Curriculum Vitae
HAMID M. SEDIGHI

ASSOCIATE PROFESSOR, SHAHID CHAMRAN UNIVERSITY OF AHVAZ

Personal Data:

Born: 13 May 1983 in Shiraz, Iran
Address: Associate Professor, Shahid Chamran University of Ahvaz,
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ResearcherID Profile:

https://publons.com/researcher/1242834/hamid-m-sedighi

Researchgate Profile:

https://www.researchgate.net/profile/Hamid_M_Sedighi3

Scopus Profile:

https://www.scopus.com/authid/detail.uri?authorId=54783478200

Education:

Jan 2008 – Jun 2013	**Shahid Chamran University of Ahvaz** PH.D., Chaos theory, Applied Mathematics, MEMS/NEMS, Nonlinear Vibration Ahvaz, Iran
Oct 2005 – Oct 2007	**Shahid Chamran University of Ahvaz** MS, Vehicle Dynamics Ahvaz, Khuzestan, Iran
Oct 2001 – Sep 2005	**Shiraz University** BSc, Solid Mechanics Shiraz, Iran

Achievements and Awards:

Nov 2021	Award: The best researcher award at Shahid Chamran University, Research Week, 2021
Sep 2021	Named among the World's Top Highly Cited Researchers (Top 1%) by Web of Science, 2021 (From Essential Science Indicators).
Nov 2021	Named among the World's Top (Most-cited) 2% Scientists by Stanford University, 2021.
Nov 2020	Named among the World's Top (Most-cited) 2% Scientists by Stanford University, 2020.
Dec 2016	Award: The best researcher award at Khoozestan Province, Research Week, 2017
Dec 2017	Establishing and Supplying necessary materials for "Dynamics of Machinery and Vibrations Laboratory" (Shohaday-e-Hoveizeh University of Technology)
Nov 2016	Award: The best researcher award at Shahid Chamran University, Research Week, 2016
Nov 2015	Award: The best young researcher award at Shahid Chamran University, Research Week, 2015
Dec 2013	Award: First Rank in the PhD Graduates of Khoozestan Province, Research Week
Dec 2013	Award: First Rank in the PhD Graduates of Shahid Chamran University, Research Week
May 2013	Award: First Rank, Ph.D. Student of Mechanical Engineering, Shahid Chamran University of Ahvaz
Sep 2007	Award: First Rank, Postgraduate Student of Mechanical Engineering, Shahid Chamran University of Ahvaz
Sep 2005	Award: Outstanding Undergraduate Student of Mechanical Engineering, Shiraz University

Editorial Experiences:

- Associate Editor of " SIMULATION " (SCI-Indexed)
- Editorial Board Member of " International Journal of Applied Mechanics " (SCI-Indexed)
- Associate Editor of " Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science " (SCI-Indexed) (2022-present)
- Associate Editor of " Computer Modeling in Engineering & Sciences " (SCI-Indexed) (2022-2027)
- Editorial Board Member of " Advances in Nano Research " (SCI-Indexed) (2022-2024)
- Editorial Board Member of " IET Nanobiotechnology " (SCI-Indexed)
- Editorial Board Member of " Microsystem Technologies " (SCI-Indexed) (2016-2021)
- Associate Editor of " Metrology and Measurement Systems " (SCI-Indexed)
- Associate Editor of "IEEE Access" (SCI-Indexed) (2019-2021)
- Editorial Board Member of " Microelectronics International " (SCI-Indexed)
- Editorial Board Member of "International Journal of Simulation Modelling" (SCI-Indexed)
- Editorial Board Member of "Mathematical Methods in Applied Sciences" (SCI-Indexed)
- Editorial Advisory Board of "Facta Universitatis, Series: Mechanical Engineering" (SCI-Indexed)

