

**In the name of God**  
**(Last updated: February, 2020)**

➤ **Personal information**

Given name: Reza,  
Family name: Nazemnezhad,  
Date of birth: July 24, 1985,  
Nationality: Islamic Republic of Iran,  
Marital status: Married,  
Address: School of Engineering, Damghan University, Damghan, Iran  
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➤ **Academic positions**

Associate Professor (2019-Present)  
Assistant Professor (2015-2019)

➤ **University degrees**

Ph.D. (Mechanical Engineering), Iran University of Science and Technology, Tehran, Iran  
(2011-2015)  
M.Sc. (Mechanical Engineering, Applied Mechanics), Iran University of Science and  
Technology, Tehran, Iran (2007-2009)  
B.Sc. (Mechanical Engineering, Solid Mechanics), Shahrood University of Technology,  
Shahrood, Iran (2003-2007)

➤ **Research Interests**

1. Vibration of linear and nonlinear systems (macro and nano scales)
2. Vibration of beams, plates, and shells (macro and nano scales)
3. Nano-mechanics
4. Residual stress
5. Molecular dynamics simulation of carbon nanotubes and graphenes
6. Linear and nonlinear partial differential equations corresponding to mechanical systems
7. Numerical methods for solution of differential equations

➤ **Awards**

1. “Dr. Kazemi Aashtiani” award, National Elites Foundation, Iran (2016)
2. Top graduate qualification, National Elites Foundation, Iran (2016)
3. Distinguished researcher of the School of Engineering, Damghan University, Iran (2015)
4. Distinguished researcher among PhD students of School of Mechanical Engineering, Iran University of Science and Technology (First rank) (2014)
5. Ministry of Science, Research and Technology, PhD scholarship award, Iran (2012-2015)

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6. National Elites Foundation Award, Iran (2014)

➤ **Served as reviewer for international journals**

1. Applied Mathematical Journal
2. Composites Part B
3. European Journal of Mechanics A/Solid
4. International Journal of Mechanical Sciences
5. Meccanica
6. Journal of Physics D: Applied Physics
7. Acta Mechanica
8. Measurement
9. Journal of Composite Materials
10. Engineering with Computers
11. Mechanics of Advanced Materials and Structures
12. Journal of Mechanical Science and Technology
13. Science and Engineering of Composite Materials
14. Engineering Science and Technology: an International Journal
15. Scientia Iranica
16. Ain Shams Engineering Journal
17. Earthquake Engineering and Engineering Vibration
18. Applications and Applied Mathematics\_An International Journal (AAM)
19. Journal of Testing and Evaluation
20. Periodica Polytechnica Mechanical Engineering
21. Journal of Mechanical Engineering Science
22. Iranian Journal of Science and Technology, Transactions of Mechanical Engineering
23. Strojniški vestnik - Journal of Mechanical Engineering
24. International Journal of Nano Dimension (IJND)
25. International Journal of Applied Mechanics

➤ **Served as reviewer for national journals**

1. Amirkabir Journal of Science & Research\_ Mechanical Engineering (AJSR\_ME)
2. Mechanics of Advanced Composite Structures (MACS)
3. Engineering Mechanics Journal-Tabriz University

➤ **Publications**

**ISI papers**

- [1] Sh. Hosseini-Hashemi, M. Kermajani, R. Nazemnezhad, *An analytical study on the buckling and free vibration of rectangular nanoplates using nonlocal third-order shear deformation plate theory, European Journal of Mechanics A/Solid*, Vol. 51, pp. 29-43 (2014).

