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Education

Ph.D.: University of the Kashan, Kashan, Iran (2010-2014).

Areas of Interest:

Analysis of Smart Materials

Analysis of Functionally Graded Materials

Analysis of Micro & Nano structures

Dynamic and static analysis of structures

Journal publications

- ❖ Buckling analysis of nanocomposite sandwich plates with piezoelectric face sheets based on flexoelectricity and first-order shear deformation theory; S. Amir, M. Khorasani, H. BabaAkbar-Zarei; Journal of Sandwich Structures & Materials; 1099636218795385; 2018.
- ❖ Size-dependent vibration analysis of a three-layered porous rectangular nano plate with piezo-electromagnetic face sheets subjected to pre loads based on SSDT; S. Amir, E. Mohammad-Rezaei, E. Arshid. Mechanics of Advanced Materials and Structures; 1-15; 2018.
- ❖ Instability analysis of viscoelastic CNTs surrounded by a thermo-elastic foundation, S. Amir, M. Khani, A.R. Shajari, P. Dashti, Structural Engineering & Mechanics; 63, 2017.
- ❖ Orthotropic patterns of visco-Pasternak foundation in nonlocal vibration of orthotropic graphene sheet under thermo-magnetic fields based on new first-order shear deformation theory; S. Amir; Proc. IMech E Part L: J. Mechanical Design and Application ; 2016

- ❖ Longitudinal magnetic field effect on wave propagation of fluid-conveyed SWCNT using Knudsen number and surface considerations; A. Ghorbanpour Arani, M.A. Roudbari, S. Amir; Applied Mathematical Modelling; ; 2016
- ❖ Dynamic Response of Viscoelastic CNT Conveying Pulsating Fluid Considering Surface Stress and Magnetic Field; A. Ghorbanpour Arani, M. Yousefi, S. Amir, P. Dashti, A. B. Chehreh; Arabian Journal for Science and Engineering; 40; 2015
- ❖ Nonlinear vibration of coupled nano- and microstructures conveying fluid based on Timoshenko beam model under two-dimensional magnetic field; A. Ghorbanpour Arani, P. Dashti, S. Amir, M. Yousefi; Acta Mechanica; 226 ;2015
- ❖ Nonlinear Flow-Induced Flutter Instability of Double CNTs Using Reddy Beam Theory; A. Ghorbanpour Arani, S Amir, A Karamali Ravandi; Journal of applied mechanics; 46 ;2015
- ❖ Static stress analysis of carbon nano-tube reinforced composite (CNTRC) cylinder under non-axisymmetric thermo-mechanical loads and uniform electro-magnetic fields; A. Ghorbanpour Arani, E. Haghparast, Z. Khoddami Maraghi, S. Amir; Composites: Part B; 68; 2015
- ❖ Flexural Vibration Of Coupled Double-Walled Carbon Nanotubes Conveying Fluid Under Thermo-Magnetic Fields Based On Strain Gradient Theory; A. Ghorbanpour Arani, P. Dashti, S. Amir, M. Yousefi; J THEOR APP MECH-POL; 53 ;2015
- ❖ Nonlocal vibration and instability analysis of embedded DWCNT conveying fluid under magnetic field with slip conditions consideration; A. Ghorbanpour Arani, E. Haghparast, Z. Khoddami Maraghi, S. Amir; Journal of Mechanical Engineering Science, Proceedings of the Institution of Mechanical Engineers Part C; 14; 2014
- ❖ Exact Solution for Electro-Thermo-Mechanical Behavior of Composite Cylinder Reinforced by BNNTs under Non-axisymmetric Thermo-Mechanical Loads; A. Ghorbanpour Arani, E. Haghparast, Z. Khoddami Maraghi, S. Amir; Amirkabir journal science and technology; 2014
- ❖ Nonlinear pull-in instability of boron nitride nano-switches considering electrostatic and Casimir forces; A. Ghorbanpour Arani, A. Jalilvand, M. Ghaaria, M. Talebi Mazraehshahi, R. Kolahchi, M.A. Roudbari, S. Amir ; Scientia Iranica; 21; 2014
- ❖ Flow-induced vibration of double bonded visco-CNTs under magnetic fields considering surface effect; A. Ghorbanpour Arani, S. Amir, P. Dashti, M. Yousefi; Computational Materials Science; 86; 2014
- ❖ CNTRC cylinder under non-axisymmetric thermo-mechanical loads and uniform electro-magnetic fields ; A. Ghorbanpour Arani, E. Haghparast, Z. Khoddami Maraghi, S. Amir; The Arabian Journal for Science and Engineering; 39; 2014
- ❖ Nonlinear instability of coupled CNTs conveying viscous fluid; A. Ghorbanpour Arani, S. Amir; Journal of Solid Mechanics; ; 2014
- ❖ Nonlinear fluid-induced vibration and instability of an embedded piezoelectric polymeric microtube using nonlocal elasticity theory; A. Ghorbanpour Arani, A.R. Shajari, S. Amir, V. Atabakhshian; PartC, Proc. IMechEPart C: J. Mechanical engineering Science; 12 ;2013
- ❖ Electro-thermal vibration of visco-elastically coupled BNNT systems conveying fluid embedded on elastic foundation via strain gradient theory; A. Ghorbanpour Arani, S. Amir; Physica B: Condensed Matter; ; 419 ;2013
- ❖ Induced Nonlocal Electric Wave Propagation of Boron Nitride Nanotubes; A. Ghorbanpour Arani , A. Hafizi Bidgoli, A. Karamali Ravandi, M. A. Roudbari, S. Amir, M. B. Azizkhani; Journal of Mechanical Science and Technology; 27 ;2013
- ❖ Buckling of piezoelectric composite cylindrical shell under electro-thermo-mechanical loading ; A. Ghorbanpour Arani, Sh. Shams, S. Amir, M.J. Maboudi; Journal of Solid Mechanics; 4 ;2013
- ❖ Nonlocal Vibration of Embedded Coupled CNTs Conveying Fluid under Thermo-magnetic Fields Via Ritz Method; A. Ghorbanpour Arani, S. Amir; Journal of Solid Mechanics; 5 ;2013
- ❖ Electrothermomechanical response of thickwalled piezoelectric cylinder reinforced by boron-nitride nanotube; A. Ghorbanpour Arani, A. Haghshenas, S. Amir, M. R. Mozdianfar, M. Latifi; Strength of Materials; 45; 2013