- Editorial Board of " Nonlinear Engineering " (ESCI-Indexed)
- Associate Editor of " The Journal of Engineering (JoE) " (ESCI-Indexed)
- Associate Editor of " Nanosystems: Physics, Chemistry, Mathematics " (ESCI-Indexed)
- Editorial Board of "Mathematical Modelling and Control" in AIMS Press (Newly Launched)
- Editorial Board of "Reports in Mechanical Engineering" in AIMS Press (Newly Launched)
- Editorial Board Member of " Journal Nano- and Electronic Physics" (Scopus Indexed)
- Editorial Board Member of "Journal of Vibrations in Physical Systems" (Scopus Indexed)
- Associate Editor of "Journal of Applied and Computational Mechanics"
- Editorial Board Member of "Advanced Engineering Forum"
- Managing Editor of "Journal of Applied and Computational Mechanics"

Scientific Committee of International Conferences:

- Scientific Committee Member of "The 1st International Conference on Mechanics of Advanced Materials and Equipment (MAME 2018)", (2018), IRAN.
- Scientific Committee Member of "The World Symposium on Civil Engineering (WSCE 2017)" (2016-2017)
- Scientific Committee Member of "INTERNATIONAL CONFERENCE OF APPLIED MECHANICAL ENGINEERING-IRAN 2016" (2016), IRAN.
- Scientific Committee Member of "1st National Conference of Applied Mechanical Engineering -Iran 2016" (2016), IRAN.
- Scientific Committee Member of "International Conference on Robotic Engineering & Automation Technology", (2017), UAE.

Scientific Memberships:

- Member, American Society of Mechanical Engineers, ASME

Research Experiences:

Nov 2015 – Nov 2015	**Chairman of Research and Technology Week** Shohadaye Hoveizeh University of Technology, Dasht-e-Azadegan, Iran
Sep 2015 – present	**Director of Research Affairs** Shohadaye Hoveizeh University of Technology, Department of Mechanical Engineering Dasht-e-Azadegan, Iran
Oct 2014 – Sep 2015	**Head of Department** Shohadaye Hoveizeh University of Technology, Department of Mechanical Engineering Dasht-e-Azadegan, Iran

Oct 2014 – present	**Professor (Assistant)** Shohadaye Hoveizeh University of Technology, Department of Mechanical Engineering Dasht-e-Azadegan, Iran
Jan 2013 – present	**Professor (Assistant)** Shahid Chamran University of Ahvaz, Department of Mechanical Engineering Ahvaz, Iran
Jan 2008 – Jan 2014	**Professor (Assistant)** Islamic Azad University of Ahvaz, Department of Mechanical Engineering Ahvāz, Iran

Research Areas:

- Metamaterials
- MEMS/NEMS
- IsoGeometric Analysis
- Machine Learning-based Solutions
- Nonlinear Vibrations and Chaos
- Optical Physics
- Piezo/Magneto Materials
- Dynamics Instability
- System Dynamics
- Applied Mathematics
- Functionally Graded Materials

Journal Referee:

ASME Journal of Vibration and Acoustics,

International Journal of Mechanical Sciences,

IEEE Journal of Microelectromechanical Systems,

ASCE Journal of Aerospace Engineering,

Physics Letters A,

Computer Methods in Applied Mechanics and Engineering,

Composites Part B Engineering,

International Journal of Heat and Mass Transfer,

Archives of Civil and Mechanical Engineering,

Micro & Nano Letters,

European Physical Journal Plus,

International Journal of Applied Mechanics,

Microsystem Technologies,

Mathematical and Computer Modelling of Dynamical Systems,

Analog Integrated Circuits and Signal Processing,

Mechanics of Advanced Materials and Structures,

ISA Transactions,

Indian Journal of Physics,

Chinese Journal of Physics,

Applied and Computational Mathematics,

Microelectronics International,

IEEE Access,

Journal of Vibration and Control,

Journal of Low Frequency Noise Vibration and Active Control,

Vehicle System Dynamics,

Physica B: Condensed Matter,

International Journal of Mechanics and Materials in Design,

Advances in Applied Mathematics and Mechanics,

Journal of Modares Mechanical Engineering,

Mechanics Based Design of Structures and Machines,

Steel and Composite Structures,

Scientia Iranica,

Strojniški vestnik - Journal of Mechanical Engineering,

Iranian Journal of Science and Technology, Transactions of Mechanical Engineering,

