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Titolo	Bacterial physiology [[electronic resource]] : a molecular approach / / Walid El Sharoud, editor
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Descrizione fisica	1 online resource (388 p.)
Altri autori (Persone)	El-SharoudWalid M
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Subcellular Organisation in Bacteria -- Molecular Components of the Bacterial Cytoskeleton -- Mechanosensitive Channels: Their Mechanisms and Roles in Preserving Bacterial Ultrastructure During Adaptation to Environmental Changes -- Structural and Functional Flexibility of Bacterial Respiromes -- Protein Secretion in Bacterial Cells -- Regulation of Transcription in Bacteria by DNA Supercoiling -- Quorum Sensing -- Environmental Sensing and the Role of Extracytoplasmic Function Sigma Factors -- Extracellular Sensors and Extracellular Induction Components in Stress Tolerance Induction -- Ribosome Modulation Factor -- The Role of RpoS in Bacterial Adaptation -- Phenotypic Variation and Bistable Switching in Bacteria.
Sommario/riassunto	The application of new molecular methodologies in the study of bacterial behaviour and cell architecture has enabled new revolutionary insights and discoveries in these areas. While this has also raised a number of scientific mysteries about bacteria, it certainly improved our understanding of these organisms as complex and adaptive entities rather than just simple tiny buckets of enzymes. The value of this recent knowledge in bacterial physiology is not only restricted to fundamental biology, but it also extends to biotechnology and drug-discovery disciplines where understanding cell behaviour and structure is essential for better exploitation of useful bacteria and effective eradication of harmful ones. This makes a new text accommodating recent developments in bacterial physiology highly relevant to a wide

range of readership including those interested in basic and applied knowledge.