Extrica کے Journals Engineering

ISSN ONLINE 2538-8460 ISSN PRINT 1392-8716

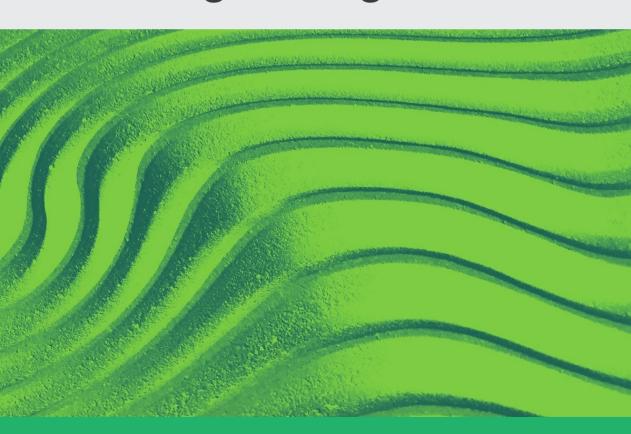
> August 2025 VOLUME 27 ISSUE 5 PAGES 757-940

Mechanical Engineering

Materials Science and Technology

Journal of Vibroengineering





Editor in Chief

Minvydas Ragulskis Kaunas University of Technology, (Lithuania) minvydas.ragulskis@ktu.lt

Editorial Board

Hamid Reza Karimi

 Hojjat Adeli
 The Ohio State University, (United States)
 adeli.1@osu.edu

 Kouamana Bousson
 University of Beira Interior, (Portugal)
 bousson@ubi.pt

 Jinde Cao
 Southeast University, (China)
 jdcao@seu.edu.cn

 Maosen Cao
 Hohai University, (China)
 cmszhy@hhu.edu.cn

 Marco Civera
 Politecnico di Torino, (Italy)
 marco.civera@polito.it

 Joze Duhovnik
 University of Ljubljana, (Slovenia)
 joze.duhovnik@lecad.uni-lj.si

 Sezgin Ersoy
 Marmara University, (Turkey)
 sersoy@marmara.edu.tr

 Ke Feng
 University of British Columbia, (Canada)
 ke.feng@outlook.com.au

 Rafael Figueroa
 Instituto Tecnológico de Sonora, (Mexico)
 rafael.figueroad@itson.edu.mx

Rafael FigueroaInstituto Tecnológico de Sonora, (Mexico)rafael.figueroad@itson.eePiotr FolegaSilesian University of Technology, (Poland)piotr.folega@polsl.plWen-Hsiang HsiehNational Formosa University, (Taiwan)allen@nfu.edu.tw

David Hui University of New Orleans, (United States) dhui@uno.edu

Vassilios Kappatos Center for Research and Technology Hellas, (Greece) vkappatos@certh.gr

Politecnico di Milano, (Italy)

Vitaliy Korendiy Lviv Polytechnic National University, (Ukraine) vitaliy.nulp@gmail.com

Chen Lu Beihang University, (China) luchen@buaa.edu.cn

Abdollah MalekjafarianUniversity College Dublin, (Ireland)abdollah.malekjafarian@ucd.iePhuoc Trong NguyenHo Chi City Open University, (Vietnam)phuoc.nguyen@ou.edu.vnNicola NisticòSapienza University of Rome, (Italy)nicola.nistico@uniroma1.itEhsan NoroozinejadThe University of British Columbia (UBC), (Canada)ehsan.noroozinejad@gmail.com

hamidreza.karimi@polimi.it

Vytautas Ostaševičius Kaunas University of Technology, (Lithuania) vytautas.ostasevicius@ktu.lt

Lei Qiu Nanjing University of Aeronautics and Astronautics, lei.qiu@nuaa.edu.cn

(China)

Subhash Rakheja Concordia University, (Canada) subhash.rakheja@concordia.ca
Vinayak Ranjan University of Pittsburgh at Bradford PA, (United States) vinayak.ranjan@bennett.edu.in

Villayar Naijaii Oliveisity Oliveisity Oliveisity Oliveisity Villayar. Iaijaii @berii ett. ett...

Pouyan Roodgar Saffari Chulalongkorn University, (Thailand) rpouyan@engr.tu.ac.th

G. Eduardo Sandoval-Romero The National Autonomous University of Mexico, eduardo.sandoval@ccadet.unam.mx (Mexico)

•

Miguel A. F. Sanjuan University Rey Juan Carlos, (Spain) miguel.sanjuan@urjc.es

Gangbing Song University of Houston, (United States) gsong@uh.edu

Vincentas Veikutis Lithuanian University of Health Sciences, (Lithuania) vincentas.veikutis@lsmuni.lt

Jānis Vība Riga Technical University, (Latvia) janis.viba@rtu.lv

inga recrimical criversity, (Latvia)

Xiao-Jun Yang China University of Mining and Technology, (China) xjyang@cumt.edu.cn

JVE Journal of Vibroengineering

Aims and Scope

Journal publishes research papers presenting the latest results in the general area of vibration engineering. Mechanical vibrations and applications, fault diagnosis based on vibration signal analysis, seismic engineering, acoustics, and noise control are typical examples of the core areas of the Journal. The Journal is devoted to the publication of original research papers of a high technical standard representing theoretical and experimental aspects of engineering problems related to vibrations.

All published papers are peer reviewed and crosschecked by plagiarism detection tools.