Journal of Low Frequency Noise Vibration and Active Control,

Journal of Theoretical and Applied Mechanics,

Latin American Journal of Solids and Structures,

Physica E Low-dimensional Systems and Nanostructures,

Nanomaterials and Nanotechnology,

Neural Computing and Applications,

International Journal of Non-Linear Mechanics,

International Journal of Engineering,

Journal of Vibroengineering,

Shock and Vibration,

Frontiers of Structural and Civil Engineering,

International journal of physical sciences,

Journal of Mechanical Science and Technology,

Advances in Mechanical Engineering,

International Journal of Nonlinear Sciences and Numerical Simulation,

Journal of Engineering Science and Technology,

Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science,

Journal of Theoretical and Applied Vibration and Acoustics (TAVA),

Journal of Low Frequency Noise, Vibration and Control

Mathematical Methods in the Applied Science

Steel & Composite structures

Advances in Nano Research

Engineering with Computers

Archive of Applied Mechanics

Nonlinear Dynamics

IEEE Access

Proceedings of the Institution of Mechanical Engineers

Structural Engineering and Mechanics

Applied Physics A

Results in Physics

Complexity

Iranian Journal of Science and Technology

Journal of Vibration and Control

Acta Mechanica

AEJ - Alexandria Engineering Journal

Transport in Porous Media

Journal of Computational Design and Engineering

Journal of Taibah University for Science

Journal of the Brazilian Society of Mechanical Engineers

Mathematical Sciences

Numerical Methods for Partial Different...

Arabian Journal of Geosciences

Advances in Concrete Construction

Journal of Engineering Science and Technology

Mechanics Based Design of Structures and Machines

Mathematical Problems in Engineering

Microsystem Technologies

International Nano Letters

TWMS Journal of Pure and Applied Matematics

Computers and Concrete

ZAMM - Journal of Applied Mathematic...

International Journal of Modern Physic...

International Communications in Heat ...

Thin-Walled Structures

Journal of Thermal Engineering

Mechanics of Advanced Composite Structures

Structural Health Monitoring

Journal of Mathematics

International Journal of Quantum Chem...

Surfaces and Interfaces

IEEE Transactions on Neural Networks ...

ISA Transactions

Communications in Nonlinear Science ...

Walailak Journal of Science and Technology

Journal of Mechanics of Materials and ...

Partial Differential Equations in Applied Mathe...

International Journal of Advanced Design and ...

Mechanical Engineering

International Journal of Non-Linear Me...

Journal of Theoretical and Applied Mec...

Smart Structures and Systems

Journal of Stress Analysis

Physical Mesomechanics

Facta Universitatis series Mechanical E...

AUT Journal of Mechanical Engineering

International Journal of Computational ...

Geomechanics and Engineering

International Journal of Mechanics and ...

Fractals

Discontinuity, Nonlinearity, and Complexity

Intelligent Automation and Soft Compu...

Saudi Journal of Biological Sciences

International Journal of Applied Mecha...

Facta Universitatis, Series: Mathematic...

Arab Journal of Basic and Applied Sciences

Frontiers in Physics

International Journal of Structural Stabi...

Journal of Pipeline Systems Engineerin...

The European Physical Journal Plus

Journal Publications:

1. Modeling photoexcited carrier interactions in a solid sphere of a semiconductor material based on the photothermal Moore-Gibson-Thompson model Published: Oct 2021 in Applied Physics A Solids and Surfaces DOI: 10.1007/S00339-021-04971-2
2. Advanced thermoelastic heat conduction model with two fractional parameters and phase-lags
3. Published: Oct 2021 in Physica Scripta DOI: 10.1088/1402-4896/AC2F80
4. Effective numerical technique applied for Burgers' equation of (1+1)-, (2+1)dimensional, and coupled forms Published: Sep 2021 in Mathematical Methods in the Applied Sciences DOI: 10.1002/MMA.7395
5. Modeling and analysis of novel coupled magneto-electro-aeroelastic continuous system for flutter-based energy harvesting system Published: Sep 2021 in Energy DOI: 10.1016/J.ENERGY.2021.120742
6. Nonlinear bending, buckling and vibration of functionally graded nonlocal strain gradient nanobeams resting on an elastic foundation Published: Aug 2021 in Journal of Mechanics of Materials and Structures DOI: 10.2140/JOMMS.2021.16.327
7. A new insight into the interaction of thermoelasticity with mass diffusion for a half-space in the context of Moore-Gibson-Thompson thermodiffusion theory Published: Aug 2021 in Applied Physics A Solids and Surfaces DOI: 10.1007/S00339-021-04725-0

