



## Ali Ghorbanpor arani

Professor

College: Faculty of Mechanical Engineering

Department: Mechanical Engineering - Solid Design

### Employment Information

Faculty/Department	Position/Rank	Employment Type	Cooperation Type	Grade
(not set)	(not set)	Tenured	Full Time	

### Papers in Journals

1. [Aeroelastic Analysis of Composite Sandwich Rectangular Plates with Auxetic Honeycomb Core: Free Vibration and Instability Investigation](#), Arabian Journal for Science and Engineering, pp. 1, 2024 11 29, SCOPUS ,JCR.
2. [Free vibration and supersonic flutter analyses of a sandwich cylindrical shell with CNT-reinforced honeycomb core integrated with piezoelectric layers](#), Mechanics Based Design of Structures and Machines, 2024 11 07, SCOPUS ,JCR.
3. [Size-dependent buckling analysis of functionally graded nanoplate coupled with piezoelectric layers resting on orthotropic foundation based on surface piezo-elasticity theory](#), ZAMM - Journal of Applied Mathematics and Mechanics / Zeitschrift für Angewandte Mathematik und Mechanik, Vol. 104, pp. 1, 2024 10 25, SCOPUS ,JCR.
4. [Refined Plate Theory for Critical Buckling Analysis of FG Sandwich Nanoplates Considering Neutral Surface Concept and Piezoelectric Surface Effects](#), Journal of Solid Mechanics (JSM), Vol. 16, pp. 97, 2024 09 24, ISI-Listed.
5. [Nonlocal buckling analysis of five-layer laminated nanocomposites on kerr foundation: A refined zigzag theory approach](#), Journal of Sandwich Structures & Materials, pp. 1, 2024 09 02, SCOPUS ,JCR.
6. [Size-Dependent Buckling Analysis of Three-Layered Nano-Plate on Orthotropic Foundation Using Surface Theory](#), J solid mech, Vol. 16, pp. 97, 2024 08 15, SCOPUS ,ISC.
7. [Vibration and aeroelastic instability analysis in GPL-porous multi-layered beam with the rotation effect](#), International journal for computational methods in engineering science and mechanics, 2024 07 04, SCOPUS ,JCR.
8. [A Vibration Analysis of a Thick Micro Sandwich Panel with Metamaterial or Porous Core and Carbon Nanotubes/Graphene Platelets Reinforced Composite Based on HSDT and NSGT](#), Multiscale Science and Engineering, Vol. 1, pp. 1, 2024 06 07, SCOPUS ,JCR.
9. [Dynamics of a rotating ring-stiffened sandwich conical shell](#), سحر جهانگیری, علی قربانپور, زهرا خدای مرقی.

