

Journal of Vibration Testing and System Dynamics

Editors

Pawel Olejnik

Department of Automation, Biomechanics and Mechatronics
Lodz University of Technology
1/15 Stefanowski Str., BLDG A22
90-924 Lodz, Poland
Email: pawel.olejnik@p.lodz.pl

C. Steve Suh

Department of Mechanical Engineering
Texas A&M University
College Station, TX 77843-3123, USA
Email: ssuh@tamu.edu

Xian-Guo Tuo

School of Automation & Information Engineering
Sichuan University of Science and Engineering
Zigong, Sichuan, 643000, China
Email: tuoxianguo@suse.edu.cn

Associate Editors

Farbod Alijani

Department of Precision and
Microsystems Engineering
Delft University of Technology
The Netherlands
Email: F.Alijani@tudelft.nl

Mohamed Belhaq

Laboratory of Mechanics
University Hassan II-Casablanca
Casablanca, Morocco
Email: mbelhaq@yahoo.fr

Valentina E. Balas

Automatics and Applied Software
Department
Aurel Vlaicu University of Arad
Arad, Romania
Email: balas@drbalas.ro

Biagio Carboni

Department of Structural and
Geotechnical Engineering
Sapienza University of Rome, Italy
Email: biagio.carboni@uniroma1.it

Francesco Clementi

Department of Civil and Buildings
Engineering and Architecture
Polytechnic University of Marche
Ancona, Italy
Email: francesco.clementi@univpm.it

Frank Z. Feng

Department of Mechanical and
Aerospace Engineering
University of Missouri
Columbia, MO 65211, USA
Email: FengF@missouri.edu

Vladimir N. Grebenev

Institute of Computational Technologies
Siberian Division of Russian Academy of
Sciences (SDRAS)
630090 Akademgorodok, Novosibirsk,
Russia
Email: vngrebenev@gmail.com

Yu Guo

McCoy School of Engineering
Midwestern University
3410 Taft Boulevard
Wichita Falls, TX 76310, USA
Email: yu.guo@mwsu.edu

Hamid R. Hamidzadeh

Department of Mechanical and
Manufacturing Engineering
Tennessee State University
Nashville, TN 37209-1561, USA
Email: hhamidzadeh@tnstate.edu

Jianzhe Huang

School of Aeronautics and Astronautics
Shanghai Jiao Tong University
Shanghai, China 200240
Email: hjianzhe@sjtu.edu.cn

Nizar Jaber

Department of Mechanical Engineering
College of Engineering Sciences and
Applied Engineering
King Fahd University of Petroleum and
Minerals, Saudi Arabia
Email: nizar.jaber@kfupm.edu.sa

Hossein Jafari

Department of Mathematical Science
University of South Africa
Corner of Christiaan de Wet Road &
Pioneer Avenue, Florida, 1709
South Africa
Email: jafarh@unisa.ac.za

Krzysztof Kecik

Department of Applied Mechanics
Lublin University of Technology
Nadbystrzycka, Lublin, Poland
Email: k.kecik@pollub.pl

Zhong Luo

School of Mechanical Engineering &
Automation
Northeastern University, Liaoning, China
Email: zhluo@mail.neu.edu.cn

Diego Orlando

Department of Mechanics and Energy
University of State of Rio de Janeiro,
Resende, Brazil
Email: dgorlando@gmail.com

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Pawel Olejnik

C. Steve Suh

Xian-Guo Tuo



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Journal of Vibration Testing and System Dynamics is an interdisciplinary journal as a platform for facilitating the synergy of *dynamics, experimentation, design, and education*. The journal publishes high-quality, original articles that explore the theory, modelling, and application of dynamical systems and data-driven dynamics for high-impact engineering solutions. Manuscripts exploring data science, machine learning, and artificial intelligence to the design and control of complex dynamical systems including cell and neuro networks are solicited. Articles on data mining, deep learning and big data applicable to physical sciences and large-scale dynamic systems are equally encouraged. Progress made in the following topics, but not limited to, are of interest to the journal:

Data-Driven Dynamics and Control

- Artificial intelligence and machine learning
- Data and signal processing
- System identification
- Dynamical sensing and measurement
- Discrete dynamical systems

Dynamics of Continuum

- Flow induced vibrations
- Combustion dynamics
- Sensing, measurement and devices
- Thermoacoustic vibrations

Complex Networks and Systems

- Network dynamics and control
- Synchronization and collective behavior
- Networks of networks
- Consensus tracking

