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Titolo	Fungi of Antarctica : diversity, ecology and biotechnological applications / / edited by Luiz Henrique Rosa
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ISBN	9783030183677 303018367X
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (xv, 345 pages) : color illustrations
Disciplina	579.135 579.5
Soggetti	Mycology Microbial ecology Conservation biology Ecology Microbiology Environmental engineering Biotechnology Polar regions
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Preface -- Fungi in Antarctica: Diversity, ecology, effects of climate change, and bioprospection for bioactive compounds -- Uncultivated Fungi from Antarctica -- Fungi present in soils of Antarctica -- Diversity and ecology of fungal assemblages present in lakes of Antarctica -- Rock-inhabiting fungi in Antarctica: new frontiers of the edge of life -- Fungi in snow and glacial ice of Antarctica -- Antarctic permafrost: an unexplored fungal microhabitat at the edge of life -- Fungi associated with plants and lichens of Antarctica -- Fungus-invertebrate interactions in Antarctica -- Sub-Antarctic and Antarctic marine ecosystems: an unexplored ecosystem of fungal diversity -- The use of psychrophilic Antarctic yeast in the biological control of post-harvest diseases of fruits stored at low temperatures -- Bioactive compounds produced by Antarctic filamentous fungi -- Antarctic

	yeasts as a source of enzymes for biotechnological applications -- Antarctic fungi as producers of pigments -- Genomics of Antarctic fungi: A new frontier -- Index.
Sommario/riassunto	This book focuses on the fungi found in one of the most pristine regions on Earth: Antarctica. It discusses the fungal occurrence in all substrates of the region, including soil, seawater, lake and marine sediments, rocks, ice, and snow. It also addresses the impact of climate changes on these organisms, the genomic techniques developed to study them, and how a number of compounds, such as antibiotics and enzymes, produced by the Antarctic fungi can be used in medicine, agriculture and the chemical industry.