

ISSN 1027-5851

International Journal of Acoustics and Vibration

March 2020

Volume 25, Number 1

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2020) by International Institute of Acoustics & Vibration
All rights reserved.

Printed with permission by Curran Associates, Inc. (2020)

For permission requests, please contact International Institute of Acoustics & Vibration
at the address below.

International Institute of Acoustics & Vibration
c/o Dr. Malcolm J. Crocker
1418 Wiggins Hall
Auburn, AL 36849, USA

Phone: (334) 844-3248

Fax: (334) 844-3306

www.iiav.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

EDITORIAL OFFICE

EDITOR-IN-CHIEF

Jorge P. Arenas

EDITOR EMERITUS

Malcolm J. Crocker

MANAGING EDITOR

Marek Pawelczyk

ASSOCIATE EDITORS

Dariusz Bismor

Zhuang Li

ASSISTANT EDITORS

Teresa Glowka

Karol Jablonski

Sara Bysko

Stanislaw Wrona

EDITORIAL ASSISTANT

Morgan Shaffer

Linwood Stevens

Elizabeth Robb

April Garrett

EDITORIAL BOARD

Jonathan D. Blotter

Provo, USA

Leonid Gelman

Cranfield, UK

Samir Gerges

Florianópolis, Brazil

Colin H. Hansen

Adelaide, Australia

Hugh Hunt

Cambridge, England

Dan Marghitu

Auburn, USA

Manohar Lal Munjal

Bangalore, India

Kazuhide Ohta

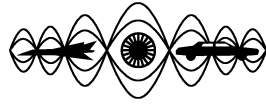
Fukuoka, Japan

Goran Pavic

Villeurbanne, France

Subhash Sinha

Auburn, USA



International Journal of Acoustics and Vibration

A quarterly publication of the International Institute of Acoustics and Vibration

Volume 25, Number 1, March 2020

EDITORIAL

Sound Absorptions by Micro-Perforated Panels

Li Cheng 2

ARTICLES

The Exact Frequency Equations for the Rayleigh and Shear Beams with Boundary Damping

Matthew P. Coleman and Laura A. McSweeney 3

A Numerical Approach for Sound Quality of Vehicle Doors

Erkut Yalçın, Halil Bilal, Ayhan Yağcı and Haluk Erol 9

Sensitivity and Performances Analysis of a Dynamic Pressure Narrow-Band Electrodynamic Micro-Sensor

Mohamed Hadj Said, Fares Tounsi, Libor Rufer, Brahim Mezghani and Laurent A. Francis 17

Seismic Analysis of Steel Cylindrical Liquid Storage Tank Using Coupled Acoustic-Structural Finite Element Method For Fluid-Structure Interaction

Aruna Rawat, Vasant Matsagar and A. K. Nagpal 27

Influence of Road Roughness Wavelengths on Bus Passengers' Oscillatory Comfort

Dragan Sekulić 41

Stiffness-Damping Matching Modelling for Vibration Isolation System of Roadheader ECB

Li Zhanlong, Sun Dagang, Qin Yuan, Zhang Wenjun and Sun Bao 54

The Rotor and Tower Vibrations Damping Monitoring in the Case of Total Pitch Servomotors Failure

Younes Ait Elmaati, Lhoussein El Bahir and Khalid Faitah 62

Effect of Flow on Various Helmholtz Resonators

Hyunsu Kim and Ihae Lee 73

Critical Frequencies of Composite Cylindrical Shells

K. Renji and S. Josephine Kelvina Florence 79

1D Numerical Study of Nonlinear Propagation of Finite Amplitude Waves in Traveling Wave Tubes with Varying Cross Section

Zhineng Zhang, Ling Zheng, Tingfei Yan and Yao Wu 88

Influence of a Vibration Isolation System on Planar Dynamics of a Motorcycle

Sudhir Kaul 96

Fluid Added-Mass Effect on Flexural Vibration of Hemispherical Shell Structure

Shahrokh Sepehrirahnama, Felix Bob Wijaya, Darren Oon, Eng Teo Ong, Heow Pueh Lee and Kian-Meng Lim 104

An Experimental Investigation of Modal Densities of Composite Honeycomb Sandwich Cylindrical Shells

K. Renji, S. Josephine Kelvina Florence and Sameer Deshpande 112

About the Authors 121