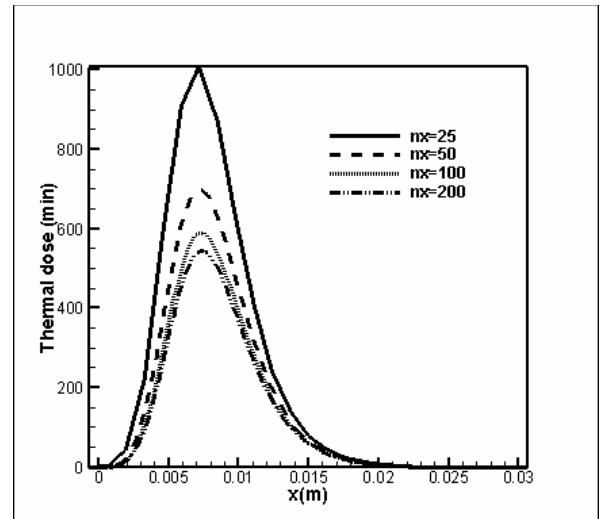


Figure 2. Thermal dose distribution vs x for different grid sizes

The current numerical results for the variation of temperature with respect of x at two different times are shown in Fig.3 and are compared with the analytical results of Deng [2]. This figure shows that the current numerical results are in good agreement with the analytical results [2].

Fig. 4 shows the variation of thermal dose versus x for different durations of heating. This figure shows that the increasing of the heating duration causes the maximum of the thermal dose to increase, while the position of this point is fixed and independent of the heating duration.

The variation of the position of the maximum thermal dose and the time required for the tissue necrosis with respect of the power of the heating source are tabulated in table 1. The time required for tissue necrosis decreases by increasing the power of heat source. This makes the treatment more bearable for the patient. Also, this results show that the increasing the power of thermal source causes the maximum of the thermal dose to move to the skin surface.

The effect of scattering coefficient on the distribution of the tissue lesion is shown in Fig. 5. This figure shows by increasing the scattering coefficient, the maximum of thermal dose increases and the position of it moves to the skin surface.

Fig. 6 shows the effect of cooling fluid temperature on the distribution of the thermal dose. As it is expected, decreasing the cooling fluid temperature causes the thermal lesion to decrease and the maximum thermal dose to move faraway from the skin surface.

The effect of the heat transfer coefficient between cooling fluid and skin surface on the distribution of thermal dose is shown in Fig. 7. This figure shows that by decreasing the heat transfer coefficient, the thermal lesion increases and the maximum of the thermal dose moves to the skin surface.

From the results of Figs. 4-7 and table 1, it is concluded that a specific point of the tissue could be detected for complete necrosis by selecting the reasonable power and type of the heating source and also setting the heating duration and characteristics of the cooling system.

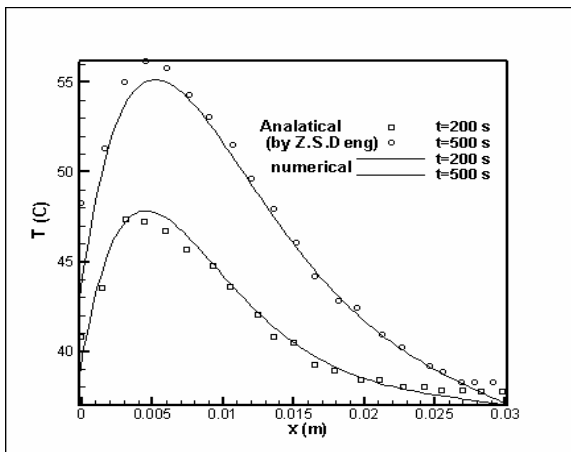


Figure 3. The comparison of the current results with the analytical results of Deng [2]

VII. CONCLUSION

Ideal hyperthermia is achieved whenever the tumoral tissue is completely destroyed while the surrounding of this region remains healthy. In this study 1D Pennes bioheat transfer equation is solved by numerical method for a superficial cancerous tissue without any significant blood vessel under hyperthermia treatment. The results show that the power and the type of the heat source and the characteristics of the cooling systems such as fluid temperature and the convective heat transfer coefficient have effects upon the distribution of the thermal dose, the maximum value of the thermal dose, and the position of the point of this maximum value. While the heating duration just affects on the maximum value of the thermal dose and it does not have any effect on the position of the point of this maximum.

