



[期刊基本参数] CN 31-1624/R * 1986 * b * A4 * 116 * zh+en * P * ¥25.00 * 2000 * 17 * 2019-02

主管

中华人民共和国教育部

主办

上海交通大学

承办

上海交通大学医学院附属
第九人民医院

出版

《医用生物力学》编辑部

编辑部

地址 上海市制造局路 639 号

邮编 200011

电话 (021) 53315397

传真 (021) 63137020

电子邮件

shengwulixue@163.com

网址

<http://www.medbiomechanics.com>

<http://www.mechanobiology.cn>

微博

<http://weibo.com/u/2040064195>

广告部 水汶

主编

戴尅戎

常务副主编

姜宗来

副主编

陈维毅 樊瑜波 龙勉

秦岭 郑诚功

编辑部主任

于志锋

E-mail: zfyu@outlook.com

责任编辑

徐绮

E-mail: 1534340082@qq.com

英文编辑

吴晓芸

编辑

《医用生物力学》编辑委员会

印刷

山西同方知网印刷有限公司

国内发行

上海市报刊发行局

国外总发行

中国国际图书贸易总公司

订购

全国各地邮局

邮发代号 4-633

定价

每期:25.00元 全年 150.00元

国内统一连续出版物号

CN 31-1624/R

国际标准连续出版物号

ISSN 1004-7220

CODEN YSLIBU

广告经营许可证号

3100120050036

©2019 年版权归《医用生物力学》

编辑部所有

目次

论著

- 安全气囊点爆展开时儿童颈部约束对颅脑损伤的影响 (1)
阮世捷,王海东,李海岩,吕文乐,崔世海,贺丽娟
- 几何参数对 Z 型覆膜支架柔顺性的影响 (7)
赵艺文,闫士举,司逸,宋成利
- 镁合金冠脉支架支撑性能分析及其优化 (14)
张宏辉,冯海全,李治国,韩青松
- 心包纤维取向对压缩性能的影响 (21)
吴泽斌,金昌,王丽珍,唐笑兰,钟生平,樊瑜波
- 基于 OpenSim 的腰部肌骨系统在体前屈状态下生物力学分析 (27)
詹晓彤,陈强,李志勇
- 腰椎经皮内镜下不同部位关节突成形对相关节段活动度的影响 (35)
余洋,樊效鸿,顾党伟,吴卫东
- 微创手术机器人机械臂结构设计和工作空间分析 (40)
李良敏,何超,宋成利,袁帅,张志阳,陈力
- 基于 LabVIEW 与 6 轴机械臂的脊柱生物力学测试系统构建及初步
可靠性研究 (47)
晏怡果,谢勇,王程,姚女兆,薛静波,欧阳智华,谭菁华,浣溢帆,齐蔚霖,
王文军
- 叶片倒角对 FDA 标准血泵流场和溶血预测的影响 (57)
王晨,徐博翎,吴鹏
- 血流切应力对血管内皮细胞 PCP 信号通路和初级纤毛发生的影响 (64)
刘月华,生燕,欧刚卫,生欣
- microRNA-214-3p 在周期性张应变诱导内皮祖细胞分化和增殖中的作用 (69)
李娜,汪文斌,阎靖,齐颖新,韩悦
- 可降解高纯镁骨钉在体降解分析 (77)
哈彤,江雄,张阔,高元明,王丽珍,樊瑜波
- 剪切流下 VWF-A1 介导的血小板钙响应 (83)
高绪强,刘晓玲,吴建华,方颖
- 一种基于加速度信号的步态稳定性研究 (91)
李晨迪,吴昱,戴尅戎,顾冬云
- 多模式镇痛下持续髂筋膜间隙阻滞与收肌管阻滞对老年人全膝关节
置换术后镇痛及早期康复的影响 (98)
余桂芳,蒋超

综述

- 跟腱运动功能与生物力学特征的研究进展 (103)
张希妮,王俊清,傅维杰
- 腔静脉滤器应用现状及生物力学研究进展 (110)
陈颖,邓小燕

信息

- 《医用生物力学》2016 年度“最高被引论文”结果公示 (58)

Supervised by

Ministry of Education of
People's Republic of China

Sponsored by

Shanghai Jiao Tong University

Organized by

Shanghai Ninth People's Hospital,
Shanghai Jiao Tong University
School of Medicine

Published by

Editorial Office of
Journal of Medical Biomechanics

Editorial Office

No. 639 Zhizaoju Rd.,
Shanghai 200011, China
Tel: + 86 21 53315397
Fax: + 86 21 63137020
E-mail: shengwulixue@163.com

Website:

<http://www.medbiomechanics.com>

<http://www.mechanobiology.cn>

Microblog:

<http://weibo.com/u/2040064195>

Advertising division: SHUI Wen

Editor-in-Chief

DAI Kerong

Executive Vice Editor-in-Chief

JIANG Zonglai

Associate Editors-in-Chief

CHEN Weiji CHENG Chengkung
FAN Yubo LONG Mian
QIN Ling

Editorial Director

YU Zhifeng

E-mail: zfyu@outlook.com

Executive Editor

XU Qi

E-mail: 1534340082@qq.com

English Editor

WU Xiaoyun

Edited by

Editorial Board of

Journal of Medical Biomechanics

Printed by

Shanxi Tongfang Knowledge Network
Printing Co., Ltd.

