Record Nr. UNINA9910451606503321 Autore Shimomura Osamu <1928-> Titolo Bioluminescence [[electronic resource]]: chemical principles and methods / / Osamu Shimomura Hackensack, N.J., : World Scientific, 2012 Pubbl/distr/stampa **ISBN** 1-280-66962-4 9786613646552 981-4366-09-9 Edizione [Rev. ed.] Descrizione fisica 1 online resource Disciplina 572/.4358 Soggetti Bioluminescence Chemiluminescence Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto The fireflies and luminous insects -- Luminous bacteria -- The ostracod cypridina (vargula) and other luminous crustaceans -- The jellyfish aequorea and other luminous coelenterates -- The coelenterazines -- Luminous mollusca -- Annelida -- Dinoflagellates and other protozoa -- Luminous fungi -- Other luminous organisms. Sommario/riassunto This book is an authoritative monograph on the recent progresses in the chemistry of bioluminescence. It provides a comprehensive overview of the past and the latest developments in understanding the biochemical mechanisms of some 35 different types of luminous organisms, together with information helpful to students and researchers in an Appendix. It is the first and only book that provides chemical information on all currently known bioluminescence systems. Dr Shimomura is the leading practitioner in the field for the past half century, and is best known for his discovery of the jellyfish photoprotein aequorin and the green fluorescent protein. This book is the bible of bioluminescence, and is "a must read", not only for the students who study bioluminescence but also for those who work in various aspects relating to bioluminescence. This book will be an

important source of chemical knowledge on bioluminescence for a long

period of time in future. Fully revised since its publication in 2006, it now incorporates the most recent advances in the subject area. A new section on "Green Fluorescent Protein" has been added at the end of Chapter 4. It also contains an extensive reference section.