Special Issue

Crystal Structure and Crystal Growth of Semiconductor Materials

Message from the Guest Editor

Crystal, the most stable and perfect state, can reveal the intrinsic properties of material and also constitutes the basic component of semiconducting devices. Therefore, crystal growth and structure design have been attracting a great deal of research interest. However, achieving the production of high-quality crystal is not a simple matter. Although great efforts have been made, some fundamentals underlying crystal growth processes are still unclear, including nucleation, growth kinetics, segregation behavior, interface stability, heat, mass transport, etc. The understanding of these processes that determine crystal quality and packing structural is therefore of paramount importance for the exploration of structure-property relationships and electrical transport behavior in semiconductor materials. Additionally, with more crystal growth methods and technologies, some aspects of theoretical characterization and prediction of crystal structures are encouraged to explore.

Guest Editor

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