- ❖ Flow-Induced Instability Smart Control of Elastically Coupled Double-Nanotube-Systems ; V. Atabakhshian, A. Ghorbanpour Arani, A.R. Shajari, S. Amir; Journal of Solid Mechanics; 5; 2013
- ❖ Electro-thermo-mechanical nonlinear buckling of Pasternak coupled DWBNNTs based on nonlocal piezoelasticity theory; A. Ghorbanpour Arani, S.A. Jamali, S. Amir, M.J. Maboudi; Turkish Journal of Engineering and Environmental Sciences; 37 ;2013
- ❖ Forced-Vibration Analysis of a Coupled System of SLGSs by Visco- Pasternak Medium Subjected to a Moving Nano-particle; A. Ghorbanpour-Arani, A. Shiravand, A. H. Ghorbanpour, S. Amir, E. Haghparast; Journal of nanostructures; 3; 2013
- ❖ Nonlocal electro-thermal transverse vibration of embedded fluid-conveying DWBNNTs ;A. Ghorbanpour Arani, M. Shokravi, S. Amir, M.R. Mozdianfard; Journal of Mechanical Science and Technology; 26 ;2012
- ❖ Nonlinear vibration of embedded SWBNNTs based on nonlocal Timoshenko beam theory using DQ method; A. Ghorbanpour Arani, V. Atabakhshian, A. Loghman, A.R. Shajari, S. Amir; Physica B: Condensed Matter; 407 ;2012
- ❖ Nonlocal vibration of SWBNNT embedded in bundle of CNTs under a moving nanoparticle; A. Ghorbanpour Arani, M.A. Roudbari, S. Amir; Physica B: Condensed Matter; 407 ;2012
- ❖ Nonlocal vibration and instability of embedded DWBNNT conveying viscose fluid; Z. Khoddami, A. Ghorbanpour Arani, R. Kolahchi, S. Amir, M.R. Bagheri; Composites Part B: Engineering; 45 ;2012
- ❖ Nonlinear vibration analysis of protein microtubules in cytosol conveying fluid based on nonlocal elasticity theory using DQM; A. Ghorbanpour Arani, A.A. Shirali, M. Noudeh Farahani, S. Amir, A. Loghman; Institution of Mechanical Engineers, Part C, Journal of Mechanical Engineering Science; 227 ; 2012
- ❖ Nonlinear dynamical response of embedded fluid-conveyed micro-tube reinforced by BNNTs; A. Ghorbanpour Arani, A.R. Shajari, V. Atabakhshian, S. Amir, A. Loghman; Composites Part B: Engineering; 44 ;2012
- ❖ Electro-thermo-mechanical nonlinear nonlocal vibration and instability of embedded micro-tube reinforced by BNNT, conveying fluid; A. Ghorbanpour Arani, A.R. Shajari, S. Amir, A. Loghman; Physica E: Low-dimensional Systems and Nanostructures; 45 ;2012
- ❖ Electro-Thermo-Mechanical Response of Thick-Walled Piezoelectric Cylinder Reinforced by BNNTs; A. Ghorbanpour Arani, A. Haghshenas, S. Amir, M. Azami, Z. Khoddami ; Journal of Nanostructures; 2 ; 2012
- ❖ Nonlinear Vibration of Smart Micro-tube Conveying Fluid Under Electro-Termal Fields; A. Ghorbanpour Arani, E. Haghparast, S. Amir ; Journal of Solid Mechanics; 4 ;2012
- ❖ Analysis of Nonlinear Vibrations for Multi-walled Carbon Nanotubes embedded in an Elastic Medium; A. Ghorbanpour Arani, H. Rabbani, S. Amir, Z. khoddami, M. Mohammadimehr; Journal of Solid Mechanics; 3 ;2012
- ❖ Nonlinear nonlocal vibration of embedded DWCNT conveying fluid using shell model; A. Ghorbanpour Arani, M. Sh. Zarei, S. Amir, Z. khoddami Maraghi; Physica B: Condensed Matter; 410 ;2012
- ❖ Effects of Electro-Termal Fields on Buckling of a Piezoelectric Polymeric Shell Reinforced with DWBNNTs; A. Ghorbanpour Arani, S. Shams, S. Amir, Z. Khoddami; Journal of nanostructures; 2 ;2012
- ❖ Closed-form Solution of Dynamic Displacement for SLGS Under Moving the Nanoparticle on Visco-Pasternak Foundation; A. Ghorbanpour Arani, A. Shiravand, S. Amir; Journal of Solid Mechanics ;4; 2012
- ❖ Analytical Solution for Electro-mechanical Behavior of Piezoelectric Rotating Shaft Reinforced by BNNTs Under Non-axisymmetric Internal Pressure; A. Ghorbanpour Arani, E. Haghparast, S. Amir; Journal of Solid Mechanics ;4; 2012
- ❖ 2D-Magnetic Field and Biaxial In-Plane Pre-Load Effects on the Vibration of Double Bonded Orthotropic Graphene Sheets; A.H. Ghorbanpour Arani, M.J. Maboudi, A. Ghorbanpour Arani, S. Amir; Journal of Solid Mechanics; 5 ;2012

