

Special Issue

Synthesis and Characterization of Thin Films for Optoelectronic Applications

Message from the Guest Editor

Plasma treatment of the nanostructured surface of thin films has increasingly attracted the attention of scientists and technologists due to the high surface-to-volume ratio and related size effects. The surface and size effects impose challenges for energy conversion or sensing applications, i.e., in solar cells, optoelectronic devices, gas sensors, or electrochemical energy storage. The plasma modification of surfaces by plasma processing provides further adjustment of properties for applications, for example, in bio-sensing. The hybrid metal/semiconductor or hybrid inorganic/organic nanoparticles, including core-shell, Janus, dumbbells, and others, offer new multi-functionality due to the synergy between the involved components. In this Special Issue, modern trends of plasma-assisted surface treatment, including the processing fundamentals and optimization of final product properties, are highlighted and discussed.

Guest Editor

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Message from the Editor-in-Chief

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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