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Altri autori (Persone)	Jaya PrakashNiranjana
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Nota di contenuto	Silk: Sources & Structure -- Role of degumming and various degumming techniques -- Various morphological forms of silk fibroin -- Bio-composites of Silk -- Silk based bio-inks -- Additive manufacturing of silk -- Silk based smart materials -- Biomedical applications of Silk fibroin -- Silk for environment remediation.
Sommario/riassunto	This book highlights the potential of silk in a vast array of applications, mainly in the field of medicine, electronics, and cosmetics. The silk proteins are generally contrived within the specialized glands of the arthropods, viz silkworms, spiders, and moths posterior to the biosynthesis occurring inside the epithelial cells. The unique conformational orientation comprising of hydrophobic crystalline beta-sheet domains and hydrophilic amorphous random coil structure, their

tunability, presence of plenteous functional groups, mechanical strength, ease of regeneration, biocompatibility and biodegradability has enabled silk to grow beyond textile materials over last few decades making it an excellent alternative to synthetic polymers.

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