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# Conformational Motion and Disorder in Low and High Molecular Mass Crystals

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With 42 Figures and 11 Tables



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The broad field of conformational motion and disorder in crystals is reviewed with attention paid to the distinction of the recently defined condisc crystals from the well-known mesophases of liquid crystals and plastic crystals. Structure, thermodynamics, motion and transitions of a number of small and large molecules are discussed. The cooperative nature of the defect equilibrium is analyzed. Of special interest are the borderlines between high viscosity liquid crystals and condisc crystals and between plastic crystals and condisc crystals. The complications posed by pseudorotation, jumping between symmetry-related states and freezing into non-equilibrium states are illuminated.

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