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Textures and Anisotropy in Advanced Materials

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

The anisotropic properties of polycrystalline aggregates are strongly influenced by the preferred orientation (texture) of their constituting crystals. Beneficiation of such textures is conducted in order to optimize macroscopic properties in specific directions. Usual QTA, using X-ray, electron, and neutron scattering, progressively incorporated the characterization of residual stresses, crystal defects, and their variations in samples, giving rise to the new concept of Combined Analysis of the actual material. Additionally, the representation and simulation of the resulting properties, holds an important place in the understanding of a material's behavior.

This Special Issue aims to review recent aspects of texture application to advanced materials of all kinds, from anisotropic elaboration techniques to resulting anisotropic properties, and via their scattering and spectroscopic characterization and simulation. New process developments, characterization techniques, simulations and databases linked to anisotropy are targeted.

Prof. Dr. Daniel Chateigner
Guest Editor



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Message from the Editor-in-Chief

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