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Titolo	Prokaryotic Chaperonins : Multiple Copies and Multitude Functions / / edited by C. M. Santosh Kumar, Shekhar C. Mande
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Descrizione fisica	1 online resource (IX, 170 p. 46 illus., 38 illus. in color.)
Collana	Heat Shock Proteins, , 1877-1246 ; ; 11
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Soggetti	Proteins Microbiology Biophysics Biomedical engineering Cell physiology Protein Science Biological and Medical Physics, Biophysics Biomedical Engineering/Biotechnology Cell Physiology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Chapter 1. Protein folding in the cell – the role of molecular chaperones -- Chapter 2. Structure and function of the Hsp60 Chaperonins -- Chapter 3. Classical View on the Regulation of Heat-shock response -- Chapter 4. Recent Advances in the Regulation of Heat-shock Response- Chapter 5. Multiple Chaperonins in Bacteria -- Chapter 6. Multiple Chaperonins in Mycobacteria -- Chapter 7. Dynamic interplay of the Myxobacterial chaperonins -- Chapter 8. Division of Labour in Rhizobial Chaperonins -- Chapter 9. Cooperativity of archaeal and bacterial chaperonins -- Chapter 10. Evolution of multiple chaperonins.
Sommario/riassunto	This book focuses on a topical and timely aspect of prokaryotic biology - the biology of prokaryotic multiple chaperonins. Chaperonins are a class of molecular chaperones, the proteins that assist folding of other proteins in the cell. The book begins with an introductory chapter on the structural and functional aspects of chaperonins, followed by an

outline on different mechanisms of their regulation. Subsequently, the book provides a comprehensive overview on how the multiple-chaperonins have embraced biological requirements in different classes of microbes, discussing their functional diversity, evolutionary paths and the latest advances in the field. It brings together leading experts from across the globe in offering a detailed account of the structural, biochemical, functional and phylogenetic characteristics of microbial chaperonins for students, researchers and teachers working in the area of microbiology/ biophysics/ parasitology – more specifically, in protein folding pathways. .