

Abstract Submitted
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Topological defects of lyotropic chromonic liquid crystals XUXIA YAO, ALEJANDRO REY, JUNG PARK, MOHAN SRINIVASARAO — Lyotropic chromonic liquid crystals (LCLCs), an interesting and relatively poorly studied class of lyotropic liquid crystals, have gained increasing attention from 1980s. The studies of topological defects of LCLCs have been rarely reported in literature. We found LCLCs actually provide a good model system to study the defects, due to their unique properties. Defects, such as loops and point defects distributed on disclination line, etc., were created and controlled through symmetry-breaking phase transitions in some cells with special geometries. The dynamics of these defects was studied and more elastic properties of LCLCs were deduced.

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