- with an auxetic honeycomb core, APPLIED MATHEMATICS AND MECHANICS (ENGLISH EDITION), Vol. 45, pp. 963, 2024 06 05, SCOPUS, JCR.
10. امیرحسین سلطان ارانی، علی قربانپور، زهرا خدای مرقی، Nonlocal quasi-3d vibration/ analysis of three-layer nanoplate surrounded by Orthotropic Visco-Pasternak foundation by considering surface effects and neutral surface concept, Mechanics Based Design of Structures and Machines, Vol. 1, pp. 1, 2024 05 17, SCOPUS, JCR.
  11. مصطفی تیموری، مصطفی طالبی توتی، علی قربانپور، The Effect of porosity distribution on the free vibration of tapered nanocomposite sandwich beam, Mechanics of Advanced and Smart Materials Journal, Vol. 4, pp. 1, 2024 04 27, SCOPUS, ISC.
  12. وحید محمدلو، زهرا خدای مرقی، علی قربانپور، Thermoelastic analysis of axisymmetric conical shells: Investigating stress-strain response under uniform heat flow with semi-coupled approach, Numerical Heat Transfer, Part A: Applications, pp. 1, 2024 03 18, SCOPUS, JCR.
  13. علیرضا میهن خواه، زهرا خدای مرقی، علی قربانپور، شهریار نیک نژاد، Vibrations of Multi-Layer Beam with Nanocomposite Face Sheets Reinforced with Graphene Platelets and Porous Core, J Solid Mech, Vol. 15, pp. 258, 2023 09 01, JCR.
  14. امیرعباس قربانپور ارانی، زهرا خدای مرقی، علی قربانپور، The Frequency Response of Intelligent Composite Sandwich Plate Under Biaxial In-Plane Forces, J Solid Mech, Vol. 15, pp. 1, 2023 03 01, JCR.
  15. علی قربانپور، نسیم السادات میرعلائی میرابادی، اشکان فراذین، مهدی محمدی مهر، An extensive review of the repair behavior of smart self-healing polymer matrix composites, Journal of Materials Research, Vol. 38, pp. 617, 2023 01 04, ISI-Listed.
  16. علی قربانپور، معصومه اسکندری شهرکی، الهام حق پرست، The Supersonic Flutter Behavior of Sandwich Plates with an Magnetorheological Elastomer Core and Gnp-Reinforced Face Sheets, International Journal of Applied Mechanics, Vol. 13, pp. 2250015, 2022 12 07, ISC, JCR.
  17. مجید پاکیزه، محسن ایرانی رهقی، زهرا خدای مرقی، شهریار نیک نژاد، علی قربانپور، Vibrational study on multilayer sandwich plates: porous FGM core, nanocomposite and piezoelectric face sheets, Journal of Solid Mechanics, 2022 10 26, SCOPUS, JCR.
  18. علیرضا میهن خواه، زهرا خدای مرقی، علی قربانپور، شهریار نیک نژاد، Magneto-Rheological Response in Vibration of Intelligent Sandwich Plate with Velocity Feedback Control, Journal of Solid Mechanics, Vol. 14, pp. 430, 2022 09 08, ISC.
  19. علیرضا میهن خواه، زهرا خدای مرقی، علی قربانپور، شهریار نیک نژاد، Magneto-Rheological Response in Vibration of Intelligent Sandwich Plate with Velocity Feedback Control, Journal of Solid Mechanics, Vol. 14, pp. 430, 2022 09 08, SCOPUS, JCR.
  20. مجید پاکیزه، زهرا خدای مرقی، محسن ایرانی رهقی، شهریار نیک نژاد، علی قربانپور، Monotonous, symmetric, and nonsymmetric patterns of porous core in vibration study of nano-composite sandwich plate bonded by piezoelectric sheets, Journal of Computational Applied Mechanics, Vol. 53, pp. 444, 2022 09 01, SCOPUS, JCR.
  21. علی قربانپور، شهریار نیک نژاد، علیرضا میهن خواه، ایمان صفری، Dynamic Stability Analysis of Bi-Directional Functionally Graded Beam with Various Shear Deformation Theories Under Harmonic Excitation and Thermal Environment, Journal of Solid Mechanics, Vol. 14, pp. 272, 2022 05 20, SCOPUS, JCR.
  22. علی قربانپور، معصومه اسکندری شهرکی، الهام حق پرست، Instability analysis of axially moving sandwich plates with a magnetorheological elastomer core and GNP-reinforced face sheets, Journal of the Brazilian Society of Mechanical Sciences and Engineering, Vol. 44, pp. 150, 2022 03 22, SCOPUS, JCR.
  23. M. Rafaati, A. Zali, A. Ghorbanpour Arani, M. Sehhati, Analysis of sequential ultrasound frames for the measurement of hemodynamic stresses, critical bent buckling pressure, and critical buckling torque of human common carotid atherosclerosis, CLIN BIOMECH, Vol. 87, pp. 105401, 2021 05 27, SCOPUS, JCR.
  24. A. Ghorbanpour Arani, A. Farazin, M. Mohammadimehr, The effect of nanoparticles on enhancement of the specific mechanical properties of the composite structures: A review research, Advances in Nano Research, Vol. 10, pp. 327, 2021 04 25, SCOPUS, ISI-Listed.
  25. J. Kargar, A. Ghorbanpour Arani, E. Arshid, M. Irani Rahaghi, Vibration analysis of spherical

