

ISSN 0253-4827 CN 31-1650/O1 CODEN AMMEEQ



## APPLIED MATHEMATICS AND MECHANICS

(English Edition)







Vol. 39 No. 11 Nov. 2018

应用数学和力学(英文版)





## **CONTENTS**

Vol. 39 No. 11 Nov. 2018 (Monthly)

Clean numerical simulation: a new strategy to obtain reliable
solutions of chaotic dynamic systems(1529)
Xiaoming LI, Shijun LIAO
A simultaneous space-time wavelet method for nonlinear initial boundary value problems $\dots$ (1547)
Jizeng WANG, Lei ZHANG, Youhe ZHOU
Two-way coupled analysis of lithium diffusion and diffusion induced finite
elastoplastic bending of bilayer electrodes in lithium-ion batteries(1567)
Jun YIN, Xianjun SHAO, Bo LU, Yicheng SONG, Junqian ZHANG
Identifying the temperature effect on the vibrations of functionally
graded cylindrical shells with porosities(1587)
Yanqing WANG, Chao YE, J. W. ZU
Effects of the Reynolds number on a scale-similarity model of Lagrangian
velocity correlations in isotropic turbulent flows
Zhaoyu SHI, Jincai CHEN, Guodong JIN
Investigation of generalized Fick's and Fourier's laws in the second-grade fluid flow
T. HAYAT, S. AHMAD, M. I. KHAN, A. ALSAEDI
Tubular limiting stream surface: "tornado" in three-dimensional vortical flow(1631)
Shuhai ZHANG
Response of a hypersonic blunt cone boundary layer to slow acoustic waves
with assessment of various routes of receptivity(1643)
Bingbing WAN, Jisheng LUO, Caihong SU
General decay of energy to a nonlinear viscoelastic two-dimensional beam(1661)
B. LEKDIM, A. KHEMMOUDJ
Optimization of a global seventh-order dissipative compact
finite-difference scheme by a genetic algorithm(1679)
Yu LIN, Yaming CHEN, Chuanfu XU, Xiaogang DENG

 $\frac{\rm ISSN~0253\text{-}4827}{\rm CN~31\text{-}1650/O1}$ 



ISSN 0253-4827 1 1 1> 9 770253 482182

## **CONTENTS**

Vol. 39 No. 11 Nov. 2018 (Monthly)

Clean numerical simulation: a new strategy to obtain reliable
solutions of chaotic dynamic systems(1529)
Xiaoming LI, Shijun LIAO
A simultaneous space-time wavelet method for nonlinear initial boundary value problems $\dots$ (1547)
Jizeng WANG, Lei ZHANG, Youhe ZHOU
Two-way coupled analysis of lithium diffusion and diffusion induced finite
elastoplastic bending of bilayer electrodes in lithium-ion batteries(1567)
Jun YIN, Xianjun SHAO, Bo LU, Yicheng SONG, Junqian ZHANG
Identifying the temperature effect on the vibrations of functionally
graded cylindrical shells with porosities(1587)
Yanqing WANG, Chao YE, J. W. ZU
Effects of the Reynolds number on a scale-similarity model of Lagrangian
velocity correlations in isotropic turbulent flows
Zhaoyu SHI, Jincai CHEN, Guodong JIN
Investigation of generalized Fick's and Fourier's laws in the second-grade fluid flow
T. HAYAT, S. AHMAD, M. I. KHAN, A. ALSAEDI
Tubular limiting stream surface: "tornado" in three-dimensional vortical flow(1631)
Shuhai ZHANG
Response of a hypersonic blunt cone boundary layer to slow acoustic waves
with assessment of various routes of receptivity(1643)
Bingbing WAN, Jisheng LUO, Caihong SU
General decay of energy to a nonlinear viscoelastic two-dimensional beam(1661)
B. LEKDIM, A. KHEMMOUDJ
Optimization of a global seventh-order dissipative compact
finite-difference scheme by a genetic algorithm(1679)
Yu LIN, Yaming CHEN, Chuanfu XU, Xiaogang DENG

 $\frac{\rm ISSN~0253\text{-}4827}{\rm CN~31\text{-}1650/O1}$ 



ISSN 0253-4827 1 1 1> 9 770253 482182