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Advances of Silicon Carbide Crystals

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Message from the Guest Editors

Wide-band gap semiconductor materials and power devices are widely recognized as a revolutionary in electronic and electric power applications. As one of the most studied materials in the research of wide-band gap semiconductors, silicon carbide (SiC) substrates have excellent characteristics. At present, they are widely used in the manufacture of power electronic devices, radio frequency (RF) devices, electric vehicles, 5G base stations and so on. Currently, for SiC crystal processing technology, traditional processing technology continues to develop in the direction of process integration. At the same time, laser cold-cutting technology has attracted the attention of enterprises from all over the world, such as Infineon. In brief, the current research on SiC materials is at the stage that it was before the current global pandemic, and advanced semiconductor companies and scientists from all over the world are scrambling to solve the challenges regarding the widespread application of SiC crystals. The present Special Issue on “Advances of Silicon Carbide Crystals” may become a status report summarizing the progress achieved in the last five years.



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Special Issue



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Message from the Editor-in-Chief

Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

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