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Bending analysis of size-dependent functionally graded annular sector microplates based on the modified couple stress theory

Farhad Alinaghizadeh , Mahmoud Shariati , Jacob Fish

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Highlights

- A non-classical model for FG sectorial microplates under transverse loading is developed.
- The model is based on the modified couple stress theory and the first order shear deformation theory.
- The model contains a material length scale parameter and can predict the size effect.
- The GDQ method is employed to discretize the governing equations.
- The effects of material length scale, power-law index and geometrical parameters are studied.

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