



# APPLIED MATHEMATICS AND MECHANICS

(ENGLISH EDITION)









Vol. 43 No. 11 Nov. 2022

应用数学和力学(英文版)



# APPLIED MATHEMATICS AND MECHANICS (ENGLISH EDITION) 克爾教子和力学(英文版)

## CONTENTS

Commenced in May 1980	Vol. 43 No. 11 Nov. 2022 (Monthly)	
Bandgap characteristics of the two-dimensional missing rib lattice structure		
A novel design scheme for acoustic cloaking of complex shape based on region partitioning and multi-origin coordinate transformation		
Pengfei LI, Fan YANG, Peng WANG, Jinfeng ZHAO, Zheng ZHONG		
Investigation on two-phase flow-induced vibrations of a piping structure		
with an elbow	(1657)	
Rational design of thermoelastic damping in microresonators		
with phase-lagging heat conduction law		
Yu FU, Li LI, Hongfang CHEN, Xuelin WANG, Ling LING, Yujin HU  Thermoelectric field for a coated hole of arbitrary shape in a nonlinearly		
coupled thermoelectric material	·	
Xu WANG, P. SCHIAVONE	(4352)	
Effective property of piezoelectric composites containing coated		
nano-elliptical fibers with interfacial debonding	(1701)	
Yu CHEN, Junhong GUO		
A novel physics-informed framework for reconstruction of structural defects		
Nonsmooth dynamic analysis of rigid-flexible interaction col	lision(1731)	
Ling TAO, Zhongpan LI, Yan LI, Huijian CHEN, Zhio	qiang FENG	
Multiplicity-induced optimal gains of an inverted pendulum system		
under a delayed proportional-derivative-acceleration feed	dback (1747)	
Zisong MEI, Zaihua WANG		
Numerical study of opposed zero-net-mass-flow jet-induced erythrocyte		
mechanoporation		
Xinyue LIU, Jinfang AI, Jun XIE, Guohui HU  Global weak solutions to a phase-field model for motion of grain boundaries(1777)		
Zixian ZHU, Boling GUO, Shaomei FANG		
Zixian Ziro, Bonng Goo, Shaomer Fang		

ISSN 0253-4827 CN 31-1650/O1

Domestic: ¥40 Overseas: \$178





ISSN 0253-4827



# APPLIED MATHEMATICS AND MECHANICS (ENGLISH EDITION) 克爾教子和力学(英文版)

## CONTENTS

Commenced in May 1980	Vol. 43 No. 11 Nov. 2022 (Monthly)	
Bandgap characteristics of the two-dimensional missing rib lattice structure		
A novel design scheme for acoustic cloaking of complex shape based on region partitioning and multi-origin coordinate transformation		
Pengfei LI, Fan YANG, Peng WANG, Jinfeng ZHAO, Zheng ZHONG		
Investigation on two-phase flow-induced vibrations of a piping structure		
with an elbow	(1657)	
Rational design of thermoelastic damping in microresonators		
with phase-lagging heat conduction law		
Yu FU, Li LI, Hongfang CHEN, Xuelin WANG, Ling LING, Yujin HU  Thermoelectric field for a coated hole of arbitrary shape in a nonlinearly		
coupled thermoelectric material	·	
Xu WANG, P. SCHIAVONE	(4352)	
Effective property of piezoelectric composites containing coated		
nano-elliptical fibers with interfacial debonding	(1701)	
Yu CHEN, Junhong GUO		
A novel physics-informed framework for reconstruction of structural defects		
Nonsmooth dynamic analysis of rigid-flexible interaction col	lision(1731)	
Ling TAO, Zhongpan LI, Yan LI, Huijian CHEN, Zhio	qiang FENG	
Multiplicity-induced optimal gains of an inverted pendulum system		
under a delayed proportional-derivative-acceleration feed	dback (1747)	
Zisong MEI, Zaihua WANG		
Numerical study of opposed zero-net-mass-flow jet-induced erythrocyte		
mechanoporation		
Xinyue LIU, Jinfang AI, Jun XIE, Guohui HU  Global weak solutions to a phase-field model for motion of grain boundaries(1777)		
Zixian ZHU, Boling GUO, Shaomei FANG		
Zixian Ziro, Bonng Goo, Shaomer Fang		

ISSN 0253-4827 CN 31-1650/O1

Domestic: ¥40 Overseas: \$178





ISSN 0253-4827

