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Selected Publications:

Book:

Maziar Janghorban and Davood Shahsavari, An Introduction to Nanostructures

Journal Articles, etc.:

- Shahsavari, D. and Janghorban, M. (2017), “Bending and shearing responses for dynamic analysis of single-layer graphene sheets under moving load”, J. Brazil. Soc. Mech. Sci. Eng., 39(10), 3849-3861.
- 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, 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
- 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

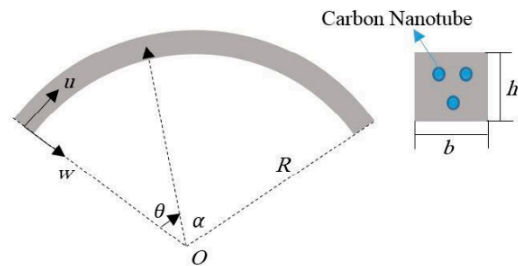


Figure 1. Geometry of a carbon nanotubes (CNTs) reinforced composite curved beam.

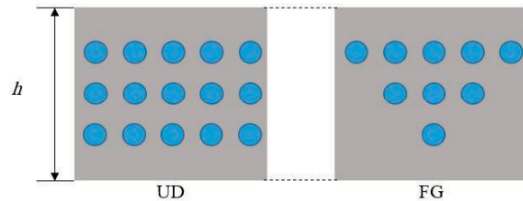


Figure 2. Distribution schemes of CNTs along the thickness direction. UD = uniform distribution; FG = functionally graded.

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

Davood Shahsavari, Behrouz Karami and Sima Mansouri, "Shear buckling of single layer graphene sheets in hydrothermal 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

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

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, 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, 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 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 hydrothermal environment", *Structural Engineering and Mechanics*, Vol. 73, No. 2, 2020, pp 191-207