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- [2] R. Nazemnezhad, Sh. Hosseini-Hashemi, ***Free vibration analysis of multi-layer graphene nanoribbons incorporating interlayer shear effect via molecular dynamics simulations and nonlocal elasticity***, *Physics Letters A*, Vol. 378, no. 44, pp. 3225-3232 (2014).
- [3] R. Nazemnezhad, Sh. Hosseini-Hashemi, ***Nonlinear free vibration analysis of Timoshenko nanobeams with surface energy***, *Meccanica*, Vol. 50, no. 4, pp. 1027-1044 (2015).
- [4] R. Nazemnezhad, H. Shokrollahi, Sh. Hosseini-Hashemi, ***Sandwich beam model for free vibration analysis of bilayer graphene nanoribbons with interlayer shear effect***, *Journal of Applied Physics*, Vol. 115, no. 17, pp. 174303-10 (2014).
- [5] Sh. Hosseini-Hashemi, M. Fakher, R. Nazemnezhad; Mohammad-Hadi Sotudeh-Haghighi; ***Dynamic behavior of thin and thick cracked nanobeams incorporating surface effects***, *Composites part-B Engineering*, Vol. 61, No. C, pp. 66-72 (2014).
- [6] Sh. Hosseini-Hashemi, I. Nahas, M. Fakher, R. Nazemnezhad, ***Nonlinear free vibration of piezoelectric nanobeams incorporating surface effects***, *Smart Materials and Structures*, Vol. 23, no. 3, pp. 035012-9 (2014).
- [7] Sh. Hosseini-Hashemi, R. Nazemnezhad, M. Bedroud, ***Surface Effects on Nonlinear Free Vibration of Functionally Graded Nanobeams using Nonlocal Elasticity***, *Applied Mathematical Modelling*, Vol. 38, no. 14, pp. 3538-3553 (15 July 2014).
- [8] R. Nazemnezhad, Sh. Hosseini-Hashemi, ***Nonlocal nonlinear free vibration of functionally graded nanobeams***, *Composite Structures*, Vol. 110, pp. 192-199 (2014).
- [9] Sh. Hosseini-Hashemi, I. Nahas, M. Fakher, R. Nazemnezhad, ***Surface effects on free vibration of piezoelectric functionally graded nanobeams using nonlocal elasticity***, *Acta Mechanica*, Vol. 225, no. 6, pp. 1555-1564 (June 2014).
- [10] M. Sedighi, R. Nazemnezhad, ***Effect of Peak Positioning Method on Accuracy of XRD Residual Stress Measurement***, *Experimental Techniques*, In Press (2013).
- [11] M. Bedroud, Sh. Hosseini-Hashemi, R. Nazemnezhad, ***Buckling of circular/annular Mindlin nanoplates via nonlocal elasticity***, *Acta Mechanica*, Vol. 224, pp. 2663-2676 (2013).
- [12] Sh. Hosseini-Hashemi, R. Nazemnezhad, ***An analytical study on the nonlinear free vibration of functionally graded nanobeams incorporating surface effects***, *Composites Part B: Engineering*, Vol. 52, pp. 199-206 (2013).
- [13] Sh. Hosseini-Hashemi, M. Bedroud, R. Nazemnezhad, ***An exact analytical solution for free vibration of functionally graded circular/annular Mindlin nanoplates via nonlocal elasticity***, *Composite Structures*, Vol. 103, pp. 108-118 (2013).
- [14] Sh. Hosseini-Hashemi, M. Zare, R. Nazemnezhad, ***An Exact Analytical Approach for Free Vibration of Mindlin Rectangular Nano-Plates via Nonlocal Elasticity***, *Composite Structures*, Vol. 100, pp. 290-299 (2013).
- [15] R. Nazemnezhad, M. Salimi, Sh. Hosseini-Hashemi, P.A. Sharabiani, ***An analytical study on the nonlinear free vibration of nanoscale beams incorporating surface density effects***, *Composites Part B: Engineering*, Vol. 43, no. 8, pp. 2893-2897 (2012).
- [16] M. Bedroud, R. Nazemnezhad, Sh. Hosseini-Hashemi, ***Axisymmetric/asymmetric buckling of functionally graded circular/annular Mindlin nanoplates via nonlocal elasticity***, *Meccanica*, Vol. 50, no. 7, pp. 1791-1806 (2015).
- [17] R. Nazemnezhad, Sh. Hosseini-Hashemi, H. Rokni, ***Nonlocal nonlinear free vibration of nanobeams with surface effects***, *European Journal of Mechanics A/Solid*, Vol. 52, pp. 44-53 (2015). (IF: 1.904)
- [18] M. Zare, R. Nazemnezhad, Sh. Hosseini-Hashemi, ***Analysis of natural frequencies of functionally graded rectangular nanoplates for different boundary conditions***, *Meccanica*, Vol. 50, no. 9, pp. 2391-2408 (2015).

