Special Issue

(Ultra)Wide-Bandgap Semiconductors for Extreme Environment Applications

Message from the Guest Editors

Wide-bandgap and ultrawide-bandgap semiconductors have notable potential for applications in extreme environments. Ultrawide-bandgap electronics operating in extreme environments allow for an evident reduction in additional control components and shielding blocks, thereby reducing the size and weight of the power electronics system. However, the current exploration and research results of wide-bandgap devices in extreme environments are relatively scattered, and there is a lack of organization to provide inspiration to the wider community. Therefore, this Special Issue aims to provide a stage and communication venue for the research results of ultrawide-bandgap semi-conductor technology for extreme environmental applications. This Special Issue welcomes, but is not limited to, manuscripts on the following topics:

Material physics and defects for extreme environments (irradiation, stress, etc.);

Device structure and process fabrication, g., traditional structure and hardened design;

Various extreme-environment applications, such as radiation, high and low temperatures, and extreme stress.

Guest Editors

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Deadline for manuscript submissions

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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.

Editor-in-Chief

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