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Autore	Toledano Jean-Claude
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Sommario/riassunto

This book introduces the physical mechanism of the plastic deformation of solids, which relies essentially on the occurrence and motion of dislocations. These are linear defects, specific of crystalline solids whose motion under external stresses explains the relative ease by which solids (metals in particular) can be deformed in order to give them desired shapes. The objective is to introduce the topic to undergraduate students, restricting to the main ideas and showing their relevance in interpreting phenomena well known to everyone (e.g. why are certain metals harder than others?), and fina