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- [19] R. Nazemnezhad, ***Nonlocal Timoshenko beam model for considering shear effect of van der Waals interactions on free vibration of multilayer graphene nanoribbons***, *Composite Structures*, Vol. 133, pp. 522-528 (2015).
- [20] R. Nazemnezhad, M. Zare, ***Nonlocal Reddy beam model for free vibration analysis of multilayer nanoribbons incorporating interlayer shear effect***, *European Journal of Mechanics A/Solid*, Vol. 55, pp. 234-242 (2016).
- [21] M. Bedroud, R. Nazemnezhad, Sh. Hosseini-Hashemi, Mohammad Valixani, ***"Buckling of FG circular/annular Mindlin nanoplates with an internal ring support using nonlocal elasticity"***, *Applied Mathematical Modelling*, Vol. 40, no. 4, pp. 3185-3210, (2016).
- [22] R. Nazemnezhad, K. Kamali, Sh. Hosseini-Hashemi, ***"Study on tensile-compressive and shear effects of van der Waals interactions on free vibration of bilayer graphene nanoribbons"***, *Meccanica*, Vol. 52, pp. 263-282, (2016).
- [23] R. Nazemnezhad, P. Fahimi, ***"Free torsional vibration of cracked nanobeams incorporating surface energy effects"***, *Applied Mathematics and Mechanics*, Vol. 37, pp. 217-230, (2016).
- [24] K. Kamali, R. Nazemnezhad, ***"Interlayer influences between double-layer graphene nanoribbons (shear and tensile-compressive) on free vibration using nonlocal elasticity theory"***, *Mechanics of Advanced Materials and Structures*, In Press, (2016).
- [25] R. Nazemnezhad, M. Zare, Sh. Hosseini-Hashemi, H. Shokrollahi, ***"Molecular dynamics simulation for interlayer interactions of graphene nanoribbons with multiple layers"***, *Superlattices and Microstructures*, Vol. 98, pp. 228-234, (2016)
- [26] R. Nazemnezhad, M. Zare, Sh. Hosseini-Hashemi, ***"Sandwich Plate Model of Multilayer Graphene Sheets for Considering Interlayer Shear Effect in Vibration Analysis via Molecular Dynamics Simulations"***, *Applied Mathematical Modelling*, Vol. 47, pp. 459-472, (2017).
- [27] R. Nazemnezhad, Sh. Hosseini-Hashemi, ***"Exact solution for large amplitude flexural vibration of nanobeams using nonlocal Euler-Bernoulli theory"***, *Journal of Theoretical and Applied Mechanics*, Vol. 55, pp. 649-658, (2017).
- [28] Sh. Hosseini-Hashemi, M. Fakher, R. Nazemnezhad, ***"Longitudinal vibrations of Aluminum nanobeams by applying elastic moduli of bulk and surface: molecular dynamics simulation and continuum model"***, *Materials Research Express*, Vol. 47, pp. 459-472, (2017).
- [29] K. Kamali, R. Nazemnezhad, M. Zare, ***"Interlayer effects of Van der Waals interactions on transverse vibrational behavior of bilayer graphene sheets"***, *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, Vol. 40, no. 2, pp. 54, (2018).
- [30] K. Kamali, R. Nazemnezhad, M. Zare, ***"Elastic effects on vibration of bilayer graphene sheets incorporating integrated VdWs interactions"***, *Materials Research Express*, Vol. 5, no. 3, pp., (2018).
- [31] R. Nazemnezhad, ***"Surface energy and elastic medium effects on torsional vibrational behavior of embedded nanorods"***, *International Journal of Engineering*, Vol. 31, no. 3, pp. 495-503, (2018).
- [32] R. Nazemnezhad, K. Kamali, ***"An analytical study on the size dependent longitudinal vibration analysis of thick nanorods"***, *Materials Research Express*, Vol. 4, no. 7, pp. 075016, (2018).
- [33] R. Nazemnezhad, K. Kamali, ***"Free axial vibration analysis of axially functionally graded thick nanorods using nonlocal Bishop's theory"***, *Steel and Composite Structures, An International Journal*, Vol. 28, no. 6, pp. 749-758, (2018).
- [34] M.R. Ilkhani, R. Nazemnezhad, Sh. Hosseini-Hashemi, ***" Small scale and spin effects on free transverse vibration of size-dependent nano-scale beams"***, *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, Vol. , no. , pp. (In Press), (2019).
- [35] R. Nazemnezhad, M. Zare, S. Hosseini-Hashemi, ***"Effect of nonlocal elasticity on vibration analysis of multi-layer graphene sheets using sandwich model"***, *European Journal of Mechanics-A/Solids*, Vol. 70, no., pp. 75-85, (2018).

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- [36] M. Ilkhani, R. Nazemnezhad, "**Molecular dynamics simulation and size dependent cylindrical shell models for vibrations of spinning axially loaded carbon nanotubes**", *European Journal of Mechanics-A/Solids*, Vol. 77, no., pp. 103804, (2019).
- [37] K. Kamali, R. Nazemnezhad, "**A novel method for considering interlayer effects between graphene nanoribbons and elastic medium in free vibration analysis**", *Mechanics of Advanced Composite Structures*, Vol. no., pp., (2019).
- [38] R. Nazemnezhad, R. Mahoori, A. Samadzadeh, "**Surface energy effect on nonlinear free axial vibration and internal resonances of nanoscale rods**", *European Journal of Mechanics-A/Solids*, Vol. 77, no., pp. 103784, (2019).
- [39] R. Nazemnezhad, M. Moazzeni, "**Nonlocal analysis of longitudinal dynamic behavior of nanobars with surface energy effect**", *Mechanics of Advanced Composite Structures*, Vol. no., pp., (2019).
- [40] H. Heidari, P. Alasvand Hadi, R. Nazemnezhad, "**Approximate distributed controllability of nonlocal Rayleigh beam**", *Computational Methods for Differential Equations*, Vol. , no. , pp. (In Press), (2019).

