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Nota di contenuto	Chapter 1. Introduction of flexible electronics -- Chapter 2. Buckling of film-on-substrate -- Chapter 3. Buckling of fibers-on-substrate -- Chapter 4. Self-similar design without substrate -- Chapter 5. Self-similar design with substrate -- Chapter 6. Conformal design with rigid substrate -- Chapter 7. Conformal design with soft substrate -- Chapter 8. Deformation instability under compression -- Chapter 9. Deformation instability under stretching -- Chapter 10. Multiple neutral layer design for flexible electronics -- Chapter 11. Liquid metal for stretchable electronics -- Chapter 12. Devices and applications of flexible electronics.
Sommario/riassunto	Flexible electronics are electronics that can be stretched, bent, twisted, and deformed into arbitrary shapes. They break through the bottleneck and monopoly of traditional, rigid IC technologies and represent the next-generation electronics. This book provides an overview of the underlying theory and method of structural design for flexible electronics. Compared to intrinsically flexible and stretchable materials, structural engineering has proven its unique advantages, e.g. stretchable inorganic electronics. Based on the mechanical mechanisms, this book discusses the main structural deformation behaviors of flexible electronics, including mechanics of film-on-substrate and fiber-on-substrate, self-similar design with/without substrate, conformal design on rigid/soft substrate, purely in-plane design of serpentine interconnect with/without substrate, buckling-

driven self-assembly and kirigami assembly strategies, neutral layer design, and the new materials-based structure design like liquid metals, etc. Moreover, the related advanced fabrication technology, the devices designs and applications of flexible electronics are also presented. The comprehensive and in-depth content makes this book can be used as a reference book for experienced researchers, as well as a teaching material for graduate students. .
