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Nota di contenuto	Part I: General topics -- Geothermal habitats and adaptations of thermophilic microbes -- Diversity of thermophilic prokaryotes -- Molecular basis for thermostability -- Cultivation techniques and molecular methods of identification of thermophilic, anaerobic bacteria -- Part II: Biochemistry and Physiology of thermophiles -- Physiology of chemoheterotrophic thermoanaerobes -- Part III: Biotechnological Applications -- Thermostable enzymes and their applications -- Production of biofuels by thermoanaerobic bacteria -- Production of fine chemicals by thermophilic, anaerobic bacteria -- Part IV: Future aspects -- Potential of anaerobic thermophiles and future prospects.
Sommario/riassunto	Hot environments are diverse environments that habor a wide variety of anaerobic microorganisms. Although the existence of thermophilic microorganisms has been known for over a century, it is only since the 1970s that warm environments inhabited by thermophiles have been studied in more detail. While aerobic thermophiles have received most of the interest, thermophilic anaerobes have received less attention.

This book provides a comprehensive overview of the fundamental aspects of thermophilic anaerobes, from their environments to their applications in biotechnology. The book is divided into three parts: 1) a general overview of thermophilic anaerobes, their history, environments, and phylogenetic relationships, 2) physiological aspects of thermophilic anaerobes and their mechanisms of thermal adaptation, and 3) the biotechnological applications of thermophiles for the production of biofuels and other chemical building blocks as well as their applications in specific industries. This comprehensive and up-to-date book, Thermophilic anaerobes - Phylogeny, Physiology and Biotechnological Applications, is a valuable resource for experienced researchers and early career scientists alike who want to learn more about this exciting and developing field.