

INDEX OF VOLUME

Minireview & Views

A Review on High Pressure Bioscience and Biotechnology *LI Zong-jun FANG Wu XU Jian-xing* (1)
 siRNA-Mediated Gene Silencing *YIN Qin-wei* (85)
 Discovering A Cellular Pathway on Energy-consuming Protein Degradation—The Story behind The Nobel Prize in
 Chemistry for 2004 *CHANG Zeng-yi JIAO Wang-wang* (421)
 A Creative and Significant Research—An Elementary Introduction to The Nobel Prize in Physiology or
 Medicine 2004 *HU Ji YAN Zhi-qiang LUO Min-min* (426)

Progress

Structural Characteristics and Development of Bioactive Surface Research of Scorpion Toxins Affecting Potassium
 Ion Channels *WU Ying-liang CAO Zhi-jian JIANG Da-he et al.* (96)
 Observation and Manipulation of Biological Structures with AFM *WANG Li-juan ZHANG Ying-ge* (253)
 Advances in The Functions and Molecular Mechanisms of Long-term Depression in Learning and Memory
 *ZHAN Zu-bing Du Yan-hua* (337)
 Free Glutamine in Organism and Its Anti-oxygenation *WANG Xue-bin Liu Feng-lian LI Dong-feng et al.* (429)

Research Articles

Membrane Insertion of A β Would Induce Its Fibril Formation *Ji Shang-rong WU Yi SUI Sen-fang* (7)
 Characterization of The Spectra Change during Reconstitution of The D₁-D₂-Cyt b₅₅₉ Complex with The 33 kD Protein
 *TAN Xiao-hong DU Lin-fang ZHANG Nian-hui* (13)
 Cultivation of Vascular Smooth Muscle Cells on Chitosan and Gelatin Films
 *ZHANG Lu-hua YANG Fei GONG Yan-dao et al.* (19)
 Modulation of The Voltage-gated Sodium and Calcium Channels by Pertussis Toxin Sensitive Gi Protein in Neurons
 Isolated from Cotton Bollworm (*Helicoverpa armigera*) *LI Jie HE Bing-jun LIU An-xi* (26)
 “Critical Sensitivity” Phenomena of Neural Firing Pacemaker to Electrical Field Stimulus
 *YANG Jing DUAN Yu-bin XING Jun-ling et al.* (31)
 Analysis of DNA Sequence Constructure Based on Nonlinear Method
 *ZHAO Xiao-jie LIU Yong YAO Li et al.* (37)
 Statistical Analysis of Positive Transcriptional Regulatory Sites in The Introns of Yeast Genes
 *HU Jun YANG Jian-hong LI Yan et al.* (43)
 Optical Technic of Isolation A Single Chromosome *WANG Hao-wei LIU Xiao-hui LI Yin-mei et al.* (50)
 Quasi-steady Fluid Field Distributions in Static Larynx and Hemilarynx Model
 *LI Sheng WAN Ming-xi WANG Su-pin et al.* (57)
 Phenomenological Theory of Substance Transport Through Skin
 *WANG Hong BAO Jia-li WANG Hui-ping et al.* (66)
 Experimental Study on Young's Modulus of The Zona Pellucida of Water Buffalo Oocytes
 *TENG Wei-zhong SHI De-shun WU Wen-zhou et al.* (73)

