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Altri autori (Persone)	SarkarHironmoy Vega-BaudritJosé Roberto
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Nota di contenuto	Introduction to functionalized nanocomposites hydrogels and their applications -- Synthesis and characterization of nanocomposites hydrogels -- Classification of the wound and its nature -- Biology of wound healing and the factors influencing the healing process -- Metal nanoparticles application in wound healing -- Ceramic nanofiber-based materials for chronic wounds -- Preparation and application of Polymer-based nanomedicine for wounds -- Hydrogel dressing for wound repair -- Synthetic drugs loaded with Hydrogel Dressing -- Hydrogels as combinational therapy for wound healing -- Hydrogels against wounds causing opportunistic pathogens -- Future scope of hydrogels-based wound healing.
Sommario/riassunto	This book presents recent advancements in wound care systems using functionalized nanomaterials based hydrogels to prevent infection and promote wound healing. In clinical set-ups or hospitals, wound healing remains a challenging problem; a proper, efficient, and cost-effective wound management system is essential. Additionally, wounds infected with multiple antibiotic-resistant bacteria (MAR) opportunistic

pathogens cause prolonged patient debility, increasing healthcare costs. The chapters in this book comprehensively introduce functionalized nanocomposite hydrogels and their application to wound healing. It describes the synthesis, fabrication, and properties of hydrogel systems such as metal nanoparticles, ceramic nanofiber, and polymer-based nanomedicine, to function as a wound dressing to promote repair and prevent infection. This book will appeal to clinical practitioners, researchers, engineers, and scientists interested in biomaterials for applications primarily in wound care and recovery.