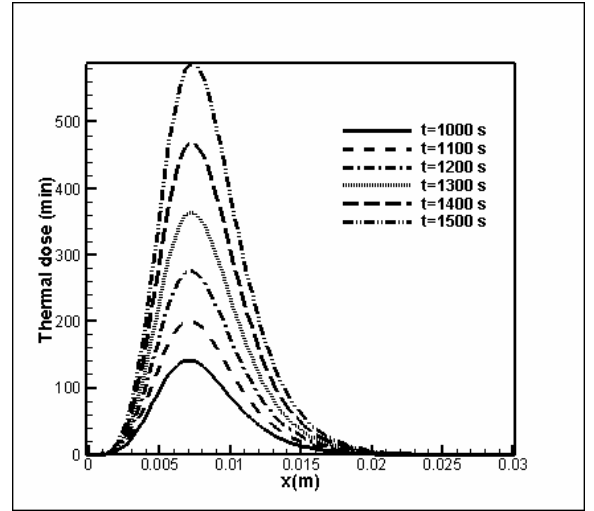


Figure 4. Thermal dose distribution vs x , for different heating durations. $T_f=15^\circ\text{C}$, $\eta=200\text{ m}^{-1}$, $h=100\text{ W/m}^2\text{C}$, $P_0=3000\text{ W/m}^3$

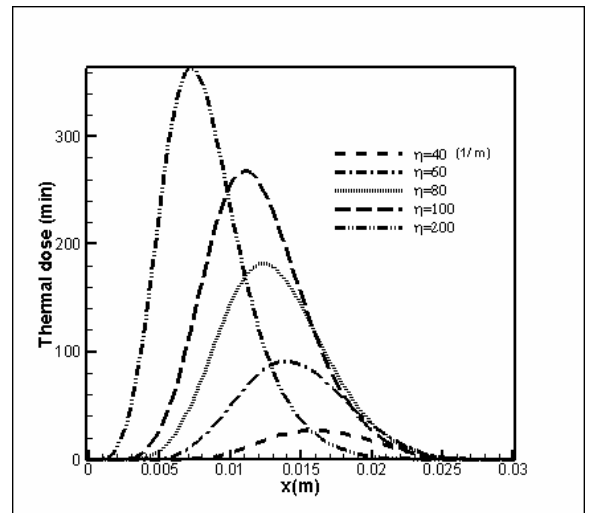


Figure 5. Thermal dose distribution vs x , for different values of the scattering coefficient. $T_f=15^\circ\text{C}$, $t=1300\text{ s}$, $h=100\text{ W/m}^2\text{K}$, $P_0=3000\text{ W/m}^3$

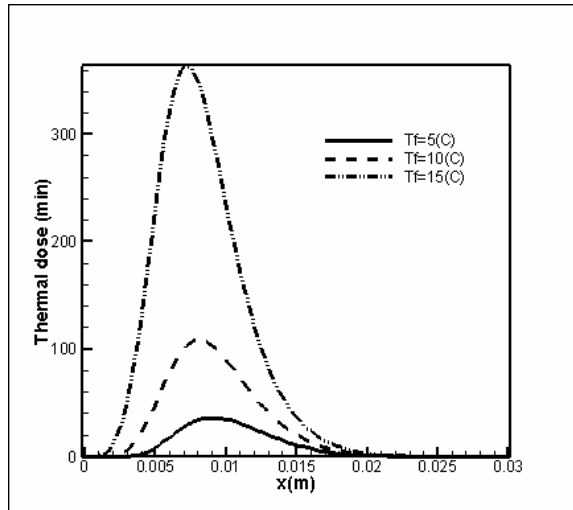


Figure 6. Thermal dose distribution vs x , for different values of the cooling fluid temperature. $\eta=200 \text{ m}^{-1}$, $t=1300 \text{ s}$, $h=100 \text{ W/m}^2\text{C}$, $P_0=3000 \text{ W/m}^3$

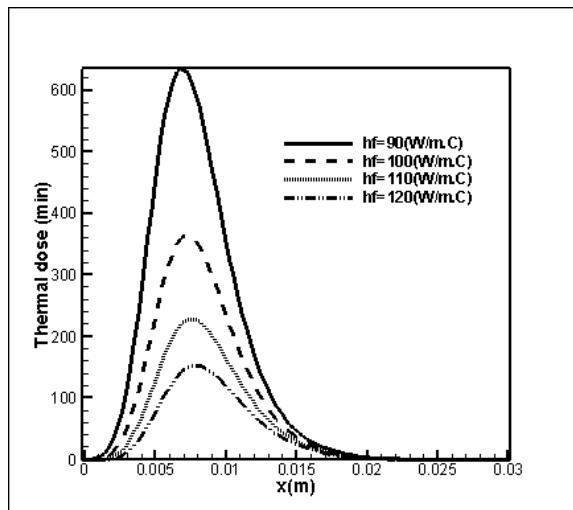


Figure 7. Thermal dose distribution vs x , for different values of heat transfer coefficient. $\eta=200 \text{ m}^{-1}$, $T_f=15^\circ\text{C}$, $t=1300 \text{ s}$, $P_0=3000 \text{ W/m}^3$

TABLE I. TISSUE NECROSIS TIME AND PEAK LOCATION

$P_0 \text{ (W/m}^2\text{)}$	2000	3000	5000
Time (min)	250	20	5
$x_p \text{ (m)}$	0.01	0.007	0.0005

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