SHOCK and VIBRATION VOLUME CONTENTS • VOLUME 2 • 1995

ISSUE 1

Coupled Dynamics of a Rotor-Journal Bearing System Equipped with Thrust Bearings Yu Lie and R. B. Bhat	1
Active Vibration Control of a Thin Steel Sheet Yohiji Okada, Ken-Ichi Matsuda, and Junji Tani	15
Motions of a Powered Top with a Spherical Tip on a Curved Surface David C. Meeker and Miles A. Townsend	23
Performance Characteristics of Active Constrained Layer Damping A. Baz and J. Ro	33
Parametrically Excited Nonlinear Two-Degree-of-Freedom Systems with Repeated Natural Frequencies A. H. Nayfeh, C. Chin, and D. T. Mook	43
An Analytic Study of Self-Compensating Dynamic Balancer with Damping Fluid and Ball Jongkil Lee	59
Review: Periodic and Near-Periodic Structures S. S. Mester and H. Benaroya	69
Book Review Patrick Bar-Avi	97
ISSUE 2	
Air Bag Momentum Force Including Aspiration Guy Nusholtz, Deguan Wang, and E. Benjamin Wylie	99
Random Vibration of Space Shuttle Weather Protection Systems Isaac Elishakoff, Menahem Baruch, Liping Zhu, and Raoul Caimi	111
Three Case Studies in Finite Element Model Updating M. Imregun	119
Abating Earthquake Effects on Buildings by Active Slip Brace Devices Zekai Akbay and Haluk M. Aktan	133
Dynamics and Control of Adaptive Shells with Curvature Transformations H. S. Tzou and Y. Bao	143
Dynamic Stiffness Matrix for a Beam Element with Shear Deformation Walter D. Pilkey and Levent Kitis	155

Limiting Vibroisolation Control of an Oscillating String on a Moving Base Dmitry V. Balandin	163
Review: Waves, Solids, and Nonlinearities Jüri Engelbrecht	173
Book Review C. N. Bapat	191
ISSUE 3	
H-Adaptive Methods for Nonlinear Dynamic Analysis of Shell Structures Sang-Ho Lee and Ted Belytscho	193
A Toeplitz Jacobian Matrix/Fast Fourier Transformation Method for Steady State Analysis of Discontinuous Oscillators T. Ge and A. Y. T. Leung	205
Effective Method for Analysis of Electrothermally Coupled Fields Jacek Korytkowski and Stanislaw Wincenciak	219
Motions of a Constrained Spherical Pendulum in an Arbitrarily Moving Reference Frame: The Automobile Seatbelt Inertial Sensor A. Peter Allan and Miles A. Townsend	227
Computer Simulations of Contact Forces for Airbags with Different Folding Patterns During Deployment Phase King H. Yang, Yun-Qiang Li, and Danyu Sun	237
Finite Element Analysis of Fluid-Conveying Timoshenko Pipes Chih-Liang Chu and Yih-Hwang Lin	247
Book Review J. A. Zukas	257
ISSUE 4	
Seismic Passive Control of Cable-Stayed Bridges Hosam-Eddin M. Ali and Ahmed M. Abdel-Ghaffar	259
Debris Cloud Material Characterization for Hypervelocity Impacts of Single- and Multimaterial Projectiles on Thin Target Plates William P. Schonberg	273
Development of a Method for Characterizing Joint Stiffness, Deadband, and Hysteresis G. D. Ferney and S. L. Folkman	289
Free Vibration of Partially Supported Cylindrical Shells S. Mirza and Y. Alizadeh	297
An Algorithm for Higher Order Hopf Normal Forms A. Y. T. Leung and T. Ge	307

Differential Quadrature Analysis of Free Vibration of Symmetric Cross-Ply Laminates with Shear Deformation and Rotatory Inertia Moinuddin Malik and Charles W. Bert	321
Numerical Analysis for Dynamic Instability of Electrodynamic Maglev Systems Y. Cai and S. S. Chen	339
Book Review Lai Wan Woo	351
ISSUE 5	
Impact of Thin-Walled Projectiles with Concrete Targets Rayment E. Moxley, Mark D. Adley, and Bob Rohani	355
Continuous Sliding Mode Control of Flow-Induced Vibrations A . Baz	365
Testing Procedures for High Output Fluid Viscous Dampers Used in Building and Bridge Structures to Dissipate Seismic Energy Douglas P. Taylor and Michael C. Constantinou	373
Experimental Investigation of Effects of Vibration upon Elastic and Cohesive Properties of Beds and of Wet Sand S. Alsop, A. J. Matchett, and J. M. Coulthard	383
Free Vibration of Thick Multilayer Cylinders H. R. Hamidzadeh and N. N. Sawaya	393
Review: Selection of a Suitable Wall Pressure Spectrum Model for Estimating Flow-Induced Noise in Sonar Applications V. Bujanga Rao	403
Review: Dynamic Analysis of Shells Charles R. Steele, Jason A. Tolomeio, and Deborah E. Zetes	413
Book Review Charles W. Bert	427
ISSUE 6	
Positive Real Zeros in Flexible Beams Eric H. Maslen	429
Application of the Choi-Williams Reduced Interference Time Frequency Distribution to Machinery Diagnostics Howard A. Gaberson	437
Optimal Constrained Layer Damping of Beams: Experimental and Numerical Studies JL. Marcelin, S. Shakhesi, and F. Pourroy	445

Transient Interaction of a Spherical Shell with an Underwater Explosion Shock Wave and Subsequent Pulsating Bubble H. Huang and K. C. Kiddy	451
Analysis of Multiaxis Vibration Simulators Norman Fitz-Coy	461
Automotive Occupant Dynamics Optimization J. A. Bennett and G. J. Park	471
Symplectic Integration and Nonlinear Dynamic Symmetry Breaking of Frames S. G. Mao and A. Y. T. Leung	481
Modeling and Fuzzy Logic Control of an Active Reaction Compensating Platform System Y. J. Lin, Y. Lu, T. Lee, and B. Choi	493
High Resolution Order Tracking at Extreme Slew Rates Using Kalman Tracking Filters Håvard Vold and Jan Leuridan	507
Book Review J. A. Zukas	517
Author Index	521
Subject Index	523
Volume Contents	