



Professor Behrouz Karami

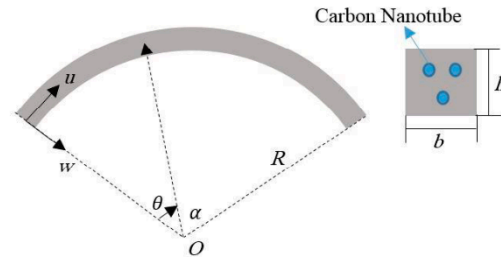


Figure 1. Geometry of a carbon nanotubes (CNTs) reinforced composite curved beam.

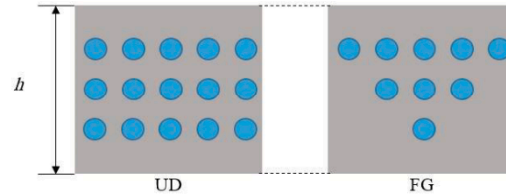


Figure 2. Distribution schemes of CNTs along the thickness direction. UD = uniform distribution; FG = functionally graded.

From: Behrouz Karami, Maziar Janghorban, Davood Shahsavari, Rossana Dimitri and Francesco Tornabene, "Nonlocal Buckling Analysis of Composite Curved Beams Reinforced with Functionally Graded Carbon Nanotubes", *Molecules*, Vol. 24, 2750, 2019

See:

<https://scholar.google.com/citations?user=zQoqf6cAAAAJ&hl=en>

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Selected Publications:

Karami, B., Janghorban, M. and Tounsi, A. (2017), "Effects of triaxial magnetic field on the anisotropic nanoplates", *Steel Compos. Struct., Int. J.*, 25(3), 361-374.

B. Karami, D. Shahsavari, M. Janghorban Wave propagation analysis in functionally graded (FG) nanoplates under in-plane magnetic field based on nonlocal strain gradient theory and four variable refined plate theory, *Mech. Adv. Mat. Struct.* (2017)

D. Shahsavari, B. Karami, S. Mansouri Shear buckling of single layer graphene sheets in hygrothermal environment resting on elastic foundation based on different nonlocal strain gradient theories, *Eur. J. Mech. A, Solids* (2017),

B. Karami, M. Janghorban, A. Tounsi, Nonlocal strain gradient 3D elasticity theory for anisotropic spherical nanoparticles, *Steel Compos. Struct.*, 27 (2) (2018), pp. 201-216

B. Karami, D. Shahsavari, L. Li, M. Karami, M. Janghorban, Thermal buckling of embedded sandwich piezoelectric nanoplates with functionally graded core by a nonlocal second-order shear deformation theory, *Proc Inst Mech Eng Part C J Mech Eng Sci*, 0954406218756451 (2018)

B. Karami, M. Janghorban, D. Shahsavari, A. Tounsi, A size-dependent quasi-3D model for wave dispersion analysis of FG nanoplates, *Steel Compos. Struct.*, 28 (1) (2018), pp. 99-110

B. Karami, M. Janghorban, and A. Tounsi, "Galerkin's approach for buckling analysis of functionally graded anisotropic nanoplates/different boundary conditions," *Engineering with Computers*, 2018.

D. Shahsavari, B. Karami, L. Li, Damped vibration of a graphene sheet using a higher-order nonlocal strain-gradient Kirchhoff plate model, *C R Mec*, 346 (2018), pp. 1216-1232

Davood Shahsavari, Maryam Shahsavari, Li Li and Behrouz Karami, "A novel quasi-3D hyperbolic theory for free vibration of FG plates with porosities resting on Winkler/Pasternak/Kerr foundation", *Aerospace Science and Technology*, Vol. 72, pp 134-149, January 2018

Davood Shahsavari, Behrouz Karami and Sima Mansouri, "Shear buckling of single layer graphene sheets in hygrothermal environment resting on elastic foundation based on different nonlocal strain gradient theories", *European Journal of Mechanics – A/Solids*, Vol. 67, pp 200-214, January 2018

Behrouz Karami, Maziar Janghorban and Abdelouahed Tounsi, "Variational approach for wave dispersion in anisotropic doubly-curved nanoshells based on a new nonlocal strain gradient higher order shell theory", *Thin-Walled Structures*, Vol. 129, pp 251-264 August 2018

Davood Shahsavari, Behrouz Karami and Li Li, "A high-order gradient model for wave propagation analysis of porous FG nanoplates", *Steel and Composite Structures*, Vol. 29, No. 1, pp 53-66, October 2018

Behrouz Karami, Davood Shahsavari, Seyed Mohammad Reza Nazemosadat, Li Li and Arash Ebrahimi, "Thermal buckling of smart porous functionally graded nanobeam rested on Kerr foundation", *Steel and Composite Structures* Volume 29, Number 3, November 10 2018, pages 349-362