8. The Effect of Excess Carrier on a Semiconducting Semi-Infinite Medium Subject to a Normal Force by Means of Green and Naghdi Approach Published: Jul 2021 in Silicon DOI: 10.1007/S12633-021-01289-9

9. PASSIVE ATMOSPHERIC WATER HARVESTING UTILIZING AN ANCIENT CHINESE INK SLAB Published: Jul 2021 in Facta Universitatis series Mechanical Engineering DOI: 10.22190/FUME201203001H

10. HAMILTONIAN-BASED FREQUENCY-AMPLITUDE FORMULATION FOR NONLINEAR OSCILLATORS Published: Jul 2021 in Facta Universitatis series Mechanical Engineering DOI: 10.22190/FUME201205002H

11. Analytical approach for the temperature distribution in the casting-mould heterogeneous system Published: Jul 2021 in International Journal of Numerical Methods for Heat & Fluid Flow DOI: 10.1108/HFF-03-2021-0180

12. A new insight into the interaction of thermoelasticity with mass diffusion for a half-space in the context of Moore‑Gibson‑Thompson thermodiffusion theory Published: Jul 2021 in Applied Physics A Solids and Surfaces DOI: 10.1007/S00339-021-04725-0

13. Parametric study of a novel magneto-electro-aeroelastic energy harvesting system Published: Jun 2021 in Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications DOI: 10.1177/14644207211020776

14. A Novel Elastic Metamaterial with Multiple Resonators for Vibration Suppression Published: Jun 2021 in Advances in Condensed Matter Physics DOI: 10.1155/2021/3914210

15. Numerical simulation of second-order initial-value problems using a new class of variable coefficients and two-step semi-hybrid methods Published: May 2021 in SIMULATION: Transactions of The Society for Modeling and Simulation International DOI: 10.1177/0037549720980824

16. The effect of variable properties and rotation in a visco-thermoelastic orthotropic annular cylinder under the Moore-Gibson-Thompson heat conduction model Published: May 2021 in Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications DOI: 10.1177/1464420720985899

17. Qualitatively Stable Nonstandard Finite Difference Scheme for Numerical Solution of the Nonlinear Black-Scholes Equation Published: May 2021 in Journal of Mathematics DOI: 10.1155/2021/6679484

18. Nonlinear vibration and stability of FG nanotubes conveying fluid via nonlocal strain gradient theory Published: Apr 2021 in Structural Engineering and Mechanics DOI: 10.12989/SEM.2021.78.1.103

19. A Singularly P-Stable Multi-Derivative Predictor Method for the Numerical Solution of Second-Order Ordinary Differential Equations Published: Apr 2021 in Mathematics DOI: 10.3390/MATH9080806

20. Analysis of time-fractional fuzzy vibration equation of large membranes using double parametric based Residual power series method Published: Apr 2021 in ZAMM - Journal of Applied Mathematics and Mechanics / Zeitschrift für Angewandte Mathematik und Mechanik DOI: 10.1002/ZAMM.202000165

21. Computational analysis of an infinite magneto-thermoelastic solid periodically dispersed with varying heat flow based on non-local Moore-Gibson-Thompson approach Published: Mar 2021 in Continuum Mechanics and Thermodynamics DOI: 10.1007/S00161-021-00998-1

22. Metamaterials and their applications: An overview Published: Mar 2021 in Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications DOI: 10.1177/1464420721995858

