## **Accepted Manuscript**

A multiscale noise tuning stochastic resonance for fault diagnosis in rolling element bearings

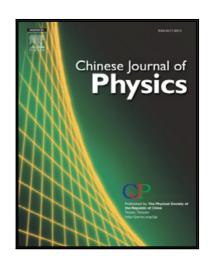
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### ACCEPTED MANUSCRIPT

#### Highlights

- The tri-stable stochastic resonance method with multiscale noise tuning is proposed.
- The theoretical signal-to-noise ratio driven by Gaussian noise is obtained.
- The effects of the system parameters on signal-to-noise ratio are explored.
- The performance of proposed method is better than traditional stochastic resonance.



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