1. Record Nr. UNINA9910254053403321

Titolo	Bioluminescence: Fundamentals and Applications in Biotechnology - Volume 3 / / edited by Gérald Thouand, Robert Marks
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2016
ISBN	3-319-27407-4
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (VIII, 203 p. 59 illus., 51 illus. in color.)
Collana	Advances in Biochemical Engineering/Biotechnology, , 0724-6145 ; ; 154
Disciplina	572.4358
Soggetti	Microbiology Genetic engineering Biochemical engineering Biochemistry Applied Microbiology Genetic Engineering Biochemical Engineering Animal Biochemistry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Lux and luc genes as reporter reactions : how to use them in molecular biology ? -- Measurement of bioluminescence intensity and spectrum: current physical techniques and principles -- Structure, Mechanism and Mutation of Bacterial Luciferase -- Detection of metals and organometallic compounds with microbial bioluminescent bioassays -- Bioluminescent microbial biosensors applied to on line detection of chemicals -- Let there be light! Bioluminescent imaging to study bacterial pathogenesis in live animals and plants -- Uses of the Photoprotein Aequorin in Biotechnology: Fundamental Properties and Genetic Engineering -- Whole-Cell Biosensors as Tools for the Detection of Quorum Sensing Molecules: Uses in Diagnostics and the Investigation of the Quorum Sensing Mechanism.
Sommario/riassunto	This book review series presents current trends in modern biotechnology. The aim is to cover all aspects of this interdisciplinary

technology where knowledge, methods and expertise are required from chemistry, biochemistry, microbiology, genetics, chemical engineering and computer science. Volumes are organized topically and provide a comprehensive discussion of developments in the respective field over the past 3-5 years. The series also discusses new discoveries and applications. Special volumes are dedicated to selected topics which focus on new biotechnological products and new processes for their synthesis and purification. In general, special volumes are edited by well-known guest editors. The series editor and publisher will however always be pleased to receive suggestions and supplementary information. Manuscripts are accepted in English.