ACTA BIOPHYSICA SINICA 2005 Vol.21

INDEX OF VOLUME

Minireviews

Calcium Signaling in Apoptosis ····· *GUO Jing PU Yong-mei Donald C. Chang (ZHANG Dong-cai)* (1)

Transient Receptor Potential Channels and Signal Transduction ····· *DUAN Bo XU Tian-le* (245)

Uncovering the Mechanism of Deep Brain Stimulation ····· *YU Chao LI Gang WANG Shi-min et al.* (325)

Avian Vocal Organ and Vocal Control Mechanism ····· *GENG Hui LI Dong-feng JIANG Jin-chang* (397)

Progress

Progress on Methods for Inferring The Gene Networks from Microarray Data ····· *WANG Ming-yi XIA Shun-ren CHEN Zuo-zhou* (19)

Progress on Learning and Memory of Birds ····· *MENG Wei LIAO Su-qun XIAO Peng et al.* (85)

Chimeric Fibrinolytic Enzymes: Progress And Prospective ····· *XIAO Rong ZHAO Jing LI Qing-Wei* (90)

Research Articles

Effects of Anti-tumor Drug Harringtonine on The Proliferation of HeLa Cell and Its Relationship with *CenpB* Gene ····· *LIANG Qian-jin Zhang Su ZHENG Yan-bo et al.* (26)

Analysis of Approximate Entropy Based on Wavelet Transforms of Brainstem Auditory Evoked Potential of Infantile Spasms ····· *CUI Lin-yang ZHENG Xu-yuan WU Shi-jing* (33)

A Neuron Population Model for Event-related Desynchronization and Synchronization ····· *HAO Dong-mei RUAN Xiao-gang* (39)

Study on Visual Spatial Attention Event Related Potentials Based on Synergetics Analysis ····· *Yin Gang Yao De-zhong* (46)

Analysis of Power Spectrum of HRV in Iugr Rats ····· *LIU Yan-hui LIU Zhen-zhai HAN Hai-sheng et al.* (55)

Prediction of Residue Solvent Accessibility in Protein with Support Vector Machine ····· *WANG Xian LI Ao WANG Ming-hui et al.* (60)

Detection of The Apoptosis of Jurkat Cell Using an Electrorotation Chip ····· *LONG Quan XING Wan-li* (65)

Evaluation of The Thickness of The Nanometer-sized Ultrasound Contrast Agents Microbubble Shell Using a Novel Ultra High Speed Camera Combined with Ultrasound Backscatter ····· *LI Bin WAN Ming-xi* (71)

Noise Removal in Digital Images Based on a Wavelet Neural Network ····· *CAI Nian HU Kuang-hu LI Fang-zhen et al.* (78)

The Prediction of Amine Receptors Ligand-binding Region and Sites ····· *GUO Zhi-yun ZHANG Huai-yu WANG Yue-lan et al.* (95)

Conservative Analysis of Type Ⅲ Secretion System Chaperones Protein Sequences and Prediction of New Chaperone ····· *WANG Li WANG Yu-min WANG Qiong et al.* (103)

A New Encoding Scheme for Protein Structure and Its Application ····· *CHEN Shuang-ping ZHENG Hao-ran Ning Yan et al.* (114)

A Fast Motif Finding Algorithm for DNA Sequence ····· *LI Dong-dong WANG Zheng-zhi DU Yao-hua et al.* (121)

A Cellular Automata Model for Simulating Fed-batch Penicillin Fermentation Process ····· *YU Nai-gong RUAN Xiao-gang* (130)

