

# CONTENTS

- Application of acoustic black hole ring in missile interstage vibration reduction and shock isolation  
 ..... WANG Xiaodong, ZHANG Haochun, ZHAO Guiqi, JI Hongli (1)
- Dynamic response of frame structure building under impact of debris flow with large stones  
 ..... LIU Huan, FAN Xiaoyi, JIANG Yuanjun, LIU Haonan, HAN Peifeng, TIAN Shujun, LIU Junxin (9)
- Bridge weighing-in-motion algorithm theory based on Bayesian posterior estimation and tests  
 ..... ZHANG Longwei, YUAN Luqi, CHEN Ning, YUAN Shuaihua, ZHANG Long (20)
- Dynamic characteristics analysis of a wide temperature range ceramic bearing rotor system considering deflection  
 ..... BAI Xiaotian, YANG Wuzhe, WANG Zinan, ZHENG Hao (28)
- Vibration characteristics analysis of spinning beam structure with elastic boundary constraints, unbalanced concentrated mass and axial load  
 ..... HE Feifan, DU Jingtao, ZHAO Yuhao, LIU Yang (36)
- Vulnerability evaluation of concrete obstacle under action of shaped charge penetrators  
 ..... MA Shixin, XIE Xingbo, LI Xiangdong, ZHONG Mingshou, JI Yangziyi (46)
- Seismic failure mode of shallow buried subway station crossing ground fissures based on static pushover analysis  
 ..... XIONG Zhongming, CHEN Zhi, CHEN Xuan, ZHENG Kun, A Xin (54)
- Analytical algorithm for overall stability of multi-layer shear-type braced steel frame  
 ..... LAN Shuwei, ZHOU Donghua, CHEN Xu, MAO Dejun (64)
- Bond-slip relation between rebars and ECC under high strain rate load  
 ..... CUI Shuangshuang, MENG Yao, CHEN Weihong, SUN Hao (71)
- Damping-controlled type FEI characteristics of tube bundle structure  
 ..... FENG Zhipeng, ZANG Fenggang, LIU Shuai, HUANG Xuan, QI Huanhuan (83)
- Allocation optimization of actuators in cabin shell active vibration isolation system  
 ..... WU Di, XIE Xiling, ZHANG Zhiyi (91)
- Dynamic characteristics of bubbles near damaged boundary based on CEL method  
 ..... ZHANG Xiao, CUI Jie, LI Mingyuan, QIN Zikai (99)
- Identification of damage degree of welded joints in bridge steel trusses based on deep learning of time-frequency maps of AE signals  
 ..... LI Dan, SHEN Peng, HE Wenyu, XIANG Shulin (107)
- Vibration suppression of magnetic levitation molecular pump rotor  
 ..... YAO Runhui, ZHOU Jin, DING Song, ZHANG Yue, XU Yuanping (116)
- Structural damage identification based on ARMAV model and J-divergence  
 ..... LI Meng, GUO Huiyong (123)
- Longitudinal nonlinear seismic response of shield tunnel passing through liquefied flow slip zone  
 ..... LI Xiaoxiong, ZHUANG Haiyang, WANG Wei, ZHAO Kai, CHEN Guoxing (131)
- Finite element analysis of DC ice-melting thermal characteristics and deicing dynamic response in a 3-phase conductor interphase interval system  
 ..... ZHU He, LIAO Hanliang, ZHANG Renqi, LIU Cheng (138)
- Transfer prediction of RUL of rolling bearing under variable operating conditions based on TCN and residual self-attention  
 ..... PAN Xuejiao, DONG Shaojiang, ZHU Peng, ZHOU Cunfang, SONG Kai (145)
- Evaluation method for aseismic effect of using fasteners to fix museum collections under horizontal seismic action  
 ..... ZOU Xiaoguang, YANG Weiguo, WANG Meng, LIU Pei, GE Jiaqi (153)

---

TMD Vibration reduction analysis and optimal layout for submerged floating tunnel tube under moving load .....	YANG Ying, JIN Licheng, XIANG Yiqiang, HE Yuliang (165)
Effects of nonlinear dynamic characteristic coefficients on motion characteristics of a steam turbine rotor-bearing-seal system .....	CAO Lihua, XUE Chuan, SI Heyong, GAO Lulu, LI Xiang, HAO Decheng (172)
Noise suppression method of explosion vibration signals based on CEEMD-MPE-IMPROVED WTD .....	TONG Xiaoling, ZENG Feiyu, JIANG Ke, LIANG Lei (184)
Fatigue crack propagation characteristics of steel bridge deck roof-longitudinal rib weld joint under random wheel load .....	LU Naiwei, LIU Jing, WANG Kai, WANG Honghao (193)
Meso-mechanical analysis for damping characteristics of glass/carbon fiber hybrid composite beam in hygrothermal environment .....	SHAO Shiru, WANG Yang, SUN Shuangshuang (202)
Effects of lattice configuration on anti-bird impact performance of sandwich structures .....	YAN Jun, ZHANG Chenguang, SAI Yinfu, WANG Fuhao, HUO Sixu, CHAI Xianghai, YAN Kun (212)
Modeling and output performance analysis of maglev vibration energy harvester system based on magnetic liquid .....	ZHANG Xianwen, LI Guozheng, WANG Weijie, SU Shuqiang (218)
Analysis of vibration fatigue failure of primary coil springs within railway vehicles .....	SUN Wenjing, WANG Jiahao, THOMPSON David, WANG Tengfei, ZHOU Jinsong (230)
Nonlinear energy sink for vibration reduction of a beam on finite depth medium based on Winkler foundation .....	LIU Zongtong, MA Jianjun, GUO Ying (237)
Vibration transmission control of vibration source in a cylindrical shell based on piezoelectric actuator .....	HE Peitao, WANG Shuangli, GENG Xiaoming, XIE Xiling, ZHANG Zhiyi (246)
BEM-FEM coupled analysis of near-field active vibration isolation of SDCM piles on saturated foundation .....	SHI Gang, GAO Xinjun, ZHANG Hao (252)
Effects of vibration markings on deflection DLAs of continuous girder bridge .....	ZHANG Heng, ZHOU Yongjun, WANG Yelu, FAN Kaixiang, ZHAO Yu, XUE Yuxin (265)
Solving and stability analysis of periodic response of nonlinear system based on time finite element method .....	ZHENG Yongjin, WANG Li, LIU Zuoqiu (276)
Effects of dynamic load direction of strong tamping on stability of loess slope .....	WU Bingquan, NI Wankui, TUO Wenxin, REN Siyuan, CHEN Junting (283)
<b>Aeronautics and Astronautics</b>	
A method for predicting aircraft noise and vibration environment based on acoustic and vibration transmission .....	LI Bingwei, ZHU Hongmin, LIU Shixiu, CHEN Gang (290)
Vertical water-entry impact characteristics of typical fuselage section of civil aircraft .....	MOU Haolei, GAO Fei, WANG Zilong, XIAO Pei, FENG Zhenyu, XIE Jiang (297)
Numerical simulation of aircraft landing and dynamic load characteristics of airport pavement .....	MENG Xianfeng, LUO Meng, JIANG Hui, DAI Peng, GAO Xuekui, ZHAO Xingyan, JI Jinwen (308)

---

# JOURNAL OF VIBRATION AND SHOCK

Vol. 43 No. 1 JANUARY 2024

Editorial Office: 1954 Huashan Rd. Shanghai, 200030, China

Issuer Abroad: China National Publishing Industry Trading Corporation

(Post-Office Box No. 728, Beijing, China)

---