THE MAGNETIC PROPERTIES AND THE BARKHAUSEN NOISE OF THE ANNEALED Fe-V-B AMORPHOUS ALLOY

L. Ceniga[a], L. Novák[b], A. Zentko[a]

[a]Institute of Experimental Physics SAS, Watsonova 47, 043 53 Košice, Slovak Republic
[b]Department of Physics, Technical University, Komenského park 2, 041 20 Košice, Slovak Republic

In order to get information about the heat treatment influence, ribbons of the Fe-V-B amorphous alloy were isothermally annealed. Barkhausen noise parameters and magnetic properties as the total anisotropy, the stress induced anisotropy, the coercive force, the remanent magnetization, the saturation magnetization, the demagnetizing factor were measured before the heat treatment process and after it. The heat treatment process was responsible for structural relaxation and destroyed as-cast clusters. Rapid changes of the magnetic properties at higher heat treatment temperature were caused by the crystallization process.

9.7 cm

13.4 cm

Subject category :

3. Transition Metals, Alloys and Compounds

Presentation mode :
poster

Corresponding author :
L. Ceniga

Address for correspondence :
Institute of Experimental Physics SAS
Watsonova 47
043 53 Košice
Slovak Republic

Email address :
ceniga@saske.sk