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| Autore                  | Solioz Marc   |
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| Soggetti                | Organometallic chemistry<br>Microbiology<br>Bacteriology<br>Medical microbiology<br>Organometallic Chemistry<br>Applied Microbiology<br>Medical Microbiology  |
| Lingua di pubblicazione | Inglese   |
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| Livello bibliografico   | Monografia  |
| Nota di contenuto       | Copper - a modern bioelement -- The essence of copper homeostasis -- Copper toxicity mechanisms -- Copper homeostasis in Gram-positive bacteria -- Copper homeostasis in Gram-negative bacteria -- Chalkophores, the 'siderophores' for copper -- Copper loading of cuproenzymes -- Contact killing of bacteria by metallic copper.   |
| Sommario/riassunto      | In the past two decades, great progress has been made in the understanding of copper as a bioelement. The book summarizes the current knowledge of copper toxicity, homeostasis and resistance in bacteria, in which proteins like copper ATPases, copper chaperones and copper-responsive regulators of gene expression play major roles. The author also discusses the metallation of cuproenzymes. The evolution of the use of copper by cells and of copper-homeostatic proteins are also considered in this Brief. |