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Sommario/riassunto

The present book describes the fundamental features of glassy disordered systems at high temperatures (close to the liquid-to-glass transition) and for the first time in a book, the universal anomalous properties of glasses at low energies (i.e. temperatures/frequencies lower than the Debye values) are depicted. Several important theoretical models for both the glass formation and the universal anomalous properties of glasses are described and analyzed. The origin and main features of soft atomic-motion modes and their excitations, as well as their role in the anomalous properties, are conside