

1. Record Nr.	UNINA9911001458203321
Autore	Waditee-Sirisattha Rungaroon
Titolo	Halotolerance in Cyanobacteria // by Rungaroon Waditee-Sirisattha, Hakuto Kageyama
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2025
ISBN	981-9653-30-4
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (XV, 202 p. 56 illus., 49 illus. in color.)
Collana	Microorganisms for Sustainability, , 2512-1898 ; ; 60
Disciplina	579.17
Soggetti	Microbial ecology Microbiology Cytology Molecular biology Environmental Microbiology Cellular Microbiology Molecular Biology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Part I. Salt-stress signal transduction in cyanobacteria -- Chapter 1. Basic principles and characteristics of cyanobacterial cells -- Chapter 2. Fundamental physiological processes in cyanobacteria -- Part II. Ion homeostasis -- Chapter 3. Cyanobacterial diversity in hypersaline environments, determined using culture-based and genomic-based methods -- Chapter 4. Genomic and evolutionary mechanisms of halophilic cyanobacteria -- Part III. Osmoprotectants in cyanobacteria -- Chapter 5. Key molecular mechanisms that facilitate halotolerance in cyanobacteria -- Chapter 6. Key molecular mechanisms that facilitate halotolerance in cyanobacteria -- Chapter 7. Key molecular mechanisms that facilitate halotolerance in cyanobacteria -- Chapter 8. Salt stress response of major intracellular metabolic pathways in cyanobacteria -- Chapter 9. Physiological regulation under salt stress conditions in cyanobacteria.
Sommario/riassunto	This book discusses the molecular, cellular and physiological processes of salt tolerance in cyanobacteria. It is divided into three sections, each explaining different aspects of cyanobacteria. The first section covers

the principle, characteristic and fundamental physiological processes, the second section describes the cyanobacterial diversity, genomic context and genome mechanism, and the last section discusses the molecular machinery, cellular response and physiological regulations for salt tolerance. This book provides a key reference for basic and advances in the field. This book can be used as a reference for researchers, scientist and students whose work on cyanobacteria, stress biology and response.