- ❖ Time-dependent thermoelastic creep analysis of rotating disk made of Al-SiC composite; A. Loghman, A. Ghorbanpour Arani, A. R. Shajari, S. Amir; Arch Appl Mech; 81; 2011
- ❖ Electro-thermal non-local vibration analysis of embedded DWBNNTs; A. Ghorbanpour Arani, S. Amir, A. R. Shajari, M. R. Mozdianfard, Z. Khoddami, M. Mohammadimehr; Proc. IMech E Part C: J. Mechanical Engineering Science; 226 ;2011
- ❖ Electro-thermo-mechanical buckling of DWBNNTs embedded in bundle of CNTs using nonlocal piezoelasticity cylindrical shell theory; A. Ghorbanpour Arani, S. Amir, A.R. Shajari, M. R. Mozdianfard; Composites Part B; 43; 2011
- ❖ Magneto-thermo-elastic stresses and perturbation of magnetic field vector in a thin functionally graded rotating disk; A. Ghorbanpour Arani , S. Amir; Journal of Solid Mechanics; 4 ;2011
- ❖ Thermal Stress Anlysis of a composite cylindricer reinforced witg FG SWCNT; A. Ghorbanpour Arani, S. Amir, V. sadooghi, M. Mohammadimehr; Journal of Solid Mechanics; 3 ;2011
- ❖ Exact solution for electrothermoelastic behaviors of a radially polarized FGPM rotating disk; A. Ghorbanpour Arani, A. Jafarzadeh, M. Abdollahian, M.R.Mozdianfard, M. Mohammadimehr, S. Amir; Journal of Solid Mechanics; 3 ;2011
- ❖ Semi-analytical solution of magneto-thermo-elastic stresses for functionally graded variable thickness rotating disk; A. Ghorbanpour Arani, A. Loghman, A.R. Shajari, S. Amir; Journal of Mechanical Science and Technology; 24; 2010
- ❖ Magnetothermoelastic creep analysis of functionally graded cylinders; A. Loghman, A. Ghorbanpour Arani, S. Amir, A. Vajedi; International Journal of Pressure Vessels and Piping; 87; 2010