- sandwich panels with MR fluids core and magneto-electro-elastic face sheets resting on orthotropic viscoelastic foundation, *STRUCT ENG MECH*, Vol. 78, pp. 557, 2021 04 06, SCOPUS , ISI-Listed.
26. A. Ghorbanpour Arani, A. Farazin, M. Mohammadimehr, S. Ienjan Nejadian, Energy harvesting of sandwich beam with laminated composite core and piezoelectric face sheets under external fluid flow, *SMART STRUCT SYST*, Vol. 27, pp. 641, 2020 12 19, SCOPUS , ISI-Listed.
  27. پویا پورموسی، الهام حق پرست، شهریار نیک نژاد، علی قربانپور، ایمان صفری، Thermodynamic Stability of Sandwich Micro-Beam with Honeycomb Core and Piezoelectric / Porous Viscoelastic Graphene Facesheets, *Journal of Solid Mechanics*, 2020 11 08, SCOPUS , JCR.
  28. پویا پورموسی، الهام حق پرست، شهریار نیک نژاد، علی قربانپور، ایمان صفری، Thermodynamic Stability of Sandwich Micro-Beam with Honeycomb Core and Piezoelectric / Porous Viscoelastic Graphene Facesheets, *Journal of Solid Mechanics*, Vol. 16, pp. 120, 2020 10 22, SCOPUS , JCR.
  29. ایمان صفری، پویا پورموسی، الهام حق پرست، شهریار نیک نژاد، علی قربانپور، Thermodynamic Stability of Sandwich Micro-Beam with Honeycomb Core and Piezoelectric / Porous Viscoelastic Graphene Facesheets, *Journal of Solid Mechanics*, Vol. 16, pp. 120, 2020 10 22, SCOPUS , ISC.
  30. A. Ghorbanpour Arani, A.H. Soltan Arani, E. Haghparast, flexoelectric and surface effects on vibration frequencies of annular nanoplate, *INDIAN J PHYS*, 2020 10 20, SCOPUS , JCR.
  31. A.A. Ghorbanpour Arani, E. Haghparast, A. Ghorbanpour Arani, Effect of Fluid–Structure Interaction on Vibration of Moving Sandwich Plate With Balsa Wood Core and Nanocomposite Face Sheets, *INT J APPL MECH*, Vol. 12, pp. 2050078, 2020 09 26.
  32. A. Ghorbanpour Arani, M. Abdollahian, Refined Zigzag Theory for Nonlinear Dynamic Response of an Axially Moving Sandwich Nano beam Embedded on Visco-Pasternak Medium Using MCST, *Journal of Solid Mechanics*, Vol. 12, pp. 752, 2020 09 08, SCOPUS , JCR.
  33. A.A. Ghorbanpour Arani, Z. Khoddami Maraghi, A. Ghorbanpour Arani, Magneto-Rheological Response in Vibration of Intelligent Sandwich Plate with Velocity Feedback Control, *Journal of Solid Mechanics (JSM)*, 2020 07 16, SCOPUS , ISC , JCR.
  34. A.A. Ghorbanpour Arani, Z. Khoddami Maraghi, A. Ghorbanpour Arani, The Frequency Response of Intelligent Composite Sandwich Plate under Biaxial In-Plane Forces, *Journal of Solid Mechanics (JSM)*, 2020 06 28, SCOPUS , ISC , JCR.
  35. A.H. Ghorbanpour , & Arani, M. Abdollahian, A. Ghorbanpour Arani, Nonlinear dynamic analysis of temperature-dependent functionally graded magnetostrictive sandwich nanobeams using different beam theories, *J BRAZ SOC MECH SCI*, Vol. 42, pp. 314, 2020 05 04, SCOPUS , JCR.
  36. A. Ghorbanpour Arani, S.A. Jamali, The vibration of the cylindrically curved sandwich plate with rheological core and nanocomposite face sheets rested on the Winkler–Pasternak foundation, *J SANDW STRUCT MATER*, 2020 03 05, SCOPUS , JCR.
  37. M.A. Roudbari, T. Doroudgar Jorshari, A. Ghorbanpour Arani, C. L□, T. Rabczuk, Transient responses of two mutually interacting single-walled boron nitride nanotubes induced by a moving nanoparticle, *EUR J MECH A-SOLID*, Vol. 82, pp. 103978, 2020 02 24, SCOPUS , ISI-Listed.
  38. T. Soleymani, A. Ghorbanpour Arani, On aeroelastic stability of a piezo-MRE sandwich plate in supersonic airflow, *COMPOS STRUCT*, Vol. 230, pp. 111532, 2019 12 15, SCOPUS , JCR.
  39. A. Ghorbanpour Arani, S. Niknejad, Dynamic stability analysis of Euler-Bernoulli and Timoshenko beams composed of bi-directional functionally graded materials, *AUT Journal of Mechanical Engineering*, Vol. 4, pp. 201, 2019 10 01, ISC , JCR.
  40. A. Ghorbanpour Arani, S. Niknejad, Dynamic Stability Analysis of Euler-Bernoulli and Timoshenko Beams Composed of Bi-Directional Functionally Graded Materials, *Journal of Solid Mechanics (JSM)*, Vol. 4, pp. 201, 2019 10 01, ISC , JCR.
  41. A. Ghorbanpour Arani, S. Niknejad, Dynamic stability analysis of Euler-Bernoulli and Timoshenko beams composed of bi-directional functionally graded materials, *AUT Journal of Mechanical Engineering*, 2019 10 01, ISC.
  42. A. Ghorbanpour Arani, S. Niknejad, Dynamic stability analysis of Euler-Bernoulli and Timoshenko beams composed of bi-directional functionally graded materials, *AUT Journal of Mechanical*

