Record Nr.	UNINA9910139506603321
Titolo	Bacterial signaling / / edited by Reinhard Kramer and Kirsten Jung
Pubbl/distr/stampa	Weinheim, : Wiley-VCH, c2010
ISBN	1-282-47231-3 9786612472312 3-527-62923-8 3-527-62924-6
Descrizione fisica	1 online resource (517 p.)
Classificazione	570 WE 5340
Altri autori (Persone)	KramerReinhard <1948-> JungKirsten
Disciplina Soggetti	660.6 Cell interaction Bacteria - Physiology Cellular signal transduction
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Bacterial Signaling; Contents; Preface; List of Contributors; Part I: Intercellular Communication; Introduction; 1 Cell-Cell Communication and Biofilm Formation in Gram-Positive Bacteria; 2 Cell-Cell Communication in Biofilms of Gram-Negative Bacteria; 3 Cell Interactions Guide the Swarming and Fruiting Body Development of Myxobacteria; 4 Communication Between Rhizobia and Plants; 5 Communication Between Pathogens and Eukaryotic Cells; 6 Identification of Bacterial Autoinducers - Methods Chapter; Part II: Transmembrane Signaling; Introduction 7 Outer Membrane Signaling in Gram-Negative Bacteria8 Stimulus Perception and Signaling in Histidine Kinases; 9 Chemotaxis and Receptor Localization; 10 Photoreception and Signal Transduction; 11 Transmembrane Signaling; 12 Sensory Transport Proteins; 13 Regulated Intramembrane Proteolysis in Bacterial Transmembrane Signaling; 14 Protein Chemical and Electron Paramagnetic Resonance Spectroscopic Approaches to Monitor Membrane Protein Structure and Dynamics - Methods Chapter; Part III: Intracellular Signaling;

1.

	Introduction; 15 Protein Domains Involved in Intracellular Signal Transduction
	The Sensing of Oxygen by Bacteria17 Microbial Sensor Systems for Dibudragen, Nitric Oxide, and Carbon Monovide: 18 Signal
	Transduction by Trigger Enzymes: Bifunctional Enzymes and
	Transporters Controlling Gene Expression; 19 Regulation of
	Carbohydrate Utilization by Phosphotransferase System-Mediated
	Protein Phosphorylation; 20 cAMP Signaling in Prokaryotes; 21 c-di- GMP Signaling; 22 ppGpp Signaling; 23 Sensory RNAs; 24 Signal Transduction by Serine/Threonine Protein Kinases in Bacteria; 25 Regulatory Proteolysis and Signal Transduction in Bacteria 26 Intracellular Signaling and Gene Target Analysis - Methods ChapterIndex
Sommario/riassunto	Providing a comprehensive insight into cellular signaling processes in bacteria with a special focus on biotechnological implications, this is the first book to cover intercellular as well as intracellular signaling and its relevance for biofilm formation, host pathogen interactions, symbiotic relationships, and photo- and chemotaxis. In addition, it deals in detail with principal bacterial signaling mechanisms making this a valuable resource for all advanced students in microbiology. Dr. Kr?mer is a world-renowned expert in intracellular signaling and its implications for biotechnology pro