



β -Ga₂O₃: Growth (Bulk, Thin Film, Epitaxy) and Physical Properties

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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 -Ga₂O₃. The potential topics of interest include but are not limited to:

- Experimental aspects of β -Ga₂O₃ Bulk crystal growth;
- β -Ga₂O₃ thin film growth;
- Epitaxial growth of β -Ga₂O₃;
- Material and physical properties of β -Ga₂O₃ (bulk, thin film, epitaxy);
- Structural, optical, electrical, and spectroscopic properties of pure and doped β -Ga₂O₃.





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Message from the Editor-in-Chief

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