

Special Issue

Synthesis, Structure, and Spectral Properties of Perovskite Materials

Message from the Guest Editors

Perovskite is a crystallographic structure described by the formula ABX_3 (simple) or $A_2(BB')X_6$ (double) perovskite, where A and B (B') are metals of very different sizes and X is an anion, e.g., O, Cl, Br, I that bonds to them. We may even dare say that the 21st century has introduced a new era of perovskite. We have certainly observed an enormous amount of interest in the search for compounds with this structure. The chemical composition of perovskites and the change in the ion substitutions that make up this structure extremely strongly affect their physical and chemical properties. Their applications are expected not only in photovoltaics but also in spintronics, as hard magnets containing no rare earths, as multiferroics or as magnetocalorics, piezoelectric materials, as well as in electrocatalysis and photocatalysis. Responding to the growing interest in perovskites and studying them for at least twenty years, we wish to invite as many authors as possible to contribute to this Special Edition of *Materials* devoted to Perovskites—Structure, Synthesis, and Spectroscopic Properties.

Guest Editors

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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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