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β-Ga_2O_3: Growth (Bulk, Thin Film, Epitaxy) and Physical Properties

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Deadline for manuscript submissions:
closed (30 June 2024)

Message from the Guest Editors

Beta gallium oxide (β-Ga2O3) is a wide-bandgap semiconductor with diverse applications. This Special Issue explores growth techniques (bulk crystals, thin films, epitaxial layers) and optimizing its properties for power electronics, sensors, and more. It invites experimental and theoretical studies on structural, optical, electrical, and spectroscopic properties of pure and doped β-Ga2O3. The issue aims to advance the field, inspire innovations, and covers topics like crystal growth, thin film deposition, epitaxy, and device structures.

It encourages the submission of experimental studies, theoretical investigations, and innovative approaches that shed light on the fundamental principles underlying the growth processes and highlight the unique characteristics of β-Ga_2O_3. The potential topics of interest include but are not limited to:

- Experimental aspects of β-Ga_2O_3 Bulk crystal growth;
- β-Ga_2O_3 thin film growth;
- Epitaxial growth of β-Ga_2O_3;
- Material and physical properties of β-Ga_2O_3 (bulk, thin film, epitaxy);
- Structural, optical, electrical, and spectroscopic properties of pure and doped β-Ga_2O_3.

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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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