Investigation of the Domain Structure of Co-based Microwires by Magneto-Optical Indicator Films Method

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The investigation of domain structure of Co-based microwires with negative magnetostriction was provided by magneto-optical method of indicator films. The thickness of the domain layer and the width of the surface domains were determined. It has been suggested that in thin microwires (with the diameter of about several tens of microns) with negative magnetostriction, the Néel-type of domain walls between the domains of the surface layer are observed. A number of assumptions about the regularities of the surface domain structure formation of microwires with negative magnetostriction have been put forward.

Keywords: microwire, domain structure, negative magnetostriction, magneto-optical indicator films, amorphous.