Design for Dynamics

- Dynamical failures and fatigues
- Structural dynamics and reliability
- Vibration testing and validation
- Multi-body dynamics
- Wave propagation and acoustics

Biological and Biomedical Physics

- Biological dynamics and biophysics
- Dynamics of bio-systems
- Neuro and brain dynamics
- Biomechanical systems and devices

Chemical Dynamics

- Dynamic chemical networks
- Mechanism of chemical reaction
- Molecular dynamics
- Process modelling and design

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Laura Ruzziconi

Dipartimento di Architettura
Costruzioni e Strutture
Università Politecnica delle Marche
Ancona, Italy
Email: laura.ruzziconi@uniecampus.it

Dimitry Volchenkov

Department of Mathematics and Statistics
Texas Tech University
1108 Memorial Circle
Lubbock, TX 79409, USA
Email: dr.volchenk@gmail.com

Yeyin Xu

School of Aerospace Engineering
Xi'an Jiaotong University
Xi'an, 710048, China
Email: xuyeyin@xjtu.edu.cn

Editorial Board

Nyesunthi Apiwattanalungarn

Department of Mechanical Engineering
Faculty of Engineering
Kasetsart University
JatuJak Bangkok 10900, Thailand
Email: fengpra@ku.ac.th

Liming Dai

Industrial Systems Engineering
University of Regina
Regina, Saskatchewan
Canada, S4S 0A2
Email: Liming.Dai@uregina.ca

Xilin Fu

School of Mathematical Science
Shandong Normal University
Jinan 250014, China
Email: xilinfu@gmail.com

Marine Mikilyan

Institute of Mechanics
National Academy of Sciences of Armenia
24, Marshall Baghramian Ave. 0019
Yerevan, Republic of Armenia
Email: mikilyan@sci.am

Weinian Zhang

School of Mathematics
Sichuan University
Chengdu, Sichuan, P.R. China
Email: wnzhang@scu.edu.cn

Alexander P. Seyranian

Institute of Mechanics
Moscow State Lomonosov University,
Michurinsky pr. 1, 119192
Moscow, Russia
Email: aseyranian@mail.ru

Guo-Cheng Wu

Data Recovery Key Laboratory of
Sichuan Province
Neijiang Normal University, Neijiang
641100, China
Email: wuguocheng@gmail.com

Daniil Yurchenko

University of Southampton
Southampton, United Kingdom
Email: d.yurchenko@soton.ac.uk

Jose Manoel Balthazar

School of Engineering
Universidade Estadual Paulista
Bauru Campus, Bauru, Brazil
Email: jmbaltha@gmail.com

Mark Edelman

Yeshiva University
245 Lexington Avenue
New York, NY 10016, USA
Email: edelman@cims.nyu.edu

Lakshmi Narayan Guin

Department of Mathematics
Siksha Bhavana, Visva-Bharati,
Santiniketan-731235
West Bengal, India
Email: guin_ln@yahoo.com

Hiroaki Watanabe

Department of Mechanical Engineering
Kyushu University
Nishi-ku, Fukuoka 819-0395, Japan
Email: whiroaki@mech.kyushu-u.ac.jp

Xu Sun

College of Mechanical and
Transportation Engineering
China University of Petroleum-Beijing
Beijing, 102249, China
Email: xsun@cup.edu.cn

Xingzhong Xiong

School of Automation & Information
Engineering
Sichuan University of Science and
Engineering
Zigong, Sichuan, 643000, China
Email: xzxiong@suse.edu.cn

Ambrus Miklós Zelei

Budapest University of Technology and
Economics: Applied Mechanics
Muegyetem rkp 5.
Budapest, 1111, HUNGARY
Email: zelei.ambrus@gmail.com

Giuseppe Catania

Department of Mechanics
University of Bologna
viale Risorgimento, 2, I-40136 Bologna,
Italy
Email: giuseppe.catania@unibo.it

Peihua Feng

School of Aerospace Engineering
Xi'an Jiaotong University
Xi'an, 710048, China
Email: fphd2017@xjtu.edu.cn

Yanfei Jin

Department of Mechanics
School of Aerospace Engineering
Beijing Institute of Technology
Beijing, China, 100086
Email: jinyf@bit.edu.cn

Jianming Yang

Faculty of Engineering and Applied
Science
Memorial University of Newfoundland
St. John's, Newfoundland, Canada
Email: jyang@mun.ca