- Blind Signal Separation of Multi-channel EEG YOU Rong-yi XU Shen-chu CHEN Zhong (77)
- Single Cell Imaging of The Living Human Retina Using Adaptive Optics and Optical Coherence Tomography
..... QU Jun-le Ravi S JONNAL Karen E THORN et al. (103)
- Spatio-Temporal Imaging of EGF-Induced Activation of Protein Kinase A by FRET in Living Cells
..... WANG Jin-jun CHEN Xiao-chuan XING Da (109)
- Photoacoustic Imaging with Deconvolving The Detected Signals of Sample by The Detected Signa of A Point Source
..... WANG Yi XING Da ZENG Ya-guang (114)
- Effects of Recombinant Adenovirus of Full-length and Trancated Form of Toll-like Receptor 4 on The Organization of
F-actin in Rf-6A Endothelial Cells SONG Ge SUN Xue-gang JIANG Yong (119)
- A Study on The Sequences and Splice Sites of *A. thaliana* and *C. elegans* Genes
..... CHEN Cui-xia LI Qian-zhong LIN Hao (125)
- Visualization of Conformational Space of Tri-peptide and Tetra-peptide
..... CHEN Shuang-ping ZHENG Hao-ran LIU Hai-yan et al. (132)
- Ortholog —— Concept, Bioinformatic Inferences and Databases
..... CHEN Zuo-zhou ZHU Sheng XUE Cheng-hai et al. (137)
- Superoxide Anion Regulates The K⁺ Channel Activity and Stomatal Movement by Increasing Guard Cell Cytosolic
Free Calcium in *Vicia faba* L AN Guo-yong JIANG Jing ZHOU Yun et al. (143)
- Expansion of Adult Schwann Cells from Rat Peripheral Nerves
..... CAO Wen-ling LI Jia-mou JING Duo-hui et al. (150)
- A Cellular Automata Model for Simulating Penicilin Fermentation Process Biomass Growth
..... YU Nai-gong RUAN Xiao-gang (155)
- Roles of Integrin β_1 on Adhesion between Different Cyclic Hepatocellular Carcinoma Cells and Human Umbilical Vein
Endothelial Cells SONG Guan-bin LUO Qing SHEN Xiao-dong et al. (167)
- The Study on Microrheological Characteristics of Mouse Reticulocytes
..... WANG Jin-hua KA Wei-bo TANG Zhi-yu et al. (173)
- The Changes of The Membrane Shear Elastic Modulus and Viscosity of Reticulocytes in The Course of Turning into
Erythrocytes XIE Li-de YANG Hai-jie WEN Zong-yao et al. (178)
- Study on Molecular Mechanism of Echinacoside for Against Aging
..... MUTELIEFU Gulinuer LEI Li TU Peng-fei et al. (183)
- Blind Source Separation for FMRI Signals Using A New Independent Component Analysis Algorithm
..... WU Zhen-hua SHI Zhen-wei TANG Huan-wen et al. (188)
- Analysis of HRV Signals Based on The High-order Complexity Measurement
..... ZHU Jia-fu YANG Hao HE Wei (193)
- sEMG Signal Complexity and Entropy Changes during Exercise-induced Local Muscle Fatigue
..... LIU Jia-hai WANG Jian LUO Xiao-fang (198)
- Time-frequency Analysis of Single-sweep Evoked Potentials Based on Wavelet Transform
..... ZHANG Jia-hua YANG Zhong-le (203)
- The Dynamical Mechanisms for The Sensitive Response of Excitable Cells with Chaotic Firing to External Stimulation
..... XIE Yong XU Jian-xue KANG Yan-mei et al. (209)
- The Numerical Analysis of Lobster Stomatogastric Nervous System LIU Shen-quan L. Song (217)
- Condition-related Gene Functional Module Cluster Analysis YU Hui GUO Zheng LI Xia et al. (225)
- Cooperativity of The Oxidization of Cysteines in Globular Proteins
..... SONG Jiang-ning Li Wei-jiang XU Wen-bo (233)
- Two-state Model for Directed Motion of Brownian Motor