Conference Publications

Authors				Title	.
	Year	Location	Name of Conference		
Saeed Amir, Ehsan Arshid, Mustafa Zarghami, S.-M.-Amin Rasti	2018	Semnan-Iarn	The 26th Annual International Conference of Iranian Society of Mechanical Engineers-ISME2018	Thermal Buckling Analysis of Truncated Porous Conical Shells	.۱
Saeed Amir, M. Khorasani	2018	Semnan-Iarn	The 26th Annual International Conference of Iranian Society of Mechanical Engineers-ISME2018	Vibration analysis of sandwich smart plates based on Flexoelectricity theory	.۲
A. Ghorbanpour Arani M.J. Maboudi S. Amir H. Haghghi H. Faridfar	2012	Belarus	International conference on modern application of Nanotechnology	Nonlinear Thermo-Nonlocal Vibration of Annular Graphene Sheet on Visco Pasternak Foundation by DQ Approach	.۳
A. Ghorbanpour Arani M. Sh. Zarei, S. Amir	2012	Belarus	International conference on modern application of Nanotechnology	Thermal Effect on the Nonlocal Torsional Buckling of Double-Walled Carbon Nanotube Embedded in Pasternak Foundation	.۴
A. Ghorbanpour Arani, S. Amir, A.R. Shajari, M.A. Roudbari	2012	Kashan	International Congress on Nanoscience & Nanotechnology (ICNN2012) 8 - 10 September 2012, Kashan, I. R. Iran	Small Scale Effect on Nonlinear Vibration of SWBNNTs Based on Euler-Bernoulli Embedded Theory Using DQ Method	.۵

.۵	A. Ghorbanpour Arani, M. Shokravi, S. Amir	2012	Kashan	International Congress on Nanoscience & Nanotechnology (ICNN2012) 8 - 10 September 2012, Kashan, I. R. Iran	Electro Nonlocal Vibration of Double-Boron Nitride Sheet System
.۶	A. Ghorbanpour Arani, M.J. Maboudi, S. Amir, H. Haghghi, H. Faridfar	2012	Kashan	International Congress on Nanoscience & Nanotechnology (ICNN2012) 8 - 10 September 2012, Kashan, I. R. Iran	Small Scale Effect on Nonlinear Vibration of Annular Graphene Sheet Under Thermal Field
.۷	A. Ghorbanpour Arani, H. Haghghi, S. Amir, M.J. Maboudi	2012	Kashan	International Congress on Nanoscience & Nanotechnology (ICNN2012) 8 - 10 September 2012, Kashan, I. R. Iran	Nonlinear Thermo-Nonlocal Vibration of a SLGS Embedded in a Viscopasternak Foundation Using DQM
.۸	A. Ghorbanpour Arani, S. Amir, A. Jamali, M. Sh. Zarei	2012	Kashan	International Congress on Nanoscience & Nanotechnology (ICNN2012) 8 - 10 September 2012, Kashan, I. R. Iran	Buckling analysis of bonded double walled boron nitride nanotube based on nonlocal Timoshenko beam theory
.۹	A. Ghorbanpour Arani, A.R. Shajari, S. Amir	2012	Kashan	International Congress on Nanoscience & Nanotechnology (ICNN2012) 8 - 10 September 2012, Kashan, I. R. Iran	Torsional Buckling of Boron-Nitride Nanotubes Using Modified Couple Stress Theory
.۱۰	A. Ghorbanpour Arani, A. Jamali, S. Amir, M. A. Roudbari	2012	Kashan	International Congress on Nanoscience & Nanotechnology (ICNN2012) 8 - 10 September 2012, Kashan, I. R. Iran	Assessment of Continuum Mechanics Models in Predicting Buckling of BWBNNT
.۱۱	A. Ghorbanpour Arani , M.A. Roudbari, S. Amir	2012	Kashan	International Congress on Nanoscience & Nanotechnology (ICNN2012) 8 - 10 September 2012, Kashan, I. R. Iran	Electro- thermo Nonlocal Wave Propagation of the SWBNNTs Conveying Viscous Fluid Embedded in a Visco Elastic Medium
.۱۲	A. Ghorbanpour Arani, E. Haghparast, Z. Khoddami Maraghi , S. Amir ,	2013	Tehran	21st Annual International Conference on Mechanical Engineering-ISME2013	Exact Solution for Electro-Magneto-Mechanical Behavior of Embedded Composite Cylinder Under Non-axisymmetric Pressure
.۱۳	A. Ghorbanpour Arani M. Shokravi S. Amir M. Sh. Zarei	2013	Tehran	21st Annual International Conference on Mechanical Engineering-ISME2013	Dynamic analysis of single-layered gheraphene sheet incorporating the Casimir and electrostatic forces
.۱۴	A. Ghorbanpour Arani, E. Haghparast, Z. Khoddami Maraghi , S. Amir , M. Sh. Zarei	۱۳۹۲	تهران	The 12 Iranian Aerospace Society Conference Amir Kabir University of Technology	Thermal Vibration of Embedded Double TB-CNTs Conveying Fluid Based on modified couple stress
.۱۵	A. Ghorbanpour Arani, S. Amir A.R. Ataie	2014	Ahvaz	The 22nd Annual International Conference on Mechanical Engineering-ISME2014	Electro-Mechanical Nonlinear Vibration of Pasternak Coupled DWBNNTs Based on Nonlocal Piezoelasticity Theory by Euller-Bernuli Beam Theory