Behrouz Karami, Davood Shahsavari and Maziar Janghorban, "A comprehensive analytical study on functionally graded carbon nanotube-reinforced composite plates", *Aerospace Science and Technology*, Vol. 82-83, pp 499-512, November 2018

Davood Shahsavari, Behrouz Karami, Hamid Reza Fahham and Li Li, "On the shear buckling of porous nanoplates using a new size-dependent quasi-3D shear deformation theory", *Acta Mechanica*, Vol. 229, No. 11, pp 4549-4573, November 2018

Davood Shahsavari, Behrouz Karami and Maziar Janghorban, "On buckling analysis of laminated composite plates using a nonlocal refined four-variable model", *Steel and Composite Structures*, Vol. 32, No. 2, July 25 2019, pp 173-187

B. Karami, M. Janghorban, A. Tounsi, On exact wave propagation analysis of triclinic material using three-dimensional bi-Helmholtz gradient plate model, *Struct. Eng. Mech.*, 69 (5) (2019), pp. 487-497

Gui-Lin She, Fuh-Gwo Yuan, Behrouz Karami, Yi-Ru Ren and Wan-Shen Xiao, "On nonlinear bending behavior of FG porous curved nanotubes", *International Journal of Engineering Science*, Vol. 135, pp 58-74, February 2019

Behrouz Karami and Maziar Janghorban, "On the dynamics of porous nanotubes with variable material properties and variable thickness", *International Journal of Engineering Science*, Vol. 136, pp 53-66, March 2019

Behrouz Karami, Maziar Janghorban and Abdelouahed Tounsi, "Wave propagation of functionally graded anisotropic nanoplates resting on Winkler-Pasternak foundation", *Structural Engineering and Mechanics*, Volume 70, Number 1, April 10 2019

Behrouz Karami, Davood Shahsavari, Maziar Janghorban and Li Li, "Influence of homogenization schemes on vibration of functionally graded curved microbeams", *Composite Structures*, Vol. 216, pp 67-79, 15 May 2019

Behrouz Karami, Davood Shahsavari, Maziar Janghorban and Abdelouahed Tounsi, "Resonance behavior of functionally graded polymer composite nanoplates reinforced with graphene nanoplatelets", *International Journal of Mechanical Science*, Vol. 156, pp 94-105, June 2019

Behrouz Karami, Davood Shahsavari, Maziar Janghorban, Rossana Dimitri and Francesco Tornabene, "Wave Propagation of Porous Nanoshells", *Nanomaterials*, Vol. 9, 22, 2019

Behrouz Karami, Maziar Janghorban, Rossana Dimitri and Francesco Tornabene, "Free Vibration Analysis of Triclinic Nanobeams Based on the Differential Quadrature Method", *Applied Sciences*, Vol. 9, 3517, 2019

Gui-Lin She, X.Y. Jiang, Behrouz Karami, "On thermal snap-buckling of FG curved nanobeams", *Materials Research Express*, September 2019

Behrouz Karami, Maziar Janghorban, Davood Shahsavari, Rossana Dimitri and Francesco Tornabene, "Nonlocal Buckling Analysis of Composite Curved Beams Reinforced with Functionally Graded Carbon Nanotubes", *Molecules*, Vol. 24, 2750, 2019

Behrouz Karami, Maziar Janghorban, "A new size-dependent shear deformation theory for free vibration analysis of functionally graded/anisotropic nanobeams", Article 106227, *Thin-Walled Structures*, Vol. 143, October 2019

Behrouz Karami, Davood Shahsavari, Maziar Janghorban, "On the dynamics of porous doubly-curved nanoshells", *International Journal of Engineering Science*, Vol. 143, pp 39-55 October 2019

Behrouz Karami, Davood Shahsavari, Maziar Janghorban and Li Li, "On the resonance of functionally graded nanoplates using bi-Helmholtz nonlocal strain gradient theory", *International Journal of Engineering Science*, Vol. 144, Article 103143, November 2019

Behrouz Karami, Maziar Janghorban, and Timon Rabczuk, “Static analysis of functionally graded anisotropic nanoplates using nonlocal strain gradient theory”, *Composite Structures*, Vol. 227, Article 111249, 1 November 2019

Behrouz Karami, Maziar Janghorban and Timon Rabczuk, “Dynamics of two-dimensional functionally graded tapered Timoshenko nanobeam in thermal environment using nonlocal strain gradient theory”, *Composites Part B: Engineering*, Vol. 182, Article 107565, 1 February 2020

Behrouz Karami and Davood Shahsavari, “On the forced resonant vibration analysis of functionally graded polymer composite doubly-curved nanoshells reinforced with graphene-nanoplatelets”, *Computer Methods in Applied Mechanics and Engineering*, Vol. 359, Article 112767, 1 February 2020

Behrouz Karami, Davood Shahsavari, Maziar Janghorban and Li Li, “Free vibration analysis of FG nanoplate with poriferous imperfection in hygrothermal environment”, *Structural Engineering and Mechanics*, Vol. 73, No. 2, 2020, pp 191-207