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Nota di contenuto	Cyanobacteria in Diverse Habitats / Lira A. Gaysina, Aniket Saraf and Prashant Singh -- Cyanobacteria in Nitrogen-Fixing Symbioses / Edder D. Bustos-Diaz, Francisco Barona-Gomez, and Angelica Cibrian-Jaramillo -- Cyanobacterial Taxonomy: Morphometry to Molecular Studies / N. Anand, N. Thajuddin, and P.K. Dadheech -- Dormant Cells (Akinetes) of Filamentous Cyanobacteria Demonstrate a Great Variability in Morphology, Physiology, and Ecological Function / Assaf Sukenik, Jacqueline Rucker and Iris Maldener -- Chlorophyll a Fluorescence in Cyanobacteria: Relation to Photosynthesis / Alexandrina Stirbet, Dusan Lazar, George C. Papageorgiou, and Govindjee -- Photomorphogenesis in the Cyanobacterium Fremyella diplosiphon Improves Photosynthetic Efficiency / Vinod Kumar, Pankaj K. Maurya, Soumila Mondal, Rajeshwar P. Sinha, and Shailendra P. Singh -- Mechanisms of Photoprotection in Cyanobacteria / Jainendra Pathak, Haseen Ahmed, Prashant R. Singh, Shailendra P. Singh, Donat-P. Hader, and Rajeshwar P. Sinha -- Nitrogenase and Hydrogenase: Enzymes for Nitrogen Fixation and Hydrogen Production in Cyanobacteria / Arun Kumar Mishra, Manish Singh Kaushik, and D.N. Tiwari -- Influence of Circadian Clocks on Optimal Regime of Central C-N Metabolism of Cyanobacteria / Jan Cerveny, Jakub Salagovic, Frantisek Muzika, David Safranek, and Igor Schreiber -- Phycobiliproteins and Their Commercial Significance / Vinod K. Kannaujiya, Deepak Kumar, Jainendra Pathak,

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Sommario/riassunto

"Cyanobacteria constitute the most widely distributed group of photosynthetic prokaryotes found in almost all realms of the earth and play an important role in Earth's nitrogen and carbon cycle. The gradual transformation from reducing atmosphere to oxidizing atmosphere was a turning point in the evolutionary history of the earth and made conditions for present life forms possible. Cyanobacteria: From Basic Science to Applications is the first reference volume that comprehensively discusses all aspects of cyanobacteria, including the diverse mechanisms of cyanobacteria for the advancement of cyanobacterial abilities, towards higher biofuel productivity, enhanced tolerance to environmental stress and bioactive compounds and potential for biofertilizers."--