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Nonlinear dynamic analysis and active control of visco-hyperelastic dielectric elastomer membrane

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Highlights

- Dynamic governing equations for visco-hyperelastic dielectric elastomer actuators are built based on Gent model.
- An analytical dynamic solution for a plane dielectric elastomer actuators under equal-biaxial deformation is proposed.
- PID controller is employed to control the output of the dielectric elastomer actuators.

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