23. Higher order and scale-dependent micro-inertia effect on the longitudinal dispersion based on the modified couple stress theory Published: Feb 2021 in Journal of Computational Design and Engineering DOI: 10.1093/JCDE/QWAA070

24. Modeling and analysis of a coupled novel nonlinear magneto-electroaeroelastic lumped model for a flutter based energy harvesting system Published: Feb 2021 in Physica Scripta DOI: 10.1088/1402-4896/ABCDC7

25. Vibration analysis of functionally graded microbeam under initial stress via a generalized thermoelastic model with dual-phase lags Published: Jan 2021 in Ingenieur Archiv DOI: 10.1007/S00419-020-01873-2

26. On the wave solutions of time-fractional Sawada-Kotera-Ito equation arising in shallow water Published: Jan 2021 in Mathematical Methods in the Applied Sciences DOI: 10.1002/MMA.6763

27. On the wave solutions of time-fractional Sawada-Kotera-Ito equation arising in shallow water Published: Jan 2021 in Mathematical Methods in the Applied Sciences DOI: 10.1002/MMA.6763

28. Difference equation vs differential equation on different scales Published: Jan 2021 in International Journal of Numerical Methods for Heat & Fluid Flow DOI: 10.1108/HFF-03-2020-0178

29. A rational beam-elastic substrate model with incorporation of beam-bulk nonlocality and surface-free energy Published: Jan 2021 in The European Physical Journal Plus DOI: 10.1140/EPJP/S13360-020-00992-7

30. TEMPERATURE-DEPENDENT PHYSICAL CHARACTERISTICS OF THE ROTATING NONLOCAL NANOBEAMS SUBJECT TO A VARYING HEAT SOURCE AND A DYNAMIC LOAD Published: 2021 in Facta Universitatis, Series: Mechanical Engineering

31. Qualitatively Stable Nonstandard Finite Difference Scheme for Numerical Solution of the Nonlinear Black--Scholes Equation Published: 2021 in Journal of Mathematics

32. Evans model for dynamic economics revised Published: 2021 in AIMS Mathematics DOI: 10.3934/MATH.2021534

33. Effective numerical technique applied for Burgers' equation of (1+ 1)-,(2+ 1)dimensional, and coupled forms Published: 2021 in Mathematical Methods in the Applied Sciences

34. A new insight into the interaction of thermoelasticity with mass diffusion for a half-space in the context of Moore--Gibson--Thompson thermodiffusion theory Published: 2021 in Applied Physics A

35. Computational analysis of an infinite magneto-thermoelastic solid periodically dispersed with varying heat flow based on non-local Moore--Gibson-Thompson approach Published: 2021 in Continuum Mechanics and Thermodynamics

36. Free vibration analysis of perforated plate using isogeometric analysis Published: 2021 in Journal of Mechanical Engineering The effect of variable properties and rotation in a visco-thermoelastic

37. orthotropic annular cylinder under the Moore--Gibson--Thompson heat conduction model Published: 2021 in Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications

38. Investigating the Static Pull-in Instability of Biosensors Using Modified Adomian Decomposition Method (MAD) Published: 2021 in Journal of Mechanical Engineering

39. Buckling analysis of a non-concentric double-walled carbon nanotube Published: Dec 2020 in Acta Mechanica DOI: 10.1007/S00707-020-02784-7

40. Dynamics of nonlocal thick nano-bars Published: Nov 2020 in Engineering with Computers DOI: 10.1007/S00366-020-01216-3

41. Nonlocal vibration of carbon/boron-nitride nano-hetero-structure in thermal and magnetic fields by means of nonlinear finite element method Published: Oct 2020 in Journal of Computational Design and Engineering DOI: 10.1093/JCDE/QWAA041

42. On the nonlinear vibration and static deflection problems of actuated hybrid nanotubes based on the stress-driven nonlocal integral elasticity Published: Sep 2020 in Mechanics of Materials DOI: 10.1016/J.MECHMAT.2020.103532

