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Preparation, Properties and Applications of Liquid Crystal Materials and Polymers

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Message from the Guest Editor

Dear Colleagues,

The development of liquid crystal devices (LCDs) (such as L displays) and LC materials are inseparable. In the early 1970s, practical LCDs (such as twisted nematic LCDs) and the practical LC materials (such as cyanobiphenyl compounds) were developed almost simultaneously. Furthermore, when the industry of thin-film transistors (TFT) LCDs started, LC materials of fluoro compounds, which became essential for TFT-LCDs, were developed. The industry of LC displays has developed greatly, partly because of the discovery of materials. Currently, liquid crystal technology explores the next applications beyond displays, e.g., optical switching devices for optical communication, smart windows for architectures, LCDs for vehicles, laser equipment, LiDar for EV, glasses, lighting equipment, and so on. Furthermore, research on LC materials has expanded in the areas of new LC materials for new applications, such as LC monomers applied for LCDs, LC optical polymers, LC paints, and so on.

This Special Issue aims to provide an opportunity to overview new developments of LC material technologies for new devices at this point.



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Special Issue



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Message from the Editor-in-Chief

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