The Amplitude Variation of Auditory Late Response Tracked by Independent Component Analysis and Wavelet Transform ..... *DING Hai-yan YE Da-tian* (139)
Edge Detection and Analysis for Gastric Tumor Cell Images Based on Multi-Wavelet ..... *LI Tian-gang WANG Su-pin* (145)
DNA Duplex Membrane Effect for The Electrochemical Detection of Single-base DNA Mutations ..... *LUO Chun-Xiong MAO You-Dong OUYANG Qi* (151)
Measurement of The Complexity for Low-dimensional Non-linear Structure of Respiratory Network in Human ..... *ZHANG Tao YANG Zhuo* (157)
Trichosanthin Can Insert into Lipid Membrane Containing Similar Lipid Components with Non-cytosolic Leaflet of Plasma Membrane ..... *ZHANG Fan SUI Sen-fang* (169)
Analysis on Expression and Function of CD39 in Hematopoietic Cell Lines ..... *NIE Kun ZHENG Guo-guang ZHANG Xiu-jun et al.* (175)
Relationship between Mitochondrial Membrane Surface Potential and Cell Livability in Photodynamic Therapy ..... *WEI Rong-hui HUANG Yan-ping LI Lin et al.* (182)
Feature Selection for Clustering Disease Samples Based on Gene Ontology ..... *XU Jian-zhen GUO Zheng LI Xia et al.* (187)
Modeling of scFv of Human Antibody Against Liver Cancer ... *TANG Zhen-jie LIAO Wen-jun YU Bing et al.* (195)
Expression of Endothelin in Organ-cultured Artery under Low Shear Stress ..... *LIU Bo ZHOU Jin LIU Yan-chun et al.* (200)
Preparation and Osteoblast Affinity of β-Tricalcium Phosphate/Apatite Composites ..... *GAO Yuan XI Jing DONG Li-min et al.* (205)
Fluorescence Lifetime Imaging Based on Neural Network Algorithm ..... *SUI Cheng-hua ZHOU Ming-hua* (213)
Monte Carlo Method and 3-D Digital Human Model Applied to Quality Assurance of The Radiotherapy Planning ..... *WANG Jin-liang BAI Jing LUO Jian-wen et al.* (221)
Signal Propagation in Cultured Neonatal Rat Cardiac Myocytes: Multi-electrode Recording Study ..... *ZHANG Pu-ming LAI Hao CHEN Ai-hua et al.* (227)
Analysis of EEG Synchronization during The Native and Second Language Stroop Task ..... *LIU Xiao-feng QI Huan WANG Yi et al.* (233)
Dynamic Difference between GLUT4 Storage Vesicles and Secretory Vesicles Revealed by Evanescent-field Imaging and Single Particle Tracking ..... *LIANG Tao LI Dong-dong XIONG Jun et al.* (261)
The Clustering Effect of Purified Epidermal Growth Factor Receptor Induced by 50 Hz Magnetic Field ..... *JIA Cai-li ZHOU Zhen-jie LIU Ren-chen et al.* (269)
Possible Short- and Long-range Transcriptional Synergistic Regulation between Upstream Regions and Introns in Yeast Genes ..... *ZHANG Kun-lin ZHANG Jing LUO Jing-chu* (277)
Identification of 5'UTRs Splice Sites in Human Gene Based on Support Vector Machine ..... *YAN Chun DU Yao-hua GAO Qing-bin et al.* (284)
Permeation Mechanism of A Two-state Potassium Channel ..... *WANG Xiang-qun ZHAO Tong-jun SONG Yang et al.* (289)
Chaotic Control of The Hindmarsh-Rose Neuron Model ..... *YU Hong-jie PENG Jian-hua* (295)
A Study of Power Density Spectra of Split-alpha Rhythem ..... *XIONG Hong-chuan YAO De-zhong* (301)
Research on Chaos Phenomenon of EEG Dynamics Model ..... *WANG Xing-yuan LUO Chao TAN Gui-lin* (307)
A Support Vector Machine Based Method of Epilepsy Spike and Sharp Waves Recognition in EEG ..... *QIU Tian-shuang ZHENG Xiao-lai BAO Hai-ping et al.* (317)

Theoretical Evaluation on Radical-scavenging Activity of Nine Natural Products ……
…… *SHEN Liang JI Hong-fang CHAI Jian-guo et al.* (332)
The Numerical Study of Dynamical IP_3-Ca^{2+} Oscillation Model …… *YAN Chuan-kui LIU Shen-quan* (339)
Real Time Observation on Cells in Different Fixed Conditions and Living Cells in Buffer Solution by AFM …… *ZHUANG Le-nan QI Hao SUN Run-guang et al.* (345)
Study on Gray-level Characteristic of Bacteriorhodopsin Film ……
…… *YANG Qing CHEN Feng ZHANG Jing-Wang et al.* (351)
Study on Viscoelastic Characterization of Biological Tissue by Photoacoustic Technique ……
…… *LI Jiang-hua TANG Zhi-lie ZHENG Chu-jun et al.* (355)
Multiple Signal Classification Based on Chaos Optimization Algorithm for MEG Sources Localization ……
…… *MA Jie-ming WANG Bin ZHANG Li-ming* (359)
The Study of Classification of Motor Imageries Based on 4^{th} Order Cumulant of EEG ……
…… *WU Xiao-pei YE Zhong-fu* (364)
Entropy Measures of ERP Recordings for Dual Tasks in Man … *TANG Xiao-jun SONG Zhuo YANG Zhuo et al.* (371)
Finite-element Simulation for Magnetic Fields Created by Multi-channel Brain Magnetic Stimulator ……
…… *WANG Xue-min CHEN Yun GUO Ming-xia et al.* (377)
Changes of sEMG Parameters During Isometric Fatiguing Contractions and Recovery Period ……
…… *YANG Hong-chun WANG Jian ZHANG Hai-hong* (385)
ERP Coherence Analysis of Form and Spatial Location Perception …… *ZHOU Qun YAO De-zhong YIN Yu* (391)
The Research of The Tryptophan Residues' Spectrum in bR When Oxidized by N-bromosuccinimide ……
…… *WANG Zhe-chen ZHONG Sheng ZHANG Jian-ping et al.* (404)
Characteristic Interspike Intervals of Primary Unit Afterdischarges in Hippocampal Neurons of Epileptic Rat - - -
…… *LIU Qing WU Jun-fang WANG Sheng et al.* (409)
Selective Inhibition of Weak Forward Masker with Different Durations on The Acoustical Responses of The Inferior Collicular Neurons in Mouse …… *MEI Hui-xian GUO Yu-ping WU Fei-jian et al.* (418)
Missing Value Estimation for Microarray Expression Data based on Total Least Squares ……
…… *QIU Lang-bo WANG Gang WANG Zheng-zhi* (425)
Kinetic Study of Stochastic Distribution of Myosin Ⅴ's Step Size ……
…… *GAO Xiu-jun ZHAN Yong ZHAO Tong-jun et al.* (431)
On Energy Principle of Couple Neuron Activities …… *WANG Ru-bin ZHANG Zhi-kang* (436)
Growing Hierarchical self-organizing map Models for Mental Task Classification ……
…… *LIU Hai-long WANG Jue ZHENG Chong-xun* (443)
Conduction Delay-aided Synchronization in Two Coupled Chay Neurons with Inhibitory Synapse ……
…… *WANG Qing-Yun LU Qi-Shao ZHENG Yan-Hong* (449)
Shape Identify of Electrocardiogram ST Segment Based on Radial Basis Function Manual Neural ……
…… *LIU Hai-long TANG Ji-ling* (457)