43. Instability analysis of bi-axial micro-scanner under electromagnetic actuation including small scale and damping effects Published: Aug 2020 in Microsystem Technologies DOI: 10.1007/S00542-020-04802-Z

44. Velocity gradient elasticity for nonlinear vibration of carbon nanotube resonators Published: Aug 2020 in Frontiers of Structural and Civil Engineering DOI: 10.1007/S11709-020-0672-X

45. Experimental and theoretical investigations of the lateral vibrations of an unbalanced Jeffcott rotor Published: Aug 2020 in Frontiers of Structural and Civil Engineering DOI: 10.1007/S11709-020-0647-Y

46. Analytical investigation of air squeeze film damping for bi-axial micro-scanner using eigenfunction expansion method Published: Jul 2020 in Mathematical Methods in the Applied Sciences DOI: 10.1002/MMA.6658

47. Stress-driven nonlocal elasticity for the instability analysis of fluid-conveying C-BN hybrid-nanotube in a magneto-thermal environment Published: Jun 2020 in Physica Scripta DOI: 10.1088/1402-4896/AB793F

48. Hygro-Magnetic Vibration of the Single-Walled Carbon Nanotube with Nonlinear Temperature Distribution Based on a Modified Beam Theory and Nonlocal Strain Gradient Model Published: Jun 2020 in International Journal of Applied Mechanics DOI: 10.1142/S1758825120500544

49. Stress-driven nonlocal elasticity for nonlinear vibration characteristics of carbon/boron-nitride hetero-nanotube subject to magneto-thermal environment Published: May 2020 in Physica Scripta

50. DOI: 10.1088/1402-4896/AB7A38

51. IMPLEMENTATION OF HERMITE-RITZ METHOD AND NAVIER'S TECHNIQUE FOR VIBRATION OF FUNCTIONALLY GRADED POROUS NANOBEAM EMBEDDED IN WINKLER-PASTERNAK ELASTIC FOUNDATION USING BIHELMHOLTZ NONLOCAL ELASTICITY Published: May 2020 in Journal of Mechanics of Materials and Structures DOI: 10.2140/JOMMS.2020.15.405

52. Stability and Dynamics of Viscoelastic Moving Rayleigh Beams with an Asymmetrical Distribution of Material Parameters Published: Apr 2020 in Symmetry DOI: 10.3390/SYM12040586

53. On the Vibrations and Stability of Moving Viscoelastic Axially Functionally Graded Nanobeams Published: Apr 2020 in Materials DOI: 10.3390/MA13071707

54. Fangzhu((sic)(sic)): An ancient Chinese nanotechnology for water collection from air: History, mathematical insight, promises, and challenges Published: Apr 2020 in Mathematical Methods in the Applied Sciences DOI: 10.1002/MMA.6384

55. Aerodynamic performance enhancement of horizontal axis wind turbines by dimples on blades: Numerical investigation Published: Mar 2020 in Energy DOI: 10.1016/J.ENERGY.2020.117056

56. Physics of rack-and-pinion-inspired metamaterials with rotational resonators for broadband vibration suppression Published: Feb 2020 in The European Physical Journal Plus DOI: 10.1140/EPJP/S13360-020-00286-Y

57. Divergence and flutter instability of magneto-thermo-elastic C-BN heteronanotubes conveying fluid Published: Jan 2020 in Acta Mechanica Sinica DOI: 10.1007/S10409-019-00924-4

58. Implementation of Hermite--Ritz method and Navier's technique for vibration of functionally graded porous nanobeam embedded in Winkler−Pasternak elastic foundation using bi-Helmholtz nonlocal elasticity Published: 2020 in Journal of Mechanics of Materials and Structures

59. Forward and backward whirling of a spinning nanotube nano-rotor assuming gyroscopic effects Published: 2020 in Advances in Nano Research DOI: 10.12989/ANR.2020.8.3.245

60. Comparative study of the flexoelectricity effect with a highly/weakly interface in distinct piezoelectric materials (PZT-2, PZT-4, PZT-5H, LiNbO3, BaTiO3) Published: Dec 2019 in Waves in Random and Complex Media DOI: 10.1080/17455030.2019.1699676