Overseas Distributor

China International Book
Trading Cooperation

China Standard Serial Numbering

ISSN 1004-7220

CN 31-1624/R

CODEN YSLIBU

Subscription

Yearly Subscription Rates: 150.00 RMB

Single Issue: 25.00 RMB

Advertising Management License Number

3100120050036

Copyright © 2019 by the Editorial

Board of Journal of Med8cal Biomechanics

Contents

Original Articles

- Effects of Neck Restrain on Traumatic Brain Injury of Child Occupant
During Airbag Inflation (1)
RUAN Shijie, WANG Haidong, LI Haiyan, LÜ Wenle, CUI Shihai, HE Lijuan
- Effects of Different Geometric Parameters on Flexibility of Z-Shaped Stent-Grafts (7)
ZHAO Yüwen, YAN Shiju, SI Yi, SONG Chengli
- Analysis and Optimization for Support Performance of Magnesium Alloy Stent (14)
ZHANG Honghui, FENG Haiquan, LI Zhiguo, HAN Qingsong
- Effects from Fiber Orientations of Bovine Pericardium on its Compression Performance (21)
WU Zebin, JIN Chang, WANG Lizhen, TANG Xiaolan, ZHONG Shengping, FAN Yubo
- OpenSim-Based Biomechanical Analysis of Lumbar Musculoskeletal
System under Forward Flexion (27)
ZHAN Xiaotong, CHEN Qiang, LI Zhiyong
- Effects of Facet Joint Arthroplasty at Different Positions under Lumbar
Percutaneous Endoscopy on Range of Motion of Vertebral Bodies (35)
YU Yang, FAN Xiaohong, GU Dangwei, WU Weidong
- Structure Design and Workspace Analysis of Robotic Arm for
Minimally Invasive Surgical Robot (40)
LI Liangmin, HE Chao, SONG Chengli, YUAN Shuai, ZHANG Zhiyang, CHEN Li
- Construction of Spine Biomechanical Test System Based on LabVIEW
and Six-Axis Robot Arm and Preliminary Reliability Study (47)
*YAN Yiguo, XIE Yong, WANG Cheng, YAO Nüzhaoh, XUE Jingbo, OUYANG Zhihua,
TAN Jinghua, HUAN Yifan, QI Weilin, WANG Wenjun*
- Effects of Rounding on Prediction of Flow Field and Hemolysis for the
FDA Benchmark Blood Pump (57)
WANG Chen, HSU Polin, WU Peng
- Effects of Fluid Shear Stress on PCP Signaling Pathway and Ciliogenesis
in Vascular Endothelial Cells (64)
LIU Yuehua, SHENG Yan, OU Gangwei, SHENG Xin
- The Role of MicroRNA-214-3p in Differentiation and Proliferation of Endothelial
Progenitor Cells in Response to Cyclic Stretch (69)
LI Na, WANG Wenbin, YAN Jing, QI Yingxin, HAN Yue
- Analysis on High Purity Magnesium Bone Screws *in vivo* (77)
HA Tong, JIANG Xiong, ZHANG Kuo, GAO Yuanming, WANG Lizhen, FAN Yubo
- VWF-A1-Mediated Calcium Response of Platelets under Shear Flow (83)
GAO Xuqiang, LIU Xiaoling, WU Jianhua, FANG Ying
- Assessment of Gait Stability using Acceleration Signal (91)
LI Chendi, WU Yu, DAI Kerong, GU Dongyun
- Influence of Continuous Fascia Iliaca Compartment Block and Adductor
Canal Block with Multimodal Analgesia on Postoperative Analgesia
and Early Rehabilitation after Elderly TKA Surgery (98)
YU Guifang, JIANG Chao
- ### Review Articles
- Research Advancements in Motor Function and Biomechanical
Characteristics of Achilles Tendon (103)
ZHANG Xini, WANG Junqing, FU Weijie
- Application Status and Biomechanical Research Progress of Vena Cava Filter (110)
CHEN Ying, DENG Xiaoyan
- ### News and Announcement
- (58)