- HAN Ying-rong ZHAO Tong-jun ZHAN Yong et al. (239)
- Effect of Branch Sites on Acceptor Sites Recognition ZHANG Yong RUAN Xiao-gang (245)
- Study on Excitability Change of Hippocampal CA1 Neurons after Fluid Percussion Injury
..... ZHANG Ai-hua GU Jian-wen ZHENG Chong-xun (258)
- Study on The Expression of P2X₇ Receptor and Its Mediation in Intracellular Calcium Response in
Human Leukemic Cell Lines ZHANG Xiu-jun ZHENG Guo-guang MA Xiao-tong et al. (263)
- The Analysis of Proteome Changes in Sunflower Seeds Induced by N⁺ Implantation
..... DONG Gui-jun ZHANG Wei-dong CHEN Shuang-yan et al. (269)
- Conformational Heterogeneity of Apoazurin Mutant M121L from *Pseudomonas aeruginosa*: A Fluorescence Study
..... ZHANG Hong-jie (275)
- Studies on Kinetics of Iron Release from The Liver Ferritins of *Dasyatis akajei* and *Aplysia* under The System of
Mixed Proteins CHEN Ping HUANG He-qing YAN Li et al. (285)
- Study on Energy Transfer in Core Complex of PSII by Femtosecond Fluorescence Spectra Technique
..... LIU Xiao WANG Shui-cai HE Jun-fang et al. (290)
- The Recognition of Subcellular Location of Protein LI Feng-min LI Qian-zhong (297)
- An Approach to Design Proteins of Four Structural Classes
..... LIU Yun WANG Yi-hua WANG Bao-han et al. (307)
- Study on Unfolding Processes of A Small Protein by Molecular Dynamics Simulations under The Coupling Effect
between Pressure and Temperature WANG Ji-hua ZHANG Zhi-yong LIU Hai-yan et al. (315)
- Time-Frequency Analysis of Surface Myoelectric Signals during Dynamic Contractions
..... MU Yong-ge PENG Cheng-lin ZHENG Xiao-lin et al. (323)
- Simulation on The Human Olfaction Reacts Affected by Nasal Cavity Structure
..... SHI Zhi-biao ZUO Chun-cheng LI Yu-tong (329)
- The Properties of Long-term Potentiation in The Auditory Cortex of C57BL/6 Mice
..... MAO Yu-ting ZANG Shao-yun SUN Xin-de (344)
- Effects of High Pressure on Proliferation and Proliferation-associated Proteins and Growth Factor of Vascular Smooth
Muscle Cells of Organ-Cultured Artery ZHANG Feng ZHANG Yan LIU Bo et al. (349)
- Experimental Observation of The Integer Multiple Beating Rhythms Generated by Cardiac Myocytes
..... LIU Zhi-qiang GU Hua-guang YANG Ming-hao et al. (355)
- Nonlinear Dynamic Mechanisms of The Integer Multiple Rhythms Generated by Cardiac Myocytes
..... LIU Zhi-qiang GU Hua-guang YANG Ming-hao et al. (363)
- Application of Ant Colony Optimization Algorithm for 2D Hydrophobic-polar Protein Folding Model
..... LI Dong-dong WANG Zheng-zhi DU Yao-hua et al. (371)
- The Distribution Model of Open Reading Frame Length in Different Genomes and The Genome
Evolution FENG Li-qin LI Hong (375)
- Complexity Measurements of Electroencephalograph Recordings Using Sample Entropy Algorithm in Patients with
Temporal Lobe Epilepsy TANG Xiao-jun TIAN Xin YANG Zhuo et al. (382)
- Lumbar Muscle sEMG Signal Characteristics Induced by Different Load Method
..... FANG Hong-guang WANG jian (393)
- A Simulation Study on Effective Parameters to Represent The Heterogeneity in Ventricular Repolarization ...
..... YANG Zhong-fu LI Chuan-yong (399)
- Comparative Study of Cardiac Contractility Recovery Trend and Heart Rate Recovery Trend Based on Simultaneously
Telemetering Cardiac Contractility and Heart Rate Signals Following Exercise
..... CHEN Li-ming TIAN Xue-long XIAO Shou-zhong et al. (403)

- Stochastic Resonance in A double Layer Hodgkin-Huxley Neuronal Network
 HAN Xiao-peng LIU Jun TONG Qin-ye (408)
- Network Thermodynamics Model of Pathway Conductance for Drug Transport through Skin
 BAO Jia-li YANG Yuan-yuan WANG Hong et al. (413)
- Effect of Low Shear Stress on Expression of c-Fos and c-Myc Protein in Cultured Artery *in vitro*
 LIU Yan-chun LIU Bo ZHANG Yan et al. (434)
- Accumulation of PS I Core Complex CP I during Light-induced Thylakoid Biogenesis in *Chlamydomonas reinhardtii* y-1
 HU Zhao-hui XU Yi-nong (439)
- The Difference of Damage of Synaptic Plasticity between Aluminium Exposure and Aluminium-lead Exposure in Dentate Gyrus of Postlactational Rats
 WANG Ming ZHU Da-miao SHE Jia-qi et al. (445)
- Synaptic Transmission of Various Spike Trains between Primary Afferent Fiber and Spinal Dorsal Horn Neuron in The Rat
 WAN Ye-hong JIAN Zhong WEN Zhi-hong et al. (453)
- A Type of New Neural Firing Pattern Induced by Autonomous Stochastic Resonance Lying in A Period Adding Bifurcation Scenario
 YANG Ming-hao GU Hua-guang LI Li et al. (465)
- Bifurcation Scenarios in Neural Fring Pattern Transitions
 LI Li GU Hua-guang YANG Ming-hao et al. (471)
- Effects of Temperature on The Activity of Cultured Hippocampal Neuronal Networks
 LI Xiang-ning, ZHOU Wei, YAO Shun et al. (477)
- Preparation and Osteoblast Affinity of Bovine Hydroxyapatite
 GAO Yuan KONG Li-jun WANG Chen et al. (483)
- Research and Simulation of The Spectrum of DNA Damages
 CAO Tian-guang MA Yun-zhi ZHUO Yi-zhong (489)