

Title (en)
PROCESS FOR FABRICATING A FILM OF AN ANTIFERROMAGNETIC MATERIAL WITH CONTROLLED MAGNETIC STRUCTURES

Title (de)
PROZESS ZUM HERSTELLEN EINES FILMS AUS EINEM ANTIFERROMAGNETISCHEN MATERIAL MIT KONTROLLIERTEN MAGNETISCHEN STRUKTUREN

Title (fr)
PROCEDE DE FABRICATION D'UNE COUCHE D'UN MATERIAU ANTIFERROMAGNETIQUE A STRUCTURES MAGNETIQUES CONTROLEES

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Application
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Abstract (en)
[origin: WO2010055238A1] The present invention relates to a process for fabricating antiferromagnetic films, and more particularly those that are used in spintronics. The process according to the invention comprises the following steps: deposition (1) on a substrate of a first film with a thickness sufficient to establish a defined magnetic order from one of the ferrimagnetic, ferromagnetic, paramagnetic and diamagnetic orders; after said order has been established, application (2) of a magnetic field having an amplitude and a duration that are sufficient to shift the magnetic domain walls of said first film from a first random distribution to a second random distribution; and deposition (3), on said first film that has had its magnetic domain walls shifted, of a second film of an antiferromagnetic material into which, during growth, at least one of the components of material of said first film may be integrated by diffusion.

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