Hysteretic GMI Behavior of Amorphous Materials in Low Magnetizing Fields

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Abstract. The hysteretic GMI effects observed for low vlues of magnetizing field are presented, on the example of three different cobalt-based amorphous materials. Hysteresis of GMI is a seldom investigated phenomena, but it is very important from the applications point of view. Simplistic test stand capable of automatic GMI measurement series is briefly described. The systems allows measurements with different driving current frequencies, currents and offsets, as well as non-sinusoidal waveforms. Significant differences in obtained results between chosen samples are highlighted.