Engineering, Vol. 4, pp. 41, 2019 10 01, ISC.

43. M. Hosseini, A. Ghorbanpour Arani, M.R. Karamizadeh, H. Afshari, S. Niknejad, Aeroelastic analysis of cantilever non-symmetric FG sandwich plates under yawed supersonic flow, WIND STRUCT, Vol. 29, pp. 457, 2019 09 27, SCOPUS, JCR.
44. A. Ghorbanpour Arani, B. Roustavi, M. Mohammadimehr, S. Niknejad, A.A. Ghorbanpour Arani, A. Hosseini, Pull-In Instability of MSGT Piezoelectric Polymeric FG-SWCNTs Reinforced Nanocomposite Considering Surface Stress Effect, Journal of Solid Mechanics, Vol. 11, pp. 759, 2019 09 17, SCOPUS, JCR.
45. B. Roustavi, M. Mohammadimehr, A. Ghorbanpour Arani, Active control of three-phase CNT/resin/fiber piezoelectric polymeric nanocomposite porous sandwich microbeam based on sinusoidal shear deformation theory, Steel and Composite Structures, Vol. 32, pp. 753, 2019 09 03, SCOPUS, ISI-Listed.
46. B. Roustavi, M. Mohammadimehr, A. Ghorbanpour Arani, Active control of three-phase CNT/resin/fiber piezoelectric polymeric nanocomposite porous sandwich microbeam based on sinusoidal shear deformation theory, STEEL COMPOS STRUCT, Vol. 32, pp. 753, 2019 09 03, SCOPUS, ISI-Listed.
47. B. Roustavi, M. Mohammadimehr, A. Ghorbanpour Arani, Active control of three-phase CNT/resin/fiber piezoelectric polymeric nanocomposite porous sandwich microbeam based on sinusoidal shear deformation theory, STEEL COMPOS STRUCT, Vol. 32, pp. 753, 2019 09 03, SCOPUS, JCR.
48. A. Ghorbanpour Arani, H. BabaAkbar, & Zarei, S.A. Jamali, Application of smart electro-rheological dampers in semi-active control of electro-rheological sandwich plates with nanocomposite facesheets rested on orthotropic visco-Pasternak foundation, Journal of the Brazilian Society of Mechanical Sciences and Engineering, Vol. 41, pp. 426, 2019 08 31, SCOPUS, ISI-Listed.
49. A. Ghorbanpour Arani, H. BabaAkbar, & Zarei, S.A. Jamali, Application of smart electro-rheological dampers in semi-active control of electro-rheological sandwich plates with nanocomposite facesheets rested on orthotropic visco-Pasternak foundation, J BRAZ SOC MECH SCI, Vol. 41, pp. 426, 2019 08 31, SCOPUS, ISI-Listed.
50. A. Ghorbanpour Arani, M. Emdadi, H. Ashrafi, M. Mohammadimehr, S. Niknejad, A.A. Ghorbanpour Arani, A. Hosseini, Analysis of Viscoelastic Functionally Graded Sandwich Plates with CNT Reinforced Composite Face Sheets on Viscoelastic Foundation, Journal of Solid Mechanics, Vol. 11, pp. 690, 2019 08 30, SCOPUS, ISC.
51. A. Ghorbanpour Arani, F. Kiani, H. Afshari, Aeroelastic Analysis of Laminated FG-CNTRC Cylindrical Panels Under Yawed Supersonic Flow, International Journal of Applied Mechanics, Vol. 11, pp. 1950052, 2019 08 21, SCOPUS, ISI-Listed.
52. A. Ghorbanpour Arani, F. Kiani, H. Afshari, Aeroelastic Analysis of Laminated FG-CNTRC Cylindrical Panels Under Yawed Supersonic Flow, INT J APPL MECH, Vol. 11, pp. 1950052, 2019 08 21, SCOPUS, ISI-Listed.
53. A. Ghorbanpour Arani, F. Kiani, H. Afshari, Aeroelastic Analysis of Laminated FG-CNTRC Cylindrical Panels Under Yawed Supersonic Flow, INT J APPL MECH, Vol. 11, pp. 1950052, 2019 08 21, SCOPUS, JCR.
54. M.H. Jalaei, A. Ghorbanpour Arani, H. Nguyen, & Xuan, Investigation of thermal and magnetic field effects on the dynamic instability of FG Timoshenko nanobeam employing nonlocal strain gradient theory, INT J MECH SCI, Vol. 161, pp. 105043, 2019 07 23, SCOPUS, JCR.
55. A. Ghorbanpour Arani, T. Soleymani, Size-dependent vibration analysis of an axially moving sandwich beam with MR core and axially FGM faces layers in yawed supersonic airflow, European Journal of Mechanics / A Solids, Vol. 77, pp. 103792, 2019 05 23, SCOPUS, ISI-Listed.
56. A. Ghorbanpour Arani, T. Soleymani, Size-dependent vibration analysis of an axially moving sandwich beam with MR core and axially FGM faces layers in yawed supersonic airflow, EUR J MECH A-SOLID, Vol. 77, pp. 103792, 2019 05 23, SCOPUS, ISI-Listed.

