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Response analysis of the archetypal smooth and discontinuous oscillator for vibration energy harvesting

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Highlights

- (i) The archetypal smooth and discontinuous oscillator considered the gravity is presented for the electromagnetic vibration energy harvesting.
- (ii) The analytical solutions of random responses are obtained and reveal interesting dynamics related to the stationary and transient properties.
- (iii) The condition for the occurrence of stochastic resonance is defined conventionally by the Kramers rate.

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