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The sliding mode control for an airfoil system driven by harmonic and colored Gaussian noise excitations

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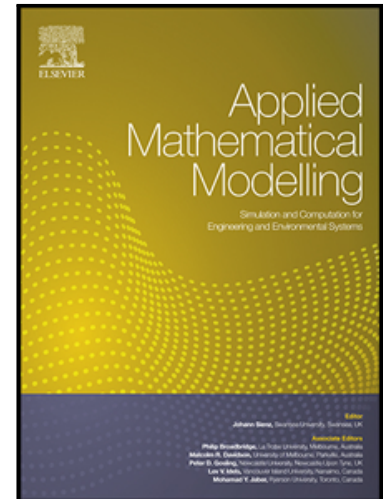
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Highlights

- A new stochastic two-degree-freedom airfoil (TDOFA) model was established.
- A stochastic jump phenomenon was observed and effects of the colored noise were included.
- A sliding mode control of the stochastic TDOFA system was investigated.
- Based on the practical stability, the stability of the controlled stochastic TDOFA system was analyzed.

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