### **Journal papers**

- [1] R. Nazemnezhad, K. Kamali, Sh. Hosseini-Hashemi, "**Investigating Simultaneous Effects of Tensile-Compressive and Shear Moduli of Van Der Waals Interactions on the Vibration of Bilayer Graphene Nanoribbons for Different Boundary Condition (In Persian)**", *Journal of Solid and Fluid Mechanics*, Volume 6, Issue 2, Pages 295-310, 2016.
- [2] R. Nazemnezhad, K. Kamali, "**Investigation of the inertia of the lateral motions effect on free axial vibration of nanorods using nonlocal Rayleigh theory (In Persian)**", *Modares Mechanical Engineering Journal*, Vol. 16, Issue 5, Pages 19-28, 2016.
- [3] Reza Nazemnezhad, Shahrokh Hosseini-Hashemi, Kamran Kamali, "**Presentation of a geometrical-analytical method for investigation of interlayer moduli in bilayer graphene sheets (In Persian)**", *Modares Mechanical Engineering Journal*, Vol. 15, Issue 7, Pages 89-97, 2015.
- [4] Mojtaba Zare, Shahrokh Hosseini-Hashemi, Reza Nazemnezhad, "**An exact solution for free vibration of nonlocal Mindlin rectangular nano-plates (In Persian)**", *Sharif Mechanical Engineering Journal*, Vol. 30, Issue 1, Pages 107-113, 2014.
- [5] Reza Nazemnezhad, Shahrokh Hosseini-Hashemi, Hassan Shokrollahi, "**Free vibration analysis of bilayer graphenes with interlayer shear effect (In Persian)**", *Modares Mechanical Engineering*, Vol. 14, Issue 7, Pages 131-138, 2014.
- [6] Reza Nazemnezhad, Shahrokh Hosseini-Hashemi, Mehdi Kermajani, Shahram Amirabdollahian, "**Exact solutions for free vibration of levy-type rectangular nanoplates via nonlocal third-order plate theory (In Persian)**", *Modares Mechanical Engineering Journal*, Vol. 14, Issue 7, Pages 122-130, 2014.
- [7] Mehdi Kermajani, Shahrokh Hosseini-Hashemi, Reza Nazemnezhad, Shahram Amirabdollahian, "**Exact solutions for buckling of rectangular nanoplates via nonlocal third-order plate theory (In Persian)**", *Modares Mechanical Engineering Journal*, Vol. 13, Issue 13, Pages 33-42, 2014.

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- [8] Shahrokh Hosseini-Hashemi, Mahmood Fakher, Reza Nazemnezhad, "**Surface effects on free vibration analysis of nanobeams using nonlocal elasticity: a comparison between Euler-Bernoulli and Timoshenko**", *Journal of Solid Mechanics*, Vol. 5, Issue 3, Pages 290-304, 2013.
- [9] Mohammad Bedroud, Shahrokh Hosseini-Hashemi, Reza Nazemnezhad, "**Axisymmetric/asymmetric buckling of circular/annular nanoplates via nonlocal elasticity (In Persian)**", *Modares Mechanical Engineering Journal*, Vol. 13, Issue 5, Pages 144-152, 2013.
- [10] Mohammad Sedighi, Reza Nazemnezhad, "**Analysis of the effect of diffraction peak positioning method on residual stress measurement, using the standard XRD technique (In Persian)**", *Aerospace Engineering Journal*, Vol. 7, Issue 2, Pages 73-87, 2011.
- [11] Reza Nazemnezhad, Kamran Kamali, Shahrokh Hosseini-Hashemi, "**Investigating Simultaneous Effects of Tensile-Compressive and Shear Moduli of Van Der Waals Interactions on the Vibration of Bilayer Graphene Nanoribbons for Different Boundary Condition (In Persian)**", *Journal of Solid and Fluid Mechanics*, Vol. 6, Pages 295-310, 2016.
- [12] Reza Nazemnezhad, "**Investigation of surface effects on free torsional vibration of nanobeams**", *Amirkabir Journal of Mechanical Engineering*, Vol. 49, no. 2, Pages 71-80, 2017.
- [13] Reza Nazemnezhad, Milad Arianpour, "**Investigation of torsional static behavior of nanorods embedded in elastic medium considering surface energy effect**", *Amirkabir Journal of Mechanical Engineering*, In Press, 2017.
- [14] R. Nazemnezhad, H. Shokrollahi, "**Free axial vibration analysis of functionally graded nanorods using surface elasticity theory**", *Modares Mechanical Engineering*, Vol. 18, no. 5, pp. 414-424 (In Persian), (2018).