Special Issue

Emerging Technologies for Development of Novel Materials Systems and Coatings (Third Edition)

Message from the Guest Editor

New or emerging technologies for material synthesis and processing are needed to obtain material systems and coatings with design compositions, microstructures, and architectures fulfilling the harsh requirements for applications in extreme mechanical, high-temperature, high-corrosion, or biological environmental conditions. Green chemical procedures with a low environmental impact enable the fine tuning of components and dopants by controlling the kinetics and mechanisms involved in the synthesis of nanostructured composites or hybrid material systems. In this Special Issue, we aim to highlight and discuss modern trends in novel material synthesis and coatings, including fundamental research, modeling, and optimization. We welcome the submission of papers focused on renewable energy (e.g., solid-state batteries, photovoltaics, solid oxide fuel cells), gas turbines, energy-harvesting systems, sensors and actuators, and automotive and aerospace components. It is my pleasure to invite you to submit a manuscript to this Special Issue. Full papers, communications, and reviews are all welcome.

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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