

Special Issue

Crystal Growth of III–V Semiconductors

Message from the Guest Editors

III–V semiconductors are binary, ternary, quaternary, quinary (and so on) alloys, containing elements from groups III (Al, Ga, In, B, and Tl) and V (N, P, As, Sb, and Bi) in the periodic table. They are widely applied in high-performance optoelectronic and electronic devices due to their superior electronic and optical properties.

The epitaxial growth of III–V semiconductors is fundamental to these devices; high single-crystal quality, atomic-layer-scale controllability, and mass productive ability are provided by the utilization of metalorganic chemical vapor deposition, molecular beam epitaxy, liquid phase epitaxy, hydride vapor phase epitaxy, and others. Phosphides, arsenides, nitrides, and antimonides are making exciting breakthroughs. Coherent growth is the growth mode of compound semiconductor thin films, and the lattice mismatch between substrates and epitaxial layers fundamentally restrains the crystal quality.

This Special Issue entitled “Crystal Growth of III–V Semiconductors,” offers researchers in the field of III–V compound growth the opportunity to present new approaches.

Guest Editors

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About the Journal

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.

Editor-in-Chief

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