57. A. Ghorbanpour Arani, H. Khani Arani, Z. Khoddami Maraghi, Size-dependent in vibration analysis of magnetostrictive sandwich composite micro-plate in magnetic field using modified couple stress theory, *J SANDW STRUCT MATER*, Vol. 21, pp. 580, 2019 03 01, SCOPUS, ISI-Listed.
58. M. Arefi, M. Pourjamshidian, A. Ghorbanpour Arani, Timon Rabczuk, Influence of flexoelectric, small-scale, surface and residual stress on the nonlinear vibration of sigmoid, exponential and power-law FG Timoshenko nano-beams, *Journal of Low Frequency Noise, Vibration and Active Control*, Vol. 38, pp. 122, 2019 03 01, SCOPUS, ISI-Listed.
59. A. Ghorbanpour Arani, H. Khani Arani, Z. Khoddami Maraghi, Size-dependent in vibration analysis of magnetostrictive sandwich composite micro-plate in magnetic field using modified couple stress theory, *Journal of Sandwich Structures & Materials*, Vol. 21, pp. 580, 2019 03 01, SCOPUS, ISI-Listed.
60. A. Ghorbanpour Arani, M. Pourjamshidian, M. Arefi, M.R. Ghorbanpour Arani, Application of nonlocal elasticity theory on the wave propagation of flexoelectric functionally graded (FG) timoshenko nano beams considering surface effects and residual surface stress, *SMART STRUCT SYST*, Vol. 23, pp. 141, 2019 02 25, SCOPUS, ISI-Listed.
61. A. Ghorbanpour Arani, F. Kiani, H. Afshari, Free and forced vibration analysis of laminated functionally graded CNTreinforced composite cylindrical panels, *Journal of Sandwich Structures & Materials*, pp. 1, 2019 02 19, SCOPUS, ISI-Listed.
62. A. Ghorbanpour Arani, F. Kiani, H. Afshari, Free and forced vibration analysis of laminated functionally graded CNTreinforced composite cylindrical panels, *J SANDW STRUCT MATER*, pp. 1, 2019 02 19, SCOPUS, ISI-Listed.
63. A. Ghorbanpour Arani, M. Pourjamshidian, M. Arefi, M.R. Ghorbanpour Arani, Thermal, electrical and mechanical buckling loads of sandwich nano beams made of FG CNTRC resting on Pasternak's foundation based on higher order shear deformation theory, *STRUCT ENG MECH*, Vol. 69, pp. 439, 2019 01 10, SCOPUS, ISI-Listed.
64. A. Ghorbanpour Arani, T. Soleymani, Size-dependent vibration analysis of a rotating MR sandwich beam with varying cross section in supersonic airflow, *International Journal of Mechanical Sciences*, Vol. 151, pp. 288, 2018 11 26, SCOPUS, ISI-Listed.
65. A. Ghorbanpour Arani, T. Soleymani, Size-dependent vibration analysis of a rotating MR sandwich beam with varying cross section in supersonic airflow, *INT J MECH SCI*, Vol. 151, pp. 288, 2018 11 26, SCOPUS, ISI-Listed.
66. M.H. Jalaei, A. Ghorbanpour Arani, H. Tourang, On the dynamic stability of viscoelastic graphene sheets, *INT J ENG SCI*, 2018 11 11, ISI, SCOPUS.
