

Accepted Manuscript

Buckling analysis of circular functionally graded plate under uniform radial compression including shear deformation with linear and quadratic thickness variation on the Pasternak elastic foundation

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PII: S0307-904X(16)30482-6
DOI: [10.1016/j.apm.2016.09.012](https://doi.org/10.1016/j.apm.2016.09.012)
Reference: APM 11343

To appear in: *Applied Mathematical Modelling*

Received date: 5 March 2016
Revised date: 18 August 2016
Accepted date: 15 September 2016

Please cite this article as: Abbas Heydari, Abdolrahim Jalali, Ali Nemati, Buckling analysis of circular functionally graded plate under uniform radial compression including shear deformation with linear and quadratic thickness variation on the Pasternak elastic foundation, *Applied Mathematical Modelling* (2016), doi: [10.1016/j.apm.2016.09.012](https://doi.org/10.1016/j.apm.2016.09.012)

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Highlights

- Two schemes for buckling analysis of FGCP based on HSDT and CPT are provided.
- New displacement field based on traction free surface and neutral plane is offered.
- The proper adhesive functions for satisfying boundary conditions are proposed.
- A modified Euler-Lagrange equation based on CPT is obtained and then solved.
- The better results based on HSDT in comparison to other works are obtained.

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