Special Issue

The Microstructures and Advanced Functional Properties of Thin Films

Message from the Guest Editors

Due to the rapid development of highly integrated microelectronics and optoelectronic devices over the past several years, the demand and properties required for functional thin films for use in related fields have gradually increased, such as transparent conductive films, heat dissipation films, electromagnetic shielding films, optical films, and so on. Owing to its high efficiency and controllability, vapor deposition, including chemical vapor deposition and physical vapor deposition, has been a major technology used for the synthesis of thin films. During the deposition process, the kinetic and thermodynamic characteristics of atoms effectively influence the microstructures of the films, such as grain size, grain orientation, surface roughness, component distribution, and so on. Please click the Special Issue website for more details: https://www.mdpi.com/journal/materials/special_issues/61997NQSBC

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Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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