

中国生物医学工程学会

CHINESE SOCIETY OF BIOMEDICAL ENGINEERING

ISSN 0258-8021

CN11-2057/R

CODEN ZSYXEI

中国生物医学工程学报

ZHONGGUO SHENGWU YIXUE GONGCHENG XUEBAO

CHINESE JOURNAL OF BIOMEDICAL ENGINEERING

第31卷

Vol.31

第5期

No.5

中国·北京

BEIJING·CHINA

5
2012

CHINESE JOURNAL OF BIOMEDICAL ENGINEERING

Vol. 31 No. 5 October 2012

CONTENTS

Papers

A New Method of Extracting Vigilant Feature from Electrooculography Using Wavelet Packet Transform	GAO Chun-Fang LV Bao-Liang MA Jia-Xin (641)
Electromagnetic Radiation to Head from Head Implantable Coil Powered via Magnetic Coupling Resonance Wireless Energy Transmission	ZHAO Jun XU Gui-Zhi ZHANG Chao LI Xuan LI Shao-Chong (649)
Characteristic Analysis of Malaise Caused by Viewing 3D Videos Based on EEG Power Spectrum	JIN Jing-Na LIU Zhi-Peng LI Ying YIN Jie YIN Tao (655)
Multi-Resolution GMI Demons Algorithm Based ^{18}F -FDG PET and CT Images Registration with Application in Esophageal Cancer	JIN Shuo LI Deng-Wang WANG Hong-Jun YIN Yong (662)
Ophthalmological High-Frequency Ultrasound Imaging Using Barker-Coded Pulse Excitation	ZHOU Sheng WANG Xiao-Chun JI Jian-Jun YANG Jun WANG Yan-Qun (671)
Advection-Diffusion-Reaction Equations Based Tumor Cells Growth Modeling	ZHANG Lu-Jun JIANG Ming-Yan BAO An-De (679)
Study on Brain-Computer Interface Controlled Functional Electrical Stimulation System for Lower Limbs	YAO Lin ZHANG Ding-Guo WANG Ying (690)
Research of Spherical Inclined Projection Correction Method Based on Projective Texture Mapping and its Application	QIU Fei-Yue ZHAO Bai-Le ZHANG Wei-Ze WANG Li-Ping (697)
Few-Trial Extraction of Single Channel Evoked Potential Based on ICA with Virtual Channels	WANG Yong-Xuan QIU Tian-Shuang LIU Rong (704)
CSSD-DE Channel Selection for ECoG Classification	WANG Jin-Jia YIN Tao (712)
Configuration Design and Analysis of the Human-Machine Kinematically Compatible Type Exoskeleton Mechanism for Lower Limb Rehabilitation Training	LI Jian-Feng WU Xi-Yao DENG Chu-Hui MA Chun-Min FAN Jin-Hong LIU De-Zhong (720)
Finite Element Analysis of a New Semi-Arthroplasty Prosthesis System Applied for the Elderly Patient with Unstable Transtrochanteric Fractures of the Femur	CHU Xiao-Bing YANG Yu HAO Gai-Ping TONG Pei-Jian (729)
In vivo Survival Evaluation of the ChinaHeart Left Ventricular Assist Device	LIU Xiu-Jian WU Guang-Hui
XU Chuang-Ye WANG Jing HOU Xiao-Tong LI Hai-Yang YANG Peng QU Wen-Bo LIN Chang-Yan (736)	
Experimental Study on Thermal Expansion Behaviors of Articular Cartilage during Freezing	XU Yi SUN Hui-Jun LV Ya (742)
Surface Plasmon Resonance Based Immunosensor for Human Chorionic Gonadotropin Using Nano Gold Modified Substrate	YUAN Lu YANG Yu-Cong FANG Xiang-Yi LIANG Xiao-Hui (748)
Reviews	
Advances in Bone Repair Composite Materials and Related Issues	LIAO Shi-Bo LAI Chen ZHANG Zhi-Xiong SHENG Li-Yuan XI Ting-Fei (755)
Current Research and Development Trend of Close-Loop Implantable Neuro-Stimulator	YUAN Yuan HAO Hong-Wei LI Lu-Ming (762)
Progress of Medical Biodegradable Magnesium Alloys	DENG Guoqing YU Zheng-Yang (769)
Communications	
An Improved Template-Matching Algorithm and its Application in ECG Waveform Recognition	JIANG Yi-Fa ZHOU Qing CHEN Wei-Yan (775)
Investigation of the Radiation Methods of the Experimental Cell on the Linear Accelerator	ZHENG Zu-An FU Xiu-Gen LIU Fei WANG Jun-Feng ZHENG Wei YAN Fang (781)
Computer Aided Diagnosis System for Fundus Images Using Content-Based Image Retrieval Technology	ZHANG Jiu-Mei DU Jian-Jun YAO Zong-Bi TIAN Lei (785)
Stabilization of Human Postural Control Based on Visual Feedback of Deviation of Center of Pressure	PEI Li-Li LI Hong-Yi FU Yun-Fa LI Jiang-Tao (790)
Preparation of Tri-Calcium Phosphate Ceramic Scaffold by HA and Bio-Glass	ZHENG Wei (795)

