Temperature dependency of the hysteresis behaviour of PZT actuators using Preisach model - DTU Orbit (08/11/2017)

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The Preisach model is a powerful tool for modelling the hysteresis phenomenon on multilayer piezo actuators under large signal excitation. In this paper, measurements at different temperatures are presented, showing the effect on the density of the Preisach matrix. An energy-based approach is presented, aiming at defining a temperature-dependent phenomenological model of hysteresis for a better understanding of the non-linear effects in piezo actuators.

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