

QK1948894

# 振动工程学报

JOURNAL OF VIBRATION ENGINEERING

第32卷 第5期  
Vol.32 No.5



5

2019

ISSN 1004-4523

1.0>  
9 771004 452195

中国振动工程学会主办

# 振动工程学报

2019年10月

第32卷第5期

## 目 次

- 复合材料梁弹性参数连续分布场识别 ..... 吴邵庆, 范 刚, 李彦斌, 等(739)  
用于超低频振动能收集的压电弹簧摆结构设计与实现 ..... 吴义鹏, 周圣鹏, 裴进浩, 等(750)  
高效耗能阻尼器性能试验及理论研究 ..... 郭 彦, 杨巧荣, 何文福, 等(757)  
预紧式准零刚度隔冲器的隔冲性能研究 ..... 张春辉, 曾泽璇, 张 磊, 等(767)  
介电弹性体球壳瞬态振动的最优参数控制 ..... 杨 颖, 金肖玲, 王 永, 等(778)  
非线性能量阱在悬臂薄板振动抑制中的应用研究 ..... 刘 艮, 张 伟(786)  
平面无限板类声子晶体结构带隙计算方法研究 ..... 钱登辉, 史治宇(793)  
六自由度发动机悬置系统分析与优化设计 ..... 张慧杰, 郝慧荣, 郭志平(801)  
基于 B 样条插值法的柔性矩形薄板的动力学分析 ..... 王 勇, 章定国, 范纪华, 等(811)  
大跨越导线在局部激励下微风振动的格林函数解 ..... 陈晓娟, 王 孟, 王璋奇, 等(822)  
大跨度桥梁主梁节段模型非平稳抖振时域模拟与分析 ..... 陶天友, 王 浩(830)  
横向固定谐振荷载下曲线轨道参数对钢轨位移响应的影响研究 ..... 刘卫丰, 杜林林, 刘维宁(837)  
近断层脉冲型地震动作用下高层建筑组合隔震的减震性能研究 ..... 潘钦锋, 颜桂云, 吴应雄, 等(845)  
深度学习对抗网络生成单人跳跃荷载 ..... 熊杰程, 陈 鸿(856)  
分数阶 van der Pol 振子的超谐与亚谐联合共振 ..... 姜 源, 申永军, 温少芳(863)  
高速铁路地震预警阈值随机振动分析 ..... 李 炜, 张鸿儒, 于仲洋(874)  
不同土层条件下斜直交替群桩-土-结构地震响应特性研究 ..... 孔德森, 白翼飞, 陈永坡, 等(886)  
动载频率对土工格栅加筋土挡墙动力特性的影响 ..... 王家全, 徐良杰, 李洋溢, 等(898)  
气体动压径向轴承超薄气膜润滑动特性分析 ..... 吴 坚, 杨利花, 徐腾飞, 等(908)  
集成多策略改进 FCM 算法的旋转机械故障数据聚类分析研究 ..... 邓林峰, 张爱华, 赵荣珍(918)  
融合声场法向变化的双面声像故障诊断方法研究 ..... 侯俊剑, 马 军, 房占鹏, 等(927)

期刊基本参数:CN32-1349/TB \* 1987 \* b \* A4 \* 196 \* zh \* P \* ¥40.00 \* 1500 \* 21 \* 2019-10

