

Piezoelectric Materials: Towards A Powerful Selection Tool From a Specific User Open Chart

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Description

The aim of this work is to build software which enables us to set up an active smart materials data base especially the piezoelectric ones. This is done using two approaches: firstly, by mean of literature, allow the different characteristics we select piezoelectric materials. The second approach consists of selecting the appropriate material according to its usage either as a sensor or as an actuator. The purpose is to provide users an easier way to combine use versus characteristics in an automatic manner. Therefore according to a given application we can overcome the selection difficulties by knowing much more about the materials through their integrated functions when actuating as sensors or actuators. This tool remains also based on an open chart that will permit to the user or developer to update it in concordance with future knowledge of material developments. This work presents the developed software (called ...