



ISSN 0268-0717  
CN 31-1650/O1  
CODEN AMMEEQ

**AMM**

# APPLIED MATHEMATICS AND MECHANICS

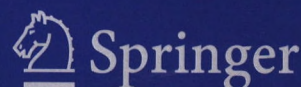
(English Edition)



**Vol. 41 No. 2 Feb. 2020**

应用数学和力学 (英文版)

**AMM** Editorial Office of AMM



万方数据

# CONTENTS

Commenced in May 1980

Vol. 41 No. 2 Feb. 2020 (Monthly)

- A micromechanical model based on hypersingular integro-differential equations for analyzing micro-crazed interfaces between dissimilar elastic materials ..... (193)  
X. WANG, W. T. ANG, H. FAN  
Theoretical analysis on elastic buckling of nanobeams based on stress-driven nonlocal integral model..... (207)  
Peng JIANG, Hai QING, Cunfa GAO  
Nonlinear primary resonance analysis of nanoshells including vibrational mode interactions based on the surface elasticity theory ..... (233)  
A. SARAFRAZ, S. SAHMANI, M. M. AGHDAM  
Nonlocal and strain gradient effects on nonlinear forced vibration of axially moving nanobeams under internal resonance conditions ..... (261)  
Jing WANG, Yilin ZHU, Bo ZHANG, Huoming SHEN, Juan LIU  
Merging phononic crystals and acoustic black holes..... (279)  
Xiaofei LYU, Qian DING, Tianzhi YANG  
Magnetic field effects on the nonlinear vibration of a rotor ..... (289)  
M. EFTEKHARI, A. DASHTI RAHMATABADI, A. MAZIDI  
Effects of thermo-magneto-electro nonlinearity characteristics on the stability of functionally graded piezoelectric beam ..... (313)  
Haohao BI, Bo WANG, Zichen DENG, Shuodao WANG  
A numerical investigation of CO<sub>2</sub> dilution on the thermochemical characteristics of a swirl stabilized diffusion flame ..... (327)  
S. VAKILIPOUR, Y. TOHIDI, J. AL-ZAILI, R. RIAZI  
Magnetic nanoparticle drug targeting to patient-specific atherosclerosis: effects of magnetic field intensity and configuration ..... (349)  
Xuelan ZHANG, Mingyao LUO, Peilai TAN, Liancun ZHENG, Chang SHU  
Non-Newtonian effect on natural convection flow over cylinder of elliptic cross section ..... (361)  
P. NAG, M. M. MOLLA, M. A. HOSSAIN

ISSN 0253-4827  
CN 31-1650/O1



ISSN 0253-4827  
9 770253 482205 02>

# CONTENTS

Commenced in May 1980

Vol. 41 No. 2 Feb. 2020 (Monthly)

- A micromechanical model based on hypersingular integro-differential equations for analyzing micro-crazed interfaces between dissimilar elastic materials ..... (193)  
X. WANG, W. T. ANG, H. FAN  
Theoretical analysis on elastic buckling of nanobeams based on stress-driven nonlocal integral model..... (207)  
Peng JIANG, Hai QING, Cunfa GAO  
Nonlinear primary resonance analysis of nanoshells including vibrational mode interactions based on the surface elasticity theory ..... (233)  
A. SARAFRAZ, S. SAHMANI, M. M. AGHDAM  
Nonlocal and strain gradient effects on nonlinear forced vibration of axially moving nanobeams under internal resonance conditions ..... (261)  
Jing WANG, Yilin ZHU, Bo ZHANG, Huoming SHEN, Juan LIU  
Merging phononic crystals and acoustic black holes..... (279)  
Xiaofei LYU, Qian DING, Tianzhi YANG  
Magnetic field effects on the nonlinear vibration of a rotor ..... (289)  
M. EFTEKHARI, A. DASHTI RAHMATABADI, A. MAZIDI  
Effects of thermo-magneto-electro nonlinearity characteristics on the stability of functionally graded piezoelectric beam ..... (313)  
Haohao BI, Bo WANG, Zichen DENG, Shuodao WANG  
A numerical investigation of CO<sub>2</sub> dilution on the thermochemical characteristics of a swirl stabilized diffusion flame ..... (327)  
S. VAKILIPOUR, Y. TOHIDI, J. AL-ZAILI, R. RIAZI  
Magnetic nanoparticle drug targeting to patient-specific atherosclerosis: effects of magnetic field intensity and configuration ..... (349)  
Xuelan ZHANG, Mingyao LUO, Peilai TAN, Liancun ZHENG, Chang SHU  
Non-Newtonian effect on natural convection flow over cylinder of elliptic cross section ..... (361)  
P. NAG, M. M. MOLLA, M. A. HOSSAIN

ISSN 0253-4827  
CN 31-1650/O1



ISSN 0253-4827  
9 770253 482205 02>