61. Static response and free vibration of MEMS arches assuming out-of-plane actuation pattern Published: Apr 2019 in International Journal of Non-Linear Mechanics DOI: 10.1016/J.IJNONLINMEC.2018.12.011

62. Numerical analysis of the counter-intuitive dynamic behavior of the elasticplastic pin-ended beams under impulsive loading with regard to linear hardening effects Published: Dec 2018 in Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science DOI: 10.1177/0954406217753456

63. Lamb wave extraction of dispersion curves in micro/nano-plates using couple stress theories Published: 2018 in Waves in Random and Complex Media DOI: 10.1080/17455030.2017.1308582

64. Mehdi Shams Alizadeh, Kourosh H Shirazi, Shapour Moradi, Hamid M Sedighi, Numerical analysis of the counter-intuitive dynamic behavior of the elastic-plastic pin-ended beams under impulsive loading with regarding the linear hardening effects, Proceedings of the Institution of Mechanical Engineers Part C Journal of Mechanical Engineering Science, 2018, in press.

65. MeisamMoory-Shirbani, Hamid M.Sedighi, Hassen M.Ouakad, FehmiNajar, Experimental and Mathematical Analysis of a Piezoelectrically Actuated Multilayered Imperfect Microbeam Subjected to Applied Electric Potential, Composite Structures, 184, 2018, 950-960.

66. Hamid Mohamad-Sedighi, Ali Koochi, Maryam Keivani, Mohamadreza Abadyan: *Microstructure-dependent dynamic behavior of torsional nano-varactor*. Measurement 07/2017; 111., DOI:10.1016/j.measurement.2017.07.011.

67. Reza Bavi, Ali Hajnayeb, Hamid M. Sedighi: *Comments on "Nonlinear phenomena, bifurcations, and routes to chaos in an asymmetrically supported rotor–stator contact system" by Philip Varney and Itzhak Green [J. Sound Vib. 336 (2015) 207–226]*. Journal of Sound and Vibration 08/2017.

68. Hassen M OUAKAD, Hamid M Sedighi, Mohammad I YOUNIS, *One-to-One and Three-to-One Internal Resonances in MEMS Shallow Arches*, Journal of Computational and Nonlinear Dynamics, 2017.

69. Mehdi Shams Alizadeh, Kourosh Heidari Shirazi, Shapour Moradi, Hamid Mohammad Sedighi, *Numerical analysis of the counterintuitive dynamic behavior of the elastic-plastic fully-clamped beams under impulsive loading*. Mechanika 03/2017; 23(1), DOI:10.5755/j01.mech.23.1.17677

70. Behnam Ghodrati, Amin Yaghootian, Afshin Ghanbar Zadeh, Hamid Mohammad-Sedighi, *Lamb Wave Extraction of Dispersion Curves in Micro/Nano Plates Using Couple Stress Theories*. Waves in Random and Complex Media 01/2017;

71. Davood Salamat, Hamid M. Sedighi: *The effect of small scale on the vibrational behavior of single-walled carbon nanotubes with a moving nanoparticle*. Journal of Applied and Computational Mechanics 09/2017; 3(3):208-217., DOI:10.22055/jacm.2017.12740.

72. M. Moory Shirbani, M. Shishesaz, H.M. Sedighi, A. Hajnayeb, *Coupled Magneto-Electro-Mechanical Lumped Parameter Model for a Novel Vibration-Based Magneto-Electro-Elastic Energy Harvesting System*, Physica E: Low-dimensional Systems and Nanostructures, 03/2017

73. Hamid M Sedighi, Hassen M. OUAKAD, Moosa KHOORAN, *INSTABILITY CHARACTERISTICS OF FREE-STANDING NANOWIRES BASED ON THE STRAIN GRADIENT THEORY WITH THE CONSIDERATION OF CASIMIR ATTRACTION AND SURFACE EFFECTS*, Metrology and Measurement Systems, 2017

