1. Record Nr. UNINA9910494563803321 Autore Kumar Prasun **Titolo** Wound Healing Research: Current Trends and Future Directions / / edited by Prasun Kumar, Vijay Kothari Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2021 Pubbl/distr/stampa **ISBN** 981-16-2677-4 [1st ed. 2021.] Edizione Descrizione fisica 1 online resource (689 pages) Altri autori (Persone) KothariVijay Disciplina 612 Soggetti Human physiology Regenerative medicine Cytology Primary care (Medicine) **Human Physiology** Regenerative Medicine and Tissue Engineering Cell Biology **Primary Care Medicine** Atenció primària Medicina regenerativa Fisiologia humana Llibres electrònics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Part I: Cellular and physiological aspects of wound-healing -- Chapter 1: Classification of wounds and the physiology of wound healing --Chapter 2: Mechanisms of collective cell migration in wound healing: physiology and disease -- Part II: Natural products in the management of infected wounds -- Chapter 3: Natural products as Wound healing agents -- Chapter 4: Wound healing agents from natural sources --Chapter 5: Wound healing: Understanding honey as an agent --Chapter 6: Role of medicinal plants in wound healing: An ethnopharmacological approach -- Chapter 7: Mainstreaming

Traditional Practices for Wound-Management -- Chapter 8: Traditional Probiotics, Next-Generation Probiotics and Engineered Live Bio-

Sommario/riassunto

Therapeutic Products in Chronic Wound Healing -- Chapter 9: Role of probiotics in wound healing -- Chapter 10: Use of probiotic bacteria and their bioactive compounds for wound-care -- Chapter 11: Development of novel anti-infective formulations for wound disinfection -- Part III: Interdisciplinary approach to wound-care --Chapter 12: Silversol® a nano silver preparation: a multidimensional approach to advanced wound healing -- Chapter 13: Preclinical models for wound-healing and repair studies -- Chapter 14: Chronic wounds: an overview of wound healing and experimental models for wound studies -- Chapter 15: Experimental wound-care models: in vitro/in vivo models and recent advances based on skin-on-a-chip models --Chapter 16: Potential Biomedical Applications of Marine Sponge Derived Chitosan: Current breakthroughs in Drug Delivery for the Wound Care -- Chapter 17: Biomedical applications of biodegradable polymers in wound-care -- Chapter 18: Role of biodegradable polymer-based biomaterials in advanced wound care -- Chapter 19: Atmospheric Pressure Plasma therapy for wound healing and disinfection- A Review -- Chapter 20: Quorum sensing as a therapeutic target in the treatment of chronic wound infections -- Chapter 21: Biofilm: A Challenge to Overcome in Wound Healing -- Chaper 22: The potential of essential oils as topical antimicrobial agents in the age of artificial intelligence. This book presents the latest knowledge on both the physiological and

This book presents the latest knowledge on both the physiological and the microbiological aspects of wound healing. Fresh insights into the process of cutaneous wound healing are described, which involves tissue regeneration and repair processes consisting of a sequence of molecular and cellular events. The management of infected wounds is then discussed in detail, covering the roles of traditional medicine practices, novel anti-infective formulations, non-antibiotic approaches, and probiotic bacteria. A section devoted to the interdisciplinary approach to wound care addresses topics including in vitro and in vivo research models, the development of advanced wound dressings, tissue engineering, and the potential applications of bioscaffolds. The authors are all leading researchers in the field. This book is an attempt to showcase current research status and future directions in the area of wound-healing research, which must be of interest to a large group of readers and researchers interested in this field.