

ISSN: 1937-6871 Volume 11, Number 4, April 2018



JBiSE



ISSN: 1937-6871



Editor-in-Chief
Prof. Hao Lin
www.scirp.org/journal/jbise

Journal Editorial Board

ISSN 1937-6871 (Print) ISSN 1937-688X (Online)

<http://www.scirp.org/journal/jbise>

Editors-in-Chief

Prof. Wei Chen

North China University of Science and Technology, China

Prof. Hao Lin

University of Electronic Science and Technology of China, China

Honorary Editor-in-Chief

Prof. Kuo-Chen Chou

Gordon Life Science Institute, San Diego, California, USA

Editorial Board

Prof. Christopher J. Branford-White

London Metropolitan University, UK

Prof. Thomas Casavant

University of Iowa, USA

Dr. Feng Cheng

University of South Florida, USA

Prof. Senshi Fukashiro

The University of Tokyo, Japan

Prof. Dayong Gao

University of Washington, USA

Dr. Ernesto Goldman

Ohio State University Wexner Medical Center, USA

Prof. Reba Goodman

Columbia University, USA

Prof. Ridha Hambli

Orleans University, France

Dr. Zeng-Jian Hu

Howard University, USA

Prof. Takeshi Kikuchi

Ritsumeikan University, Japan

Prof. Rob Krams

Imperial College London, UK

Dr. Lukasz Kurgan

University of Alberta, Canada

Prof. Juan Liu

Wuhan University, China

Dr. Girdhar K. Pandey

University of Delhi South Campus, India

Prof. Panagote (Panos) M. Pardalos

University of Florida, USA

Prof. Kota V. Ramana

University of Texas Medical Branch, USA

Dr. Yanmei Tie

Harvard Medical School, USA

Prof. Giuseppe Vairo

University of Rome "Tor Vergata", Italy

Prof. Zhizhou Zhang

Harbin Institute of Technology, China

Journal of Biomedical Science and Engineering (JBiSE)

Journal Information

SUBSCRIPTIONS

The *Journal of Biomedical Science and Engineering* (Online at Scientific Research Publishing, www.SciRP.org) is published monthly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: \$89 per issue.

To subscribe, please contact Journals Subscriptions Department, E-mail: sub@scirp.org

SERVICES

Advertisements

Advertisement Sales Department, E-mail: service@scirp.org

Reprints (minimum quantity 100 copies)

Reprints Co-ordinator, Scientific Research Publishing, Inc., USA.

E-mail: sub@scirp.org

COPYRIGHT

Copyright and reuse rights for the front matter of the journal:

Copyright © 2018 by Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY).

<http://creativecommons.org/licenses/by/4.0/>

Copyright for individual papers of the journal:

Copyright © 2018 by author(s) and Scientific Research Publishing Inc.

Reuse rights for individual papers:

Note: At SCIRP authors can choose between CC BY and CC BY-NC. Please consult each paper for its reuse rights.

Disclaimer of liability

Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assume no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained herein. We expressly disclaim any implied warranties of merchantability or fitness for a particular purpose. If expert assistance is required, the services of a competent professional person should be sought.

PRODUCTION INFORMATION

For manuscripts that have been accepted for publication, please contact:

E-mail: jbise@scirp.org

Table of Contents

Volume 11 Number 4

April 2018

**Biomechanical Effects of Implant Materials on Posterior Lumbar Interbody Fusion:
Comparison of Polyetheretherketone and Titanium Spacers Using Finite Element
Analysis and Considering Bone Density**

T. Sato, I. Yonezawa, M. Todo, H. Takano, K. Kaneko.....45

**Selective Serotonin Reuptake Inhibitors, Serotonin-Norepinephrine Reuptake Inhibitors
and Migraine: Should Cochrane Close the Door?**

D. Shevel.....60

Journal of Biomedical Science and Engineering (JBiSE)

<http://www.scirp.org/journal/jbise>

JBiSE, an international journal, publishes research and review articles in all important aspects of biology, medicine, engineering, and their intersection. Both experimental and theoretical papers are acceptable provided they report important findings, novel insights, or useful techniques in these areas. All manuscripts must be prepared in English, and are subject to a rigorous and fair peer-review process. Accepted papers will immediately appear online followed by printed in hard copy.

Subject Coverage

- Applied Biomaterials
- Bioelectrical and Neural Engineering
- Bioinformatics and Computational Biology
- Biomechanics and Biotransport
- Biomedical and Environmental Sciences
- Biomedical Chemistry
- Biomedical Chromatography
- Biomedical Devices, Sensors, Artificial Organs and Nano Technologies
- Biomedical Engineering
- Biomedical Imaging, Processing and Visualization
- Biomedical Informatics
- Biomedical Materials
- Biomedical Microdevices
- Biomedical Modeling
- Biomedical Sciences and Applications
- Biomedical Semantics
- Biomedical Signal Processing and Control
- Biomedicine and Biotechnology
- Biomedicine and Pharmacotherapy
- Clinical Engineering, Wearable and Real-Time Health Monitoring Systems
- Computer Methods and Programs in Biomedicine
- Genetic Engineering
- Genomics
- History and Philosophy of Biomedical Sciences
- Mechanical Behavior of Biomedical Materials
- Medical Biochemistry
- Medical Cell Biology
- Molecular and Genetic Medicine
- Nano-Bio-Analysis
- Negative Results in Biomedicine
- NMR in Biomedicine
- NMR/CT/ECG Technologies and Electromagnetic Field Simulation
- Nonlinear Biomedical Physics
- Numerical Methods in Biomedical Engineering
- Pharmaceutical and Biomedical Analysis
- Physiological Signal Processing
- Proteomics
- Software, Tools and Application in Medical Engineering
- Structure-Based Drug Design

Notes for Intending Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. Paper submission will be handled electronically through the website. All papers are refereed through a peer review process. For more details about the submissions, please access the website.

Website and E-Mail

<http://www.scirp.org/journal/jbise>

Email: jbise@scirp.org



Editors-in-Chief

Prof. Wei Chen

North China University of Science and Technology,
China

Prof. Hao Lin

University of Electronic Science and Technology of
China, China

Honorary Editor-in-Chief

Prof. Kuo-Chen Chou

Gordon Life Science Institute, San Diego, California, USA

Editorial Board

Prof. Christopher J. Branford-White

London Metropolitan University, UK

Prof. Thomas Casavant

University of Iowa, USA

Dr. Feng Cheng

University of South Florida, USA

Prof. Senshi Fukushima

The University of Tokyo, Japan

Prof. Dayong Gao

University of Washington, USA

Dr. Ernesto Goldman

Ohio State University Wexner Medical Center, USA

Prof. Reba Goodman

Columbia University, USA

Prof. Ridha Hambl

Orleans University, France

Dr. Zeng-Jian Hu

Howard University, USA

Prof. Takeshi Kikuchi

Ritsumeikan University, Japan

Prof. Rob Krams

Imperial College London, UK

Dr. Lukasz Kurgan

University of Alberta, Canada

Prof. Juan Liu

Wuhan University, China

Dr. Girdhar K. Pandey

University of Delhi South Campus, India

Prof. Panagote (Panos) M. Pardalos

University of Florida, USA

Prof. Kota V. Ramana

University of Texas Medical Branch, USA

Dr. Yanmei Tie

Harvard Medical School, USA

Prof. Giuseppe Vairo

University of Rome "Tor Vergata", Italy

Prof. Zhizhou Zhang

Harbin Institute of Technology, China

ISSN 1937-6871 (Print), 1937-688X (Online)

