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Flow-induced and mechanical stability of cantilever carbon nanotubes subjected to an axial compressive load

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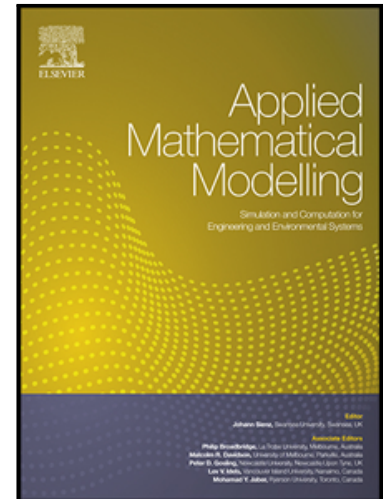
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Highlights

- Vibration behavior of CNTs based on the modified nonlocal theory was analyzed.
- Nonlocal parameter increases flutter and divergence boundaries.
- Surface effects increases flutter velocities and natural frequencies.
- Flutter instability and bifurcation take place due to fluid flow.
- Divergence instability is caused by axial force.

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