



**Dr. Amir Norouzzadeh**

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Faculty of Mechanical Engineering, University of Guilan, Rasht, Iran

### Summary:

Amir Norouzzadeh received his BSc degree in Automotive Engineering from Iran University of Science and Technology in 2012. Then, he received MSc and PhD degrees in Mechanical Engineering from University of Guilan, Iran, in 2014 and 2019, respectively. His research interests include computational mechanics, generalized continuum mechanics such as 3M, nonlocal and strain gradient theories, nonlinear finite element / isogeometric analysis of beam-, plate- and shell-type structures.

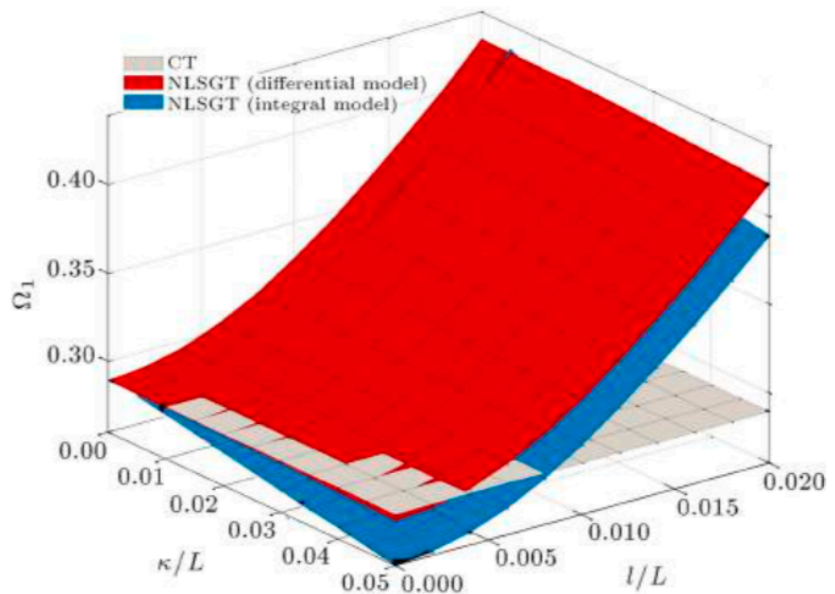
### Selected Publications:

Ansari R, Norouzzadeh A, Gholami R, Shojaei MF, Hosseinzadeh M (2014) Size-dependent nonlinear vibration and instability of embedded fluid-conveying SWBNNTs in thermal environment. *Physica E* 61:148–157

Ansari, R., Norouzzadeh, A., Gholami, R., Shojaei, M. F. and Darabi, M. A. [2016] “Geometrically nonlinear free vibration and instability of fluid-conveying nanoscale pipes including surface stress effects,” *Microfluidics and Nanofluidics* 20(1), 28.

R. Ansari, R. Gholami, A. Norouzzadeh, S. Sahmani, Size-dependent vibration and instability of fluid-conveying functionally graded microshells based on the modified couple stress theory, *Microfluidics and Nanofluidics* 19 (3) (2015) 509–522.

R. Ansari, R. Gholami, S. Sahmani, A. Norouzzadeh and M. Bezdidi-Vahdati, “Dynamic stability analysis of embedded multi-walled carbon nanotubes in thermal environment”, *Acta Mechanica Solida Sinica*, Vol. 28, No. 6, pp 659-667, December 2015



**Figure 4.** Variation of non-dimensional fundamental frequency of clamped-pinned nano-beam versus the non-dimensional small-scale and nonlocal parameters based on differential and integral model of nonlocal modified strain gradient theory.

From: Norouzzadeh A, Ansari R, Rouhi H (2018) Isogeometric vibration analysis of small-scale Timoshenko beams based on the most comprehensive size-dependent theory. *Sci Iran* 25:1864–1878

R. Ansari, R. Gholami, A. Norouzzadeh and M.A. Darabi, "Surface stress effect on the vibration and instability of nanoscale pipes conveying fluid based on a size-dependent Timoshenko beam model", *Acta Mechanica Sinica*, Vol. 31, No. 5, pp 708-719, October 2015

Ansari R, Norouzzadeh A (2016) Nonlocal and surface effects on the buckling behavior of functionally graded nanoplates: an isogeometric analysis. *Physica E* 84:84–97

Ansari R, Gholami R, Norouzzadeh A (2016) Size-dependent thermo-mechanical vibration and instability of conveying fluid functionally graded nanoshells based on Mindlin's strain gradient theory. *Thin-Walled Struct* 105:172–184

Ansari R, Bazdid-Vahdati M, Shakouri A, Norouzzadeh A, Rouhi H. Micromorphic first-order shear deformable plate element. *Meccanica*. 2016;51(8):1797-1809.

Ansari R, Gholami R, Norouzzadeh A, Darabi MA (2016) Wave characteristics of nanotubes conveying fluid based on the non-classical Timoshenko beam model incorporating surface energies. *Arab J Sci Eng* 41:4359–4369

Norouzzadeh A, Ansari R, Rouhi H (2017) Pre-buckling responses of Timoshenko nanobeams based on the integral and differential models of nonlocal elasticity: an isogeometric approach. *Appl Phys A* 123:330

Norouzzadeh A, Ansari R (2017) Finite element analysis of nano-scale Timoshenko beams using the integral model of nonlocal elasticity. *Physica E* 88:194–200

Ansari R, Bazdid-Vahdati M, Shakouri AH, Norouzzadeh A, Rouhi H. Micromorphic prism element. *Math Mech Solids*. 2017;22(6):1438-1461.

Ansari R, Shakouri AH, Bazdid-Vahdati M, Norouzzadeh A, Rouhi H. A Nonclassical Finite Element Approach for the Nonlinear Analysis of Micropolar Plates. *J Comput Nonlin Dyn*. 2017;12(1).

Ansari R, Torabi J, Norouzzadeh A (2018) Bending analysis of embedded nanoplates based on the integral formulation of Eringen's nonlocal theory using the finite element method. *Physica B* 534:90–97

A. Norouzzadeh and R. Ansari, "Nonlinear dynamic behavior of small-scale shell-type structures considering surface stress effects: An isogeometric analysis", *International Journal of Non-Linear Mechanics*, Vol. 101, pp 174-186, May 2018

A. Norouzzadeh and R. Ansari, "Isogeometric vibration analysis of functionally graded nanoplates with the consideration of nonlocal and surface effects", *Thin-Walled Structures*, Vol. 127, pp 354-372, June 2018

Norouzzadeh A, Ansari R, Rouhi H (2018) Isogeometric vibration analysis of small-scale Timoshenko beams based on the most comprehensive size-dependent theory. *Sci Iran* 25:1864–1878

A. Norouzzadeh, R. Ansari and H. Rouhi, "Nonlinear wave propagation analysis in Timoshenko nano-beams considering nonlocal and strain gradient effects", *Meccanica*, Vol. 53, No. 13, pp 3415-3435, October 2018