Professor Metin Aydogdu

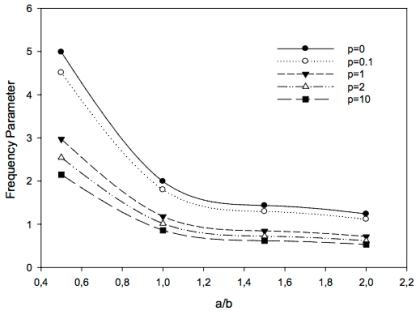

Figure 1. Variation of frequency parameter with a/b ratio and p index for a/h=20 with ESDPT2

From: Uymaz B, Aydogdu M, Filiz S. Vibration analyses of FGM plates with in-plane material inhomogeneity by Ritz method. Compos Struct 2012;94(4): 1398–405

See:
https://www.researchgate.net/profile/Metin_Aydogdu
https://scholar.google.com/citations?user=mxiQqzIAAAAJ&hl=en

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Selected Publications:

M. Aydogdu and T. Timarci, Vibration analysis of cross-ply laminated square plates with general boundary conditions, Journal of Composites Science and Technology 63(Issue 7) (2003), 1061–1070.
Taner Timarci and Metin Aydogdu, "Buckling of symmetric cross-ply square plates with various boundary conditions", Composite Structures, Vol. 68, No. 4, May 2005, pp. 381-389
Aydogdu M (2005) Vibration analysis of cross-ply laminated beams with general boundary conditions by Ritz method. Int J Mech Sci 47:1740–1755
Metin Aydogdu, "Comparison of Various Shear Deformation Theories for Bending, Buckling, and Vibration of Rectangular Symmetric Cross-ply Plate with Simply Supported Edges", Journal of Composite Materials, December 2006, vol. 40, no. 23, pp. 2143-2155
Ece M.C., Aydogdu M.: Nonlocal elasticity effect on vibration of in-plane loaded double-walled carbon nano-tubes. Acta Mech. 190, 185–195 (2007)
Aydogdu, M., and Ece, M. C., 2007. Vibration and Buckling of In-Plane Loaded Double-Walled Carbon Nano-Tubes. Turkish Journal of Engineering and Environmental Science, 31, pp. 305-310.
Metin Aydogdu, "Thermal buckling analysis of cross-ply laminated composite beams with general boundary conditions", Composites Science and Technology, Vol. 67, No. 6, May 2007, pp. 1096-1104
Aydogdu M, Taskin V. Free vibration analysis of functionally graded beams with simply supported edges. Mater Des 2007;28:1651–1656.
Uymaz, B., Aydogdu, M. (2007). Three-dimensional vibration analysis of functionally graded plates under various boundary conditions. Journal of Reinforced Plastics and Composites 26(18): 1847–1863.
Aydogdu M. Conditions for functionally graded plates to remain flat under in-plane loads by classical plate theory. Compos Struct 2008;82(1):155–157.
Aydogdu M.: Vibration of multi-walled carbon nanotubes by generalized shear deformation theory. Int. J. Mech. Sci. 50, 837–844 (2008)

Aydogdu M.: A new shear deformation theory for laminated composite plates. Compos. Struct. 89, 94–101 (2009)
Aydogdu M (2009) Axial vibration of the nanorods with the nonlocal continuum rod model. Physica E 41(5):861–864
Metin Aydogdu, "A general nonlocal beam theory: Its application to nanobeam bending, buckling and vibration", Physica E: Low-dimensional Systems and Nanostructures, Vol. 41, No. 9, September 2009, pp. 1651-1655
Filiz S., Aydogdu M.: Axial vibration of carbon nanotube heterojunctions using nonlocal elasticity. Comp. Mater. Sci. 49, 619–627 (2010)
T. Aksencer and M. Aydogdu, Levy Type Solution Method for Vibration and Buckling of Nanoplates using Nonlocal Elasticity Theory, Physica E, vol. 43, pp. 954–959, 2011.
Aydogdu M., Filiz S.: Modeling carbon nanotube-based mass sensors using axial vibration and nonlocal elasticity. Physica E. 43, 1229–1234 (2011)
Aydogdu, M.: Longitudinal wave propagation in nanorods using a general nonlocal unimodal rod theory and calibration of nonlocal parameter with lattice dynamics. Int. J. Eng. Sci. 56, 17–28 (2012)
Aydogdu M.: Axial vibration analysis of nanorods (carbon nanotubes) embedded in an elastic medium using nonlocal elasticity. Mech. Res. Commun. 43, 34–40 (2012)
Uymaz B, Aydogdu M, Filiz S. Vibration analyses of FGM plates with in-plane material inhomogeneity by Ritz method. Compos Struct 2012;94(4): 1398–405
Aydogdu, M., Elishakoff, I.: On the vibration of nanorods restrained by a linear spring in-span. Mech. Res. Commun. 57, 90–96 (2014)
Metin Aydogdu, "Longitudinal wave propagation in multiwalled carbon nanotubes", Composite Structures, Vol. 107, pp 578-584, January 2014