**Professor Emad Jomehzadeh** 



First three mode shape contour plots of transversely isotropic annular sector plate ( $\alpha = 60^{\circ}$ , a/b = 0.5, h/b = 0.1): (a) C-C, (b) C-S, (c) S-C, (d) C-F, (e) F-C, (f) S-S, (g) S-F, (h) F-S, and (i) F-F

From: E. Jomehzadeh and A.R. Saidi, "Accurate natural frequencies of transversely isotropic moderately thick annular sector plates", Proc. IMechE Vol. 223, Part C: J. Mechanical Engineering Science, pp 301-317, 2009

## See:

https://scholar.google.com/citations?user=fXMTMlAAAAJ&hl=en

Department of Mechanical Engineering

Kerman Graduate University of Advanced Technology

## **Selected Publications:**

Jomehzadeh, E. and Saidi, A. (2009), "Analytical solution for free vibration of transversely isotropic sector plates using a boundary layer function", Thin-Wall. Struct., 47(1), 82-88.

A.R. Saidi, S.R. Atashipour and E. Jomehzadeh, "Reformulation of Navier equations for solving threedimensional elasticity problems with applications to thick plate analysis", Acta Mech, Vol. 208, pp 227-235, 2009

A. R. Saidi, E. Jomehzadeh, and S. R. Atashipour, "Exact analytical solution for bending analysis of functionally graded annular sector plates," International Journal of Engineering, Transactions A: Basics, vol. 22, no. 3, pp. 307–316, 2009.

E. Jomehzadeh and A.R. Saidi, "Accurate natural frequencies of transversely isotropic moderately thick annular sector plates", Proc. IMechE Vol. 223, Part C: J. Mechanical Engineering Science, pp 301-317, 2009 Saidi A.R., Jomehzadeh E.: On analytical approach for the bending/stretching of linearly elastic functionally

graded rectangular plates with two opposite edges simply supported. Proc. I Mech. E Part C J. Mech. Eng. Sci. **223(9)**, 2009–2016 (2009)

Jomehzadeh E, Saidi AR, Atashipour SR. An analytical approach for stress analysis of functionally graded annular sector plates. Mater Des 2009;30(9):3679–3685.

Atashipour, S.R., Saidi, A.R., Jomehzadeh, E.: On the boundary layer phenomenon in bending of thick annular sector plates using third-order shear deformation theory. Acta Mech. **211**, 89–99 (2010)

A.R. Saidi, A. Naderi and E. Jomehzadeh, "A closed form solution for bending/stretching analysis of functionally graded circular plates under asymmetric loading using the Green function", Proc. IMechE, Vol. 224, Part C: J. Mechanical Engineering Science, pp 1153-1163, 2010

Mohammadi M., Saidi A.R., Jomehzadeh E.: A novel analytical approach for buckling analysis of moderately thick functionally graded rectangular plates with two opposite edges simply supported. Proc. IMechE Part C J. Mech. Eng. Sci. **224**, 1831–1841 (2010)

Mohammadi M., Saidi A.R., Jomehzadeh E.: Levy solution for buckling analysis of functionally graded rectangular plates. Appl. Compos. Mater. Vol. 17, No. 2, pp 81-93 (2010)

Saidi AR, Hejripour F, Jomehzadeh E. On the stress singularities and boundary layer in moderately thick functionally graded sectorial plates. Appl Math Model 2010;34(11):3478–3492.

Jomehzadeh, E., Saidi, A.R.: A Lévy type solution for free vibration analysis of a nano-plate considering the small scale effect. Recent Adv. Vib. Anal. 47–58 (2011)

Saidi, A., A.H. Baferani, and E. Jomehzadeh, Benchmark solution for free vibration of functionally graded moderately thick annular sector plates. Acta mechanica, 2011. 219(3-4): p. 309-335.

A. H. Baferani, A. R. Saidi and E. Jomehzadeh, An exact solution for free vibration of thin functionally graded rectangular plates, Proc. Inst. Mech. Eng. Part C J. Mech. Eng. Sci. **225** (3) (2011) 526–536.

Jomehzadeh E., Noori H.R., Saidi A.R.: The size-dependent vibration analysis of microplates based on a modified couple stress theory. Phys. E **43**, 877–883 (2011)

Jomehzadeh, E., Saidi, A.R.: A study on large amplitude vibration of multilayered graphene sheets. Comput. Mater. Sci. **50**, 1043–1051 (2011)

E. Jomehzadeh, and A.R. Saidi, Decoupling the Nonlocal Elasticity Equations for Three Dimensional Vibration Analysis of Nano-Plates, Compos. Struct. vol. 93, 1015–1020, 2011.

Jomehzadeh, E., Saidi, A.R., Pugno, N.M.: Large amplitude vibration of a bilayer graphene embedded in a nonlinear polymer matrix. Phys. E Low Dimens. Syst. Nanostruct. **44**, 1973–1982 (2012)

Baferani, A. H., Saidi, A. R., Jomehzadeh, E. (2012). Exact analytical solution for free vibration of functionally graded thin annular sector plates resting on elastic foundation. Journal of Vibration and Control 18(2): 246–267 H. R. Noori, E. Jomehzadeh, and A. R. Saidi, "On the stretching and bending analyses of thin functionally graded annular sector plates," in Materials with Complex Behaviour II, vol. 16 of Advanced Structured Materials, pp. 433–446, Springer, Berlin, Germany, 2012.

A. Anjomshoa, A. Shahidi, B. Hassani and E. Jomehzadeh, Finite element buckling analysis of multi-layered graphene sheets on elastic substrate based on nonlocal elasticity theory, Appl. Math. Model. **38** (24) (2014) 5934–5955.

Jomehzadeh, E., Saidi, A.R., Jomehzadeh, Z., Bonaccorso, F., Palermo, V., Galiotis, C., Pugno, N.M.: Nonlinear subharmonic oscillation of orthotropic graphene-matrix composite. Comput. Mater. Sci. **99**, 164–172 (2015)

S Jalali, E Jomehzadeh, N Pugno, Influence of out-of-plane defects on vibration analysis of graphene: molecular dynamics and non-local elasticity approaches, Superlattices Microstruct, 91 (2016), pp. 331-344