



Modelling and diagnostic of an ultrasonic piezoelectric actuator

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Résumé en anglais	Modeling of piezoelectric motors is a difficult task because their characteristics are affected by various factors such as materials properties, electrical and mechanical boundary conditions. This work presents the modeling of piezoelectric motor via bond graph method and used for the diagnostic. This method is an innovative way to analyse the effects of different design variables on the objective function but can be also considered as an optimization stage of the study. The validation and the development of bond graph models are based on physical insight to aid in structural damage detection and use the technique of optimal sensors placement.
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Liens

[1] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=26464>

[2] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=26465>

- [3] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=26466>
- [4] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=26467>
- [5] <http://okina.univ-angers.fr/bouchta.sahraoui/publications>
- [6] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=26468>
- [7] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=26469>
- [8] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=9505>
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- [12] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=22527>
- [13] <http://okina.univ-angers.fr/publications/ua15721>
- [14] <http://dx.doi.org/10.1080/15421406.2015.1137121>
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