



**Journal of Zhejiang  
University-SCIENCE A  
(Applied Physics &  
Engineering)**

**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 A*

**Printed by**  
Hangzhou Shengyuan Printing  
Services Co., Ltd.

**Editors-in-Chief**  
Huayong YANG,  
Yunmin CHEN

**Publication Date**  
1st Week per Month

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

**Subscription**  
Zhejiang University Press;  
Tel: +86-571-87952783;  
E-mail: yangsq@zju.edu.cn;  
Postal distributing code: 32-322

**Price**  
100 CNY/Issue

**ISSN 1673-565X**  
**CN 33-1236/O4**

# CONTENTS

## Reviews

- 91      Advanced ocean wave energy harvesting: current progress and future trends  
Fang HE, Yibei LIU, Jiapeng PAN, Xinghong YE, Pengcheng JIAO
- 109     Biophysical neurons, energy, and synapse controllability: a review  
Jun MA

## Research Articles

- 130     Deformation pre-compensated optimization design of cam ring for low  
pulsation hydraulic motors  
Chao ZHANG, Hao TAN, Yu FANG, Xiaolong ZHANG, Yu YANG,  
Yiman DUAN, Min HAN, Shaojian CUI, Bing XU, Junhui ZHANG
- 146     Reliability measure approach considering mixture uncertainties under  
insufficient input data  
Zhenyu LIU, Yufeng LYU, Guodong SA, Jianrong TAN
- 162     Preparation and 3D printing of high-thermal-conductivity continuous  
mesophase-pitch-based carbon fiber/epoxy composites  
Haiguang ZHANG, Kunlong ZHAO, Qingxi HU, Jinhe WANG

*JZUS-A* was nominated for the Fourth “Chinese Government Award for Publishing” for Journals, and was ranked in the “Top 100 Chinese Sci-Tech Journals” in 2013, 2015, and 2017. It was supported by the “Project for Enhancing International Impact of China STM Journals” (2013–2015), and it is supported by the “China Sci-Tech Journal Excellence Action Plan” (2019–2023).

**English Consultants** Alan SEAL (NZ), Robert WELHAM (UK)

**Executive Editors** Shuqi YANG, Xinxin ZHANG