中国生物医学工程学报

ZHONGGUO SHENGWU YIXUE GONGCHENG XUEBAO

双月刊 1982 年 12 月创刊 第 31 卷 第 5 期 (总第 144 期) 2012 年 10 月 20 日出版

目 次

主 管

中国科学技术协会

主 办

中国生物医学工程学会

编 辑, 出 版

《中国生物医学工程学报》

编辑部编辑

中国医学科学院出版

北京市东单三条 9 号 (100730)

电 话 (010) 65248786

传 真 (010) 65248786

E-mail

cjbmecjbme@163.com

<http://www.csbme.org>

主 编

刘德培

编辑部主任

彭 岐

印 刷

北京市昌平百善印刷厂

发 行, 订 购

北京市报刊发行局, 各地

邮 局 订 购

Editor-in-Chief LIU De-Pei

Responsible Institution

China Association for Science & Technology

Sponsor

Chinese Society of Biomedical Engineering

Edited by

Editorial Department of Chinese Journal of Biomedical Engineering

Published by

Chinese Academy of Medical Sciences

Distributed by

Beijing Post Office

Overseas Distributor

China National Publications Import and Export Corp.

(16 Congti E. Road, Chaoyang District, Beijing 100020, China)

论著

- 一种用小波包变换提取眼电信号警觉度特征的方法 高春芳 吕宝粮 马家昕 (641)
磁耦合谐振无线能量传输系统头部植入线圈对人体头部电磁辐射影响的研究 赵军 徐桂芝 张超 李炬 李少充 (649)
观看 3D 影像所致不适感的脑电功率谱特征分析 靳静娜 刘志朋 李颖 尹杰 殷涛 (655)
基于多分辨率 GMI Demons 算法的¹⁸F-FDG PET-CT 图像配准在食道癌病例中的应用 金炼 李登旺 王洪君 尹勇 (662)
Barker 编码激励在眼科高频超声成像中的应用研究 周盛 王晓春 计建军 杨军 王延群 (671)
基于对流-扩散-反应方程的肿瘤细胞生长趋势建模 张鲁筠 江铭炎 包安德 (679)
脑机接口控制的下肢功能性电刺激系统研究 姚林 张定国 王颖 (690)
基于投影纹理映射的球面斜投影校正方法研究及其应用 邱飞岳 赵柏乐 张维泽 王丽萍 (697)
基于虚拟通道 ICA 方法的诱发电位单导少次提取 王永轩 邱天爽 刘蓉 (704)
基于 CSSD-DE 通道选择算法的 ECoG 分类研究 王金甲 尹涛 (712)
人-机运动相容型下肢康复训练外骨骼机构的构型设计与分析 李剑锋 吴希瑶 邓楚慧 马春敏 范金红 刘德忠 (720)
新研制的老年不稳定型股骨粗隆间骨折半髓假体有限元分析 储小兵 杨予 郝改平 童培建 (729)
ChinaHeart 左心辅助装置的动物在体存活实验 刘修健 吴广辉
徐创业 王璟 侯晓彤 李海洋 杨朋 渠文波 蔺婧燕 (736)
关节软骨冻结过程热膨胀行为的实验研究 胥义 孙慧君 吕娅 (742)
多层纳米金修饰膜的 HCG 表面等离子体传感器 袁璐 杨玉琮 方湘怡 梁晓慧 (748)
- 综述
- 骨修复复合材料及其相关问题的研究进展 廖世波 赖琛 张志雄 盛立远 奚廷斐 (755)
闭环植入式神经刺激器的现状与发展趋势 袁媛 郝红伟 李路明 (762)
医用可降解镁合金的研究进展 邓国庆 禹正杨 (769)
- 简讯
- 一种改进的模板匹配算法及其在 ECG 波形识别中的应用 江依法 周青 陈伟燕 (775)
直线加速器细胞照射剂量方法探讨 郑祖安 付秀根 刘飞 王俊峰 郑微 严芳 (781)
利用基于内容的图像检索技术的眼底图像计算机辅助诊断系统 张九妹 杜建军 姚宗碧 田蕾 (785)
基于 COP 偏移量视觉反馈的人体姿态镇定 裴立力 李洪谊 伏云发 李江涛 (790)
HA 混合生物玻璃制备 TCP 陶瓷支架及其性能的研究 郑卫 (795)