Dr. Mohammad Reza Ghazavi

Professor of Mechanical Engineering, Department of Applied Mechanics .

Research Interest

Dynamic Stability, Nonlinear dynamics, Micro Electro Mechanics (MEMS),Drill strings, Mechanisms

With joints clearance, Rotating Bladed Disks.

Education

PhD, 1990, University of Bath

MSc, 1986, Birmingham University

BSc, 1980, Sharif University of Technology

Teaching Interest

Advanced Dynamics, Mechanisms Design, Advanced CNC Machines, Metal Cutting

Selected Journal Papers

Parametric investigation of dynamics of beams made of FG material with longitudinal and whirling movements exposed to axial forces

A Forooghi, MR Ghazavi

Journal of Science and Technology of Composites 7 (4),2021,pp 1177-1188

Size-dependent modal interactions of a piezoelectrically laminated microarch resonator with 3: 1 internal resonance

A Nikpourian, MR Ghazavi, S Azizi

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On the dynamics of a novel energy harvester to convert the energy of the magnetic noise into electrical power

A Ghodsi, H Jafari, S Azizi, MR Ghazavi

Energy 207, 118268,2020

Size-dependent secondary resonance of a piezoelectrically laminated bistable MEMS arch resonator

A Nikpourian, MR Ghazavi, S Azizi

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Primary and Secondary Resonance of Micro-Resonators Based on Couple Stress Theory

MA Beni, MR Ghazavi, G Rezazadeh, MA Beni

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Size-dependent nonlinear behavior of a piezoelectrically actuated capacitive bistable microstructure

A Nikpourian, MR Ghazavi, S Azizi

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S Rahmanian, MR Ghazavi, S Hosseini-Hashemi

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Nonlinear Size-Dependent Analysis of an Initially Curved Microbeam

A Nikpourian, MR Ghazavi

Modares Mechanical Engineering 19 (2),2019,pp 247-258

 Analytical Primary Resonance of Size-Dependent Electrostatically Actuated Nanoresonator Under the Effects of Surface Energy and Casmir ForceS Rahmanian, S Hosseini-Hashemi, MR Ghazavi

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On the numerical investigation of size and surface effects on nonlinear dynamics of a nanoresonator under electrostatic actuation

S Rahmanian, MR Ghazavi, S Hosseini-Hashemi

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Vibro-acoustic and sound transmission loss analysis of truncated conical shell subjected to incident sound wave

A Tebyanian, MR Ghazavi

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Performance of different robust control methods for three-axis rotary systems

M SoltanRezaee, M Moghadam, MR Ghazavi

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Stability of a Self-Excited Machine Due to the Mechanical Coupling

MS Rezaee, MR Ghazavi, A Najafi, WH Liao

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Nonlinear analysis of the micro/nanotube conveying fluid based on second strain gradient theory

MR Ghazavi, H Molki

Applied Mathematical Modelling 60,2018,pp 77-93

Parametric resonances for torsional vibration of excited rotating machineries with nonconstant velocity joints

M SoltanRezaee, MR Ghazavi, A Najafi

Journal of Vibration and Control 24 (15),2018,pp 3262-3277

On the dynamics of a capacitive electret-based micro-cantilever for energy harvesting

M Ghavami, S Azizi, MR Ghazavi

Energy 153,2018,pp 967-976

Stability of a multi-body driveshaft system excited through U-joints

M SoltanRezaee, MR Ghazavi, A Najafi, S Rahmanian

Meccanica 53 (4), 2018,pp1167-1183

On the nonlinear dynamics of a piezoelectrically tuned micro-resonator based on non-classical elasticity theories

A Nikpourian, MR Ghazavi, S Azizi

International Journal of Mechanics and Materials in Design 14 (1), 2018,pp1-19

A study of fluid media and size effect on dynamic response of microplate

M Aghababaie Beni, MR Ghazavi, G Rezazadeh

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S Azizi, A Ghodsi, H Jafari, MR Ghazavi

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Sajad Boorghan Farahan, MohammadReza Ghazavi*, Sasan Rahmanian

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M Mohammadzadeh, MR Ghazavi ,A Alibeigloo

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Novel mass detection based on magnetic excitation in anti-resonance region

H Jafari, A Ghodsi, MR Ghazavi, S Azizi

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ALI GHODSI, H JAFARI, MR GHAZAVI, S AZIZI

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S Azizi, MR Ghazavi, G Rezazadeh, SE Khadem

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S Rahmanian, MR Ghazavi

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A Najafi, MR Ghazavi, AA Jafari

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Analysis of dynamic behavior of FE model of drillstring-wellbore contact with improved contact model.

M Mohammadzadeh, M Ghazavi

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RM SOLTAN, MR GHAZAVI, ALI A. JAFARI

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M Asgarisabet, MR Ghazavi, M Shahgholi

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Application of Krein's theorem and bifurcation theory for stability analysis of a bladed rotor

A Najafi, MR Ghazavi, AA Jafari

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Tuning the primary resonances of a micro resonator, using piezoelectric actuation

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MR Ghazavi, A Najafi, AA Jafari

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Application of piezoelectric actuation to regularize the chaotic response of an electrostatically actuated micro-beam

S Azizi, MR Ghazavi, SE Khadem, G Rezazadeh, C Cetinkaya

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Stabilizing slider-crank mechanism with clearance joints

AA Olyaei, MR Ghazavi

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Parametric excitation of a piezoelectrically actuated system near Hopf bifurcation

S Azizi, G Rezazadeh, MR Ghazavi, SE Khadem

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Investigation of the Effect of Residual and Axial Stress, on Pull-in Instability of a Fully Clamped Micro-beam under Electrostatic Actuation, Considering Fringing Field Effect

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S Azizi, MR Ghazavi, SE Khadem, J Yang, G Rezazadeh

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MR Ghazavi, G Rezazadeh, S Azizi

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MH Ghayesh, MR Ghazavi, SE Khadem

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Finite element analysis of static and dynamic pull-in instability of a fixed-fixed micro beam considering damping effects

MR Ghazavi, G Rezazadeh, S Azizi

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Dynamic simulations of the freight three-piece bogie motion in curve

MR Ghazavi, M Taki

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M Zamanian, SE Khadem, MR Ghazavi

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J MASAH, MR Ghazavi, MM MOHAMMADI, S MINAEI

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M MAGHSOUDI, MR GHAZAVI

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Selected Conference Papers

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EFFECT OF FORCE CONTROL SYSTEM ON POWER AND TIME CONSUMPTION OF TREE PRUNING MACHINE

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