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Nota di contenuto	1.Introduction: Biotechnology of Extremophiles -- 2.Bioprospecting in Extreme Environments -- 3.Extremolytes and Extremozymes -- 4. Biotechnology of Thermophiles and Hyperthermophile -- 5. Biotechnology of Psychrophiles -- 6.Biotechnology of Acidophiles -- 7. Biotechnology of Alkaliphiles -- 8.Biotechnology of Halophiles -- 9. Biotechnology of Piezophiles.
Sommario/riassunto	Aimed at research scientists and biotechnologists, this book is an essential reading for those working with extremophiles and their potential biotechnological application. Here, we provide a comprehensive and reliable source of information on the recent advances and challenges in different aspects of the theme. Written in an accessible language, the book is also a recommended as reference text for anyone interested in this thriving field of research. Over the last decades, the study of extremophiles has provided ground breaking discoveries that challenge our understanding of biochemistry and molecular biology. In the applied side, extremophiles and their

enzymes have spawned a multibillion dollar biotechnology industry, with applications spanning biomedical, pharmaceutical, industrial, environmental, and agricultural sectors. Taq DNA polymerase (which was isolated from *Thermus aquaticus* from a geothermal spring in Yellowstone National Park) is the most well-known example of the potential biotechnological application of extremophiles and their biomolecules. Indeed, the application of extremophiles and their biologically active compounds has opened a new era in biotechnology. However, despite the latest advances, we are just in the beginning of exploring the biotechnological potentials of extremophiles. .

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