67. M.H. Jalaei, A. Ghorbanpour Arani, H. Tourang, On the dynamic stability of viscoelastic graphene sheets, *INT J ENG SCI*, Vol. 132, pp. 16, 2018 08 04, SCOPUS, ISI-Listed.
68. A. Ghorbanpour Arani, F. Kiani, Nonlinear free and forced vibration analysis of microbeams resting on the nonlinear orthotropic visco-Pasternak foundation with different boundary conditions, *STEEL COMPOS STRUCT*, Vol. 28, pp. 149, 2018 07 25, SCOPUS, JCR.
69. A. Ghorbanpour Arani, F. Kiani, Nonlinear free and forced vibration analysis of microbeams resting on the nonlinear orthotropic visco-Pasternak foundation with different boundary conditions, *STEEL COMPOS STRUCT*, Vol. 28, pp. 149, 2018 05 24, SCOPUS, ISI-Listed.
70. A. Ghorbanpour Arani, F. Kiani, Nonlinear free and forced vibration analysis of microbeams resting on the nonlinear orthotropic visco-Pasternak foundation with different boundary conditions, *Steel and Composite Structures*, Vol. 28, pp. 149, 2018 05 24, SCOPUS, ISI-Listed.
71. A. Ghorbanpour Arani, M. Abdollahian, Transient response of FG higher-order nanobeams integrated with magnetostrictive layers using modified couple stress theory, *MECH ADV MATER STRUC*, Vol. 26, pp. 359, 2017 12 05, SCOPUS, ISI-Listed.
72. A. Ghorbanpour Arani, M. Abdollahian, Transient response of FG higher-order nanobeams integrated with magnetostrictive layers using modified couple stress theory, *Mechanics of Advanced Materials and Structures*, Vol. 26, pp. 359, 2017 12 05, SCOPUS, ISI-Listed.
73. A. Ghorbanpour Arani, Z. khoddami Maraghi, M. Ferasatmanesh, Theoretical investigation on

- vibration frequency of sandwich plate with PFRC core and piezomagnetic face sheets under variable in plane load, *Structural Engineering and Mechanics*, Vol. 63, pp. 65, 2017 01 25, SCOPUS , ISI-Listed.
74. A. Ghorbanpour Arani, Z. khoddami Maraghi, M. Ferasatmanesh, Theoretical investigation on vibration frequency of sandwich plate with PFRC core and piezomagnetic face sheets under variable in plane load, *STRUCT ENG MECH*, Vol. 63, pp. 65, 2017 01 25, SCOPUS , ISI-Listed.
75. علیرضا رنجبر طره، علی قربانپور، بهزاد سلطانی، Double-walled carbon nanotube with surrounding elastic medium under axial pressure, *PHYSICA E*, Vol. 39, pp. 230, 2007 09 01, SCOPUS , JCR.
76. A. Ghorbanpour Arani, M. Pourjamshidian, M. Arefi, M.R. Ghorbanpour Arani, Application of nonlocal elasticity theory on the wave propagation of flexoelectric functionally graded (FG) Timoshenko nanobeams considering surface effects and residual surface stress, *SMART STRUCT SYST*, 0000 00 00, SCOPUS , ISI-Listed.