# JOURNAL OF VIBRATION ENGINEERING

Oct. 2019

Vol. 32 No. 5

## CONTENTS

- Continuous distribution field identification of elastic parameters on a composite beam ..... WU Shao-qing, FAN Gang, LI Yan-bin, et al (739)
- Design and implementation of a piezoelectric spring pendulum structure applied in ultra-low frequency vibration energy harvesting ..... WU Yi-peng, ZHOU Sheng-peng, QIU Jin-hao, et al (750)
- Experimental and theoretical study of a high damping viscous damper ..... GUO Yan, YANG Qiao-rong, HE Wen-fu, et al (757)
- Research on the shock isolation performance of preload quasi-zero-stiffness isolator ..... ZHANG Chun-hui, ZENG Ze-cui, ZHANG Lei, et al (767)
- Optimal parametric control for transient vibration of dielectric elastomer spherical shell ..... YANG Ying, JIN Xiao-ling, WANG Yong, et al (778)
- Vibration suppression of cantilever thin plates using nonlinear energy sink ..... LIU Gen, ZHANG Wei (786)
- Using PWE/FE method to calculate band structures of plane-infinite plate-like phononic crystals ..... QIAN Deng-hui, SHI Zhi-yu (793)
- Analysis and optimization design of six degrees of freedom engine mount system ..... ZHANG Hui-jie, HAO Hui-rong, GUO Zhi-ping (801)
- B-spline interpolation method for the dynamic analysis of flexible rectangular plates ..... WANG Yong, ZHANG Ding-guo, FAN Ji-hua, et al (811)
- Green's function solution for aeolian vibration of long-span conductors under local excitation ..... CHEN Xiao-juan, WANG Meng, WANG Zhang-qi, et al (822)
- Time-domain simulation and analysis of nonstationary buffeting responses of girder section model of a long-span bridge ..... TAO Tian-you, WANG Hao (830)
- Study on influence of parameters on displacement of curved track subjected to lateral non-moving harmonic load ..... LIU Wei-feng, DU Lin-lin, LIU Wei-ning (837)
- Seismic absorption performance of composite isolation for high-rise buildings subjected to near-fault pulse ground motions ..... PAN Qin-feng, YAN Gui-yun, WU Ying-xiong, et al (845)
- Deep learning based generative adversarial networks for generating individual jumping load ..... XIONG Jie-cheng, CHEN Jun (856)
- Super-harmonic and sub-harmonic simultaneous resonance of fractional-order van der Pol oscillator ..... JIANG Yuan, SHEN Yong-jun, WEN Shao-fang (863)
- Stochastic vibration analysis of earthquake early warning threshold for high speed railway ..... LI Hao, ZHANG Hong-ru, YU Zhong-yang (874)
- Study on seismic response characteristics of oblique pile group-soil-structure with different soil conditions ..... KONG De-sen, BAI Yi-fei, CHEN Yong-po, et al (886)
- Influence of dynamic loading frequency on dynamic characteristics of geogrid reinforced soil retaining walls ..... WANG Jia-quan, XU Liang-jie, LI Yang-yi, et al (898)
- Analysis on dynamic characteristics of the ultra-thin gas film lubrication in cylindrical gas journal bearing ..... WU Yao, YANG Li-hua, XU Teng-fei, et al (908)
- Clustering analysis of rotating machine fault data based on improved fuzzy C-means algorithm with integrated multi-strategy ..... DENG Lin-feng, ZHANG Ai-hua, ZHAO Rong-zhen (918)
- Acoustic fault diagnosis technology based on dual audio-visual images ..... HOU Jun-jian, MA Jun, FANG Zhan-peng, et al (927)

中国科技论文统计用期刊  
中国科技核心期刊  
美国 Ei Compendex 收录用期刊  
美国 Applied Mechanics Review 收录用期刊  
美国 The Shock and Vibration Digest 收录用期刊  
美国 International Aerospace Abstracts 收录用期刊  
俄罗斯《文摘杂志》收录用期刊

## 振动工程学报

ZHENDONG GONGCHENG XUEBAO  
(双月刊)

主编：苏义脑 1987 年 11 月创刊  
第 32 卷第 5 期 2019 年 10 月出版

## JOURNAL OF VIBRATION ENGINEERING

(Bimonthly)

Editor-in-chief: Su Yinao  
First Issue: November 1987  
Vol. 32 No. 5 Oct. 2019

主 管：中国科学技术协会  
主 办：中国振动工程学会  
(南京市御道街 29 号，210016)  
编辑出版：《振动工程学报》编辑部  
印 刷：南京航空航天大学印刷厂  
国内发行：江苏省报刊发行局  
  
国外发行：中国国际图书贸易总公司  
(北京 399 信箱)

Supervisor: China Association for Science and Technology  
Sponsor: Chinese Society for Vibration Engineering  
Editor and Publication: Editorial Board of Journal of Vibration Engineering  
Printing: NUAA Printing House  
Distributors:  
Domestic: Jiangsu Bureau for Distribution of Newspapers and Journals  
Abroad: China International Book Trading Corp.  
(P. O. Box 399 Beijing, China)

编辑部电话：(025)84895885 网址：<http://zdxb.nuaa.edu.cn> E-mail: zdxb @ nuaa.edu.cn

刊号：ISSN1004—4523 国内邮发代号：28—249 国外发行代号：4819Q 定价：40.00 元  
CN32—1349/TB