More information is available online https://www.extrica.com/journal/jve

The journal material is referred:

Clarivate Analytics:

Emerging Sources Citation Index (ESCI) Journal Citation Reports / Science Edition

Scopus: ELSEVIER Bibliographic Database

EI Compendex: ELSEVIER Bibliographic Database

EBSCO: Academic Search Complete

Computers & Applied Sciences Complete Central & Eastern European Academic Source

Current Abstracts

Shock & Vibration Digest

TOC Premier

Gale Cengage Learning:

Academic OneFile Custom Periodical

Science in Context

ResearchGate: https://www.researchgate.net

Scilit: https://www.scilit.net

Dimensions: https://www.dimensions.ai

Semantic Scholar: https://www.semanticscholar.org

Google Scholar: https://scholar.google.com

JGate: https://jgateplus.com CORE: https://core.ac.uk

BASE (Bielefeld Academic Search Engine): https://www.base-search.net Ulrich's Periodicals Directory: https://ulrichsweb.serialssolutions.com ERIH PLUS: https://kanalregister.hkdir.no/publiseringskanaler/erihplus

CNKI Scholar: http://eng.scholar.cnki.net

cnpLINKer (CNPIEC): http://cnplinker.cnpeak.com **WanFang Data:** https://www.wanfangdata.com.cn

TDNet: https://www.tdnet.io

JournalTOCs: https://www.journaltocs.ac.uk

WorldCat Discovery Services: https://www.oclc.org/en/worldcat-discovery.html

Crossref: https://search.crossref.org

Content is archived in Martynas Mazvydas National Library of Lithuania

Internet: https://www.extrica.com E-mail: publish@extrica.com

Publisher: Extrica

JVE Journal of Vibroengineering

AUGUST 2025. VOLUME 27, ISSUE 5, PAGES (757-940), ISSN PRINT 1392-8716, ISSN ONLINE 2538-8460

Contents

MECHANICAL VIBRATIONS AND APPLICATIONS

ANALYSIS OF THE NATURAL CHARACTERISTICS OF FIBER-REINFORCED CANTILEVER 757 BEAMS USING 8-NODE SOLID ELEMENTS HUADONG LI, JINGJUN LIU 771 IMPROVED CEEMD-BASED CORRECTION METHOD FOR LOW-FREQUENCY SHOCK RESPONSE SPECTRUM IN LARGE DUAL-WAVE SHOCK TESTER DEVICES PENG WANG, LU ZHENG, MING YAN COUPLING DYNAMICS MODELING AND VIBRATION CHARACTERISTICS ANALYSIS OF 789 TBM MAIN DRIVE SYSTEM UNDER COMPLEX TUNNELLING CONDITIONS ZHONGYUE LI, YONGJIAN JIANG, WENJUN XU, LIJIAN TANG, KAI FU, SHIJU E, HANYANG WU DYNAMIC PERFORMANCE ANALYSIS OF 1000 MW DOUBLE REHEAT STEAM TURBINE 807 FOUNDATION ZHAOWEI SHEN, XIAOHONG SUN, ZHIPENG CHENG FAULT DIAGNOSIS BASED ON VIBRATION SIGNAL ANALYSIS LSGAN-Transformer life prediction method for rolling bearings under 820 FEW SAMPLES FANNIAN MENG, KAIWEN DENG, LIUJIE WANG, JIANHUA CUI, YAHONG QIAN, WENLIAO DU, XIAOYUN GONG, LIANGWEN WANG VIBRATION CONTROL, GENERATION AND HARVESTING 839 STUDY ON THE VARIATION MECHANISM OF NON-LINEAR STIFFNESS OF RUBBER

TING DENG, XUNYAN YIN, YUQI YAN, HAILUN ZHOU, RAN ZHANG

O-RING

CONTENTS

SEISMIC ENGINEERING AND APPLICATIONS

ENERGY ANALYSIS OF LIVING STUMPS SLOPE BASED ON HILBERT-HUANG TRANSFORM AND MARGINAL SPECTRUM HUI YANG, JUN YIN, XUELIANG JIANG, HANG LIN, BO SHEN, HAODONG WANG	857
MODAL ANALYSIS AND APPLICATIONS	
VIBRATION AND NOISE PERFORMANCE ANALYSIS AND OPTIMAL DESIGN OF V-ROTOR IN PERMANENT MAGNET SYNCHRONOUS MOTOR: A NEW STRATEGY FOR HIGH EFFICIENCY AND LOW NOISE DAWEI GU, DASHUAI SHI, ZHENGQING LIU, ZHUO XU, BAISONG PAN, TIE GENG, BANGCHUN WEN	882
VIBRATION IN TRANSPORTATION ENGINEERING	
RESEARCH ON OPTIMIZATION OF INTELLIGENT DRIVING YINGJIE LIU, DAWEI CUI, CHENGLIAN XIE	899
STUDY ON THE EFFECT OF SUSPENSION SYSTEM FRICTION OF HEAVY-HAUL FREIGHT VEHICLES ON THE OPERATION PERFORMANCE YUFENG CAO, WEIHUA ZHANG, YAYUN QI	911
EXPERIMENTAL ANALYSIS OF RUNNING WHEEL FOR A STRADDLE MONORAIL VEHICLE ZENGCHUANG ZHAO, PINGBO WU, LIHUI REN	925

SHORT DESCRIPTION ABOUT THIS CATEGORY

The major objective of vibration engineering is to protect people, instruments, machines, and structures from the effect of harmful vibration. Mechanical vibrations and applications, fault diagnosis based on vibration signal analysis, seismic engineering, acoustics, and noise control are typical examples of the core areas of the Journal. The aim of the Journal is to present theoretical and experimental aspects of engineering problems related to vibrations.

