



**Journal of Zhejiang  
University-SCIENCE B**  
(Biomedicine &  
Biotechnology)

**Editors-in-Chief**

Shu-min DUAN  
Zhi-hong LIU

**Administrated by**

Ministry of Education, China

**Sponsored by**

Zhejiang University

**Published by**

Zhejiang University Press

**Edited by**

Editorial Office of *Journal of  
Zhejiang University-SCIENCE*

**Printed by**

Hangzhou Shengyuan Printing  
Services Co., Ltd.

**Publication Date**

1st Week per Month

**Subscription**

Tel: +86-571-87952783;  
E-mail: yangsq@zju.edu.cn;  
Postal distributing code: 32-323

**Contact**

Zhejiang University Press,  
148 Tianmushan Road,  
Hangzhou 310028, China;  
Tel: +86-571-87952783;  
E-mail: jzus\_b@zju.edu.cn

**Price**

100 CNY/Issue

ISSN 1673-1581  
CN 33-1356/Q

# CONTENTS

## Special Column on Stomatology

Guest Editor-in-Chief: Qianming CHEN

Guest Editor: Hang ZHAO

### Reviews

- 943 Application of silk fibroin coatings for biomaterial surface modification:  
a silk road for biomedicine

Jinxing HU, Zhiwei JIANG, Jing ZHANG, Guoli YANG

- 957 Photobiomodulation therapy assisted orthodontic tooth movement:  
potential implications, challenges, and new perspectives

Jiawen YONG, Sabine GRÖGER, Julia VON BREMEN, Márcia MARTINS MARQUES,  
Andreas BRAUN, Xiaoyan CHEN, Sabine RUF, Qianming CHEN

### Research Article

- 974 Development and accuracy of artificial intelligence-generated prediction of  
facial changes in orthodontic treatment: a scoping review

Jiajun ZHU, Yuxin YANG, Hai Ming WONG

### Regular papers

#### Review

- 985 Advantages of contrast-enhanced ultrasound in the localization and  
diagnostics of sentinel lymph nodes in breast cancer

Qihui YANG, Yeqin FU, Jiakuan WANG, Hongjian YANG, Xiping ZHANG

#### Research Articles

- 998 Sortilin-induced lipid accumulation and atherogenesis are suppressed by  
HNF1b SUMOylation promoted by flavone of *Polygonatum odoratum*

Fang LIU, Shirui CHEN, Xinyue MING, Huijuan LI, Zhaoming ZENG, Yuncheng LV

- 1014 Effects of *Aeriscardovia aeriphila* on growth performance, antioxidant  
functions, immune responses, and gut microbiota in broiler chickens

Muhammad Zahid FAROOQ, Xinkai WANG, Xianghua YAN

**Correspondence**

1027 *Pseudomonas aeruginosa*-induced mitochondrial dysfunction inhibits proinflammatory cytokine secretion and enhances cytotoxicity in mouse macrophages in a reactive oxygen species (ROS)-dependent way

Haitao YANG, Yan WANG, Hui FAN, Feixue LIU, Huimiao FENG, Xueqing LI, Mingyi CHU, Enzhuang PAN, Daoyang TENG, Huizhen CHEN, Jingquan DONG

1037 Loss-of-function of zebrafish *cdt1* causes retarded body growth and underdeveloped gonads resembling human Meier-Gorlin syndrome

Yinan HE, Yong WANG, Yanqing ZHU, Li Jan LO

1047 Fucoidan sulfate from *Sargassum fusiforme* regulates the SARS-CoV-2 receptor AXL expression in human embryonic lung diploid fibroblast cells

Xuqiang ZHOU, Weihua JIN, Di JIANG, Yipeng XU, Sanying WANG, Xinna WU, Yunchuang CHANG, Huili SU, Tianjun ZHU, Xiaogang XU, Genxiang MAO

1053 HPCAL1 is a novel driver of autophagy-dependent ferroptosis

Liwen WANG, Li QIN, Huimei LIU, Lanfang LI

1057 Spatiotemporal coding of natural odors in the olfactory bulb

Mengxue LIU, Nan JIANG, Yingqian SHI, Ping WANG, Liuqing ZHUANG

1062 Spatial expression of the nonsense-mediated mRNA decay factors UPF3A and UPF3B among mouse tissues

Xin MA, Yan LI, Chengyan CHEN, Yanmin SHEN, Hua WANG, Tangliang LI



*Journal of Zhejiang  
University-SCIENCE B  
(Biomedicine &  
Biotechnology)*

**English Consultants** Greg JERKOVICH (Hungary), Elissa KRIEG (USA), Alan SEAL (NZ)

**Executive Editors** Qing YE, Hanfeng LIN