

1. Record Nr.	UNINA9910463443403321
Titolo	Handbook of photomedicine // edited by Michael R. Hamblin, Ying-Ying Huang
Pubbl/distr/stampa	Boca Raton : , : CRC Press, , 2014
ISBN	0-429-19384-X 1-4398-8469-2
Descrizione fisica	1 online resource (854 p.)
Altri autori (Persone)	HamblinMichael R HuangYing-Ying
Disciplina	615.8/31
Soggetti	Phototherapy - Methodology Ultraviolet radiation - Side effects Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front Cover; Contents; Preface; Acknowledgments; Editors; Contributors; Chapter 1: Introduction: Historical Vignettes from the Field of Photomedicine; Chapter 2: History and Fundamentals of Lasers and Light Sources in Photomedicine; Chapter 3: Light-Tissue Interactions; Chapter 4: History and Fundamentals of Photodynamic Therapy; Chapter 5: History and Fundamentals of Low-Level Laser (Light) Therapy; Chapter 6: UV Effects on the Skin; Chapter 7: Photocarcinogenesis Nonmelanoma Skin Cancer; Chapter 8: Autoimmune Photodermatoses; Chapter 9: Photoaggravated Dermatoses; Chapter 10: Photoaging Chapter 11: UVR-Induced ImmunosuppressionChapter 12: The Porphyrias; Chapter 13: Photoprotection; Chapter 14: Botanical Antioxidants for Photochemoprevention; Chapter 15: Reversal of DNA Damage to the Skin with DNA Repair Liposomes; Chapter 16: Climate Change and Ultraviolet Radiation Exposure; Chapter 17: Photochemistry and Photobiology of Vitamin D; Chapter 18: UVB Phototherapy for Psoriasis; Chapter 19: PUVA Therapy; Chapter 20: Extracorporeal Photopheresis; Chapter 21: Ultraviolet C Therapy for Infections; Chapter 22: Recent Advances in Developing Improved Agents for Photodynamic

## Therapy

Chapter 23: 5-Aminolevulinic Acid and Its Derivatives Chapter 24: Genetically Encoded Photosensitizers: Structure, Photosensitization Mechanisms, and Potential Application to Photodynamic Therapy; Chapter 25: Light Dosimetry for Photodynamic Therapy: Basic Concepts; Chapter 26: Multimodality Dosimetry; Chapter 27: Cell Death and PDT-Based Photooxidative (Phox) Stress; Chapter 28: Vascular and Cellular Targeted PDT; Chapter 29: Photodynamic Therapy for Increased Delivery of Anticancer Drugs; Chapter 30: Targeting Strategies in Photodynamic Therapy for Cancer Treatment Chapter 31: Enhancing Photodynamic Treatment of Cancer with Mechanism-Based Combination Strategies Chapter 32: Nanoparticles for Photodynamic Cancer Therapy; Chapter 33: Drug Delivery Strategies for Photodynamic Therapy; Chapter 34: Antimicrobial PDT for Clinical Infectious Diseases; Chapter 35: PDT and the Immune System; Chapter 36: Detection of Bladder Cancer by Fluorescence Cystoscopy: From Bench to Bedside-the Hexvix Story; Chapter 37: Photochemical Internalization: From Bench to Bedside with a Novel Technology for Targeted Macromolecule Therapy Chapter 38: The Story of Tookad: From Bench to Bedside Chapter 39: Photodynamic Therapy in Ophthalmology; Chapter 40: Photodynamic Therapy in Dermatology; Chapter 41: Photodynamic Therapy in the Gastrointestinal Tract; Chapter 42: Photodynamic Applications in Brain Tumors; Chapter 43: Photodynamic Therapy for Malignant Pleural Disease; Chapter 44: Clinical Photodynamic Therapy in the Chinese Region; Chapter 45: Photodynamic Therapy and Fluorescent Diagnostics in the Russian Federation; Chapter 46: Chromophores (Photoacceptors) for Low-Level Laser Therapy Chapter 47: Low-Level Laser Therapy Signaling Pathways

---

### Sommario/riassunto

Providing the most comprehensive, up-to-date coverage of this exciting biomedical field, Handbook of Photomedicine gathers together a large team of international experts to give you a complete account of the application of light in healthcare and medical science. The book progresses logically from the history and fundamentals of photomedicine to diverse therapeutic applications of light, known collectively as phototherapies. It facilitates your understanding of human diseases caused by light, the rationale for photoprotection, and major applications of phototherapy in clini

---