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Selected Publications:

Dammak, F., Abid, S., Gakwaya, A., Dhatt, G., (2005). A formulation of the non linear discrete Kirchhoff quadrilateral shell element with finite rotations and enhanced strains. *Revue Européenne des Eléments Finis* 14:7-31

M. Taktak, F. Dammak, S. Abid, and M. Haddar, A Mixed-hybrid Finite Element for Three-dimensional Isotropic Helical Beam Analysis, *Int. J. Mech. Sci.*, vol. 47(2), pp. 209–229, 2005.

Abdessalem Hajlaoui, Abdessalem Jarraya, Imen Kallel-Kamoun and Fakhreddine Dammak, “Buckling analysis of a laminated composite plate with delaminations using the enhanced assumed strain solid shell element”, *Journal of Mechanical Science and Technology* 26 (10) (2012) 3213~3221

R. Tounsi, B. Zouari, F. Chaari, E. Markiewicz, G. Haugou and F. Dammak, “Reduced numerical model to investigate the dynamic behaviour of honeycombs under mixed shear-compression loading”, *Thin-Walled Structures*, Vol. 73, pp 290-301, December 2013

Mondher Wali, Abdessalem Hajlaoui, Jamel Mars, K. El Bikri, Abdessalem Jarraya and Fakhreddine Dammak, “FGM Shell structures analysis using an enhanced discrete double directors shell element”, in *Mechatronic Systems: Theory and Applications*, pp 131-147, 2014, Springer

Wali, M., Hajlaoui, A., Dammak, F., (2014). Discrete double directors shell element for the functionally graded material shell structures analysis. *Computer Methods in Applied Mechanics and Engineering* 278:388-403

Wali, M., Hentati, T., Jarraya, A., Dammak, F., (2015). Free vibration analysis of FGM shell structures with a discrete double directors shell element. *Composite Structures* 125:295-303

Hajlaoui, A., Jarraya, A., El Bikri, K., Dammak, F., (2015). Buckling analysis of functionally graded materials structures with enhanced solid-shell elements and transverse shear correction. *Composite Structures* 132:87-97

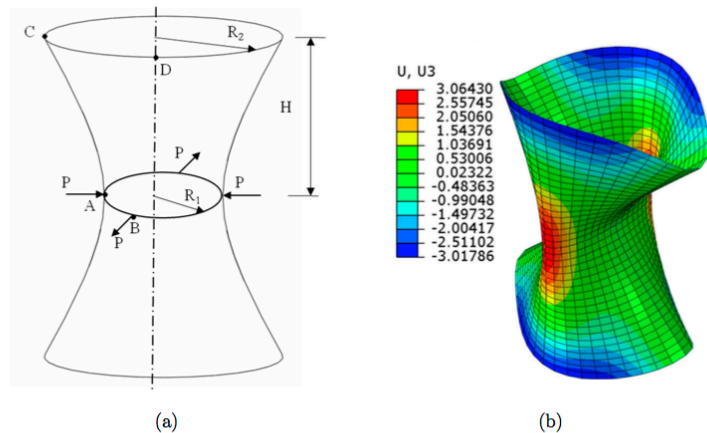


Figure 11: Hyperboloidal FGM shell subjected to alternating radial forces: a): Geometry properties, b): Deformed configuration, radial displacement U_3 of the hyperboloidal FG shell ($n=1$).

From: J. Mars, S. Koubaa, M. Wali and F. Dammak, “Numerical analysis of geometrically non-linear behavior of functionally graded shells”, *Latin American Journal of Solids and Structures*, Vol. 14, No. 11, pp 1952-1978, 2017

Abdessalem Hajlaoui, Abdessalem Jarraya, Mondher Wali and Fakhreddine Dammak, "A higher order shear strain enhanced solid-shell element for laminated composites structures analysis", in *Multiphysics Modelling and Simulation for Systems Design and Monitoring*, pp 497-506, 2015, Springer

Frikha, A., Wali, M., Hajlaoui, A., Dammak, F., (2016). Dynamic response of functionally graded material shells with a discrete double directors shell element. *Composite Structures* 154: 385-395

Hajlaoui, A., Wali, M., Ben Jdidia, M., Dammak, F., (2016). An improved Enhanced Solid Shell Element for Static and Buckling Analysis of shell structures, *Mechanics & Industry*, 17:510

A. Hajlaoui, E. Triki, A. Frikha, M. Wali and F. Dammak, "Nonlinear dynamics analysis of FGM shell structures with a higher order shear strain enhanced solid-shell element", *Latin American Journal of Solids and Structures*, Vol. 14, No. 1, Rio de Janeiro, January 2017

Abdessalem Hajlaoui, Emna Triki, Ahmed Frikha, Mondher Wali and Fakhreddine Dammak, "Nonlinear dynamics analysis of FGM shell structures with a higher order shear strain solid-shell element", *Latin American Journal of Solids and Structures*, Vol. 14, No. 1, pp 72-91, 2017

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J. Mars, S. Koubaa, M. Wali and F. Dammak, "Numerical analysis of geometrically non-linear behavior of functionally graded shells", *Latin American Journal of Solids and Structures*, Vol. 14, No. 11, pp 1952-1978, 2017

Frikha, A., Dammak, F., (2017). Geometrically non-linear static analysis of functionally graded material shells with discrete double directors shell element. *Computer Methods in Applied Mechanics and Engineering*. 315:1-24

A. Frikha, S. Zghal and F. Dammak, "Finite rotation three and four nodes shell elements for functionally graded carbon nanotubes-reinforced thin composite shells analysis", *Computer Methods in Applied Mechanics and Engineering*, Vol. 329, pp 289-311, 1 February 2018

Jamel Mars, Lotfi Ben Said, Mondher Wali and Fakhreddine Dammak, "Elasto-plastic modeling of low-velocity impact on functionally graded circular plates", *International Journal of Applied Mechanics*, Vol. 10, No. 4, May 2018

A. Frikha, S. Zghal and F. Dammak, "Dynamic analysis of functionally graded carbon nanotubes-reinforced plate and shell structures using a double directors finite shell element", *Aerospace Science and Technology*, Vol. 78, pp 438-451, July 2018

S. Trabelsi, A. Frikha, S. Zghal and F. Dammak, "Thermal post-buckling analysis of functionally graded material structures using a modified FSDT", *International Journal of Mechanical Sciences*, Vol. 144, pp 74-89, August 2018

S. Zghal, A. Frikha and F. Dammak, "Mechanical buckling analysis of functionally graded power-based and carbon nanotubes-reinforced composite plates and curved panels", *Composites Part B: Engineering*, Vol. 150, pp 165-183, 1 October 2018