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Magnetic Anisotropy: Hard and Soft Materials

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closed (31 December 2020)

Message from the Guest Editor

Magneto-elastic, random, and induced anisotropies are the anisotropy contributions relevant for soft magnetic materials.

Regarding the surface or interface anisotropy in nanostructured and/or multilayered thin-film systems, the origin of surface anisotropy stems from the stability of the crystal symmetry at the surface and plays a dominant role in defining the effective anisotropy of a magnetic nanoparticle or ultra-thin film.

On the other hand, interfacial anisotropy arises at the interface between hard and soft ferromagnetic layers or between a ferromagnetic (FM) and an antiferromagnetic (AFM) layer, and is related to the exchange interaction between layers.

One other high-technology priority is the demand to increase the storage density of magnetic recording media, which leads to the continuous development of new advanced magnetic nanostructures and the engineering of their anisotropy.

In this Special Issue we welcome both original research papers and review articles on diverse topics such as:

- magnetic anisotropy
- magnetic stress anisotropy
- magnetic graded anisotropy











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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network

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