Special Issue

Silicon Carbide: Material Growth, Device Processing and Applications

Message from the Guest Editors

Owing to its superior performance and higher energy efficiency with respect to silicon, silicon carbide (SiC) plays a pivotal role in modern power electronics, where it can be used in energy conversion systems, electric vehicles, transportation, etc. Although commercial SiC (the 4H-SiC polytype) material quality and device technology are already mature and a large variety of devices are already on the market, considerable efforts are still being dedicated to further improving device performance across several application areas. For this purpose, a deeper understanding of the material properties, processing issues and device physics is required, which can also pave the way for the applications in other fields, such as quantum technologies, sensing and detecting. This Special Issue is aimed at collecting papers on silicon carbide, covering relevant aspects from material growth through to device processing and applications. For more information, please click into the sepcial issue website at:
https://www.mdpi.com/journal/materials/special_issues/Silicon_Carbide_Mater_Growth_Device_Process_Appl

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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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