74. Meisam Moory Shirbani, Mohammad Shishesaz, Hamid Mohammad-Sedighi, Ali Hajnayeb, *Parametric modeling of a novel longitudinal vibration-based energy harvester using magneto-electro-elastic materials*, Microsystem Technologies, 2017

75. HASSEN M. OUAKAD, Hamid M. Sedighi: *Rippling Effect on the Structural Response of Electrostatically Actuated Single-walled Carbon Nanotube based NEMS Actuators*. International Journal of Non-Linear Mechanics 01/2017;

76. Hamid M. Sedighi, Meisam Moory-Shirbani, Ali Koochi, M. Abadyan: *Modeling the effect of size phenomenon on the dynamic response and stability of torsional NEMS scanner*. Journal of Mechanical Science and Technology 01/2017;

77. U. Filobello-Nino, H. Vazquez-Leal, M. M. Rashidi, H. M. Sedighi, A. Perez-Sesma, M. Sandoval-Hernandez, A. Sarmiento-Reyes, A. D. Contreras-Hernandez, D. Pereyra-Diaz, C. Hoyos-Reyes, V. M. Jimenez-Fernandez, J. Huerta-Chua, F. Castro-Gonzalez, J. R. Laguna-Camacho: *Laplace transform homotopy perturbation method for the approximation of variational problems*. SpringerPlus 12/2016; 5(1). DOI:10.1186/s40064-016-1755-y

78. Hamid M. Sedighi, Amin Yaghootian: *Dynamic instability of vibrating carbon nanotubes near small layers of graphite sheets based on nonlocal continuum elasticity*. Journal of Applied Mechanics and Technical Physics 05/2016; 57(1):90-100. DOI:10.1134/S0021894416010107

79. Maryam Keivani, Ali Koochi, Hamid M. Sedighi, Ahmadreza Abadian, Mohamadreza Abadyan: *A Nonlinear Model for Incorporating the Coupled Effects of Surface Energy and Microstructure on the Electromechanical Stability of NEMS*. ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING 04/2016; DOI:10.1007/s13369-016-2135-1

80. Hamid M. Sedighi, Ashkan Sheikhanzadeh: *Static and dynamic pull-in instability of nano-beams resting on elastic foundation based on the nonlocal elasticity theory*. Chinese Journal of Mechanical Engineering 04/2016;

81. Hamid M. Sedighi, Nazanin Farjam: *A modified model for dynamic instability of CNT based actuators by considering rippling deformation, tip-charge concentration and Casimir attraction*. Microsystem Technologies 04/2016; DOI:10.1007/s00542-016-2956-6

82. Hamid M. Sedighi, Alireza Bozorgmehri: *Nonlinear vibration and adhesion instability of Casimir-induced nonlocal nanowires with the consideration of surface energy*. Journal of the Brazilian Society of Mechanical Sciences and Engineering 03/2016; DOI:10.1007/s40430-016-0530-x

83. Ramirez-Pinero, H. Vazquez-Leal, V. M. Jimenez-Fernandez, H.M. Sedighi, M.M. Rashidi, U. Filobello-Nino, R. Castaneda-Sheissa, J. Huerta-Chua, L.A. Sarmiento-Reyes, J.R. Laguna-Camacho, F. Castro-Gonzalez: Speed-up Hyperspheres Homotopic Path Tracking Algorithm for PWL Circuits Simulations. SpringerPlus 01/2016;

84. Abbas Kaghazian, Hamidreza Foruzande, Ali Hajnayeb, Hamid M Sedighi: *Nonlinear free vibrations analysis of a piezoelectric bimorph nano actuator using nonlocal elasticity theory*.

85. Ali Koochi, Abolfazl Kanani, Mohammad R Mardaneh, Hamid M Sedighi, Mohamadreza Abadyan, Maryam Keivani: *Using strain gradient elasticity in conjunction with Gurtin-Murdoch theory for modeling the coupled effects of surface and size phenomena on the instability of narrow nano-switch*. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science 03/2016; DOI:10.1177/0954406216642475

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