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Titolo	Biology of the Fungal Cell // edited by Dirk Hoffmeister, Markus Gressler
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ISBN	3-030-05448-9
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Descrizione fisica	1 online resource (138 pages)
Collana	The Mycota, A Comprehensive Treatise on Fungi as Experimental Systems for Basic and Applied Research ; ; 8
Disciplina	572.8295
Soggetti	Mycology Cell biology Microbiology Microbial ecology Cell Biology Microbial Ecology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	The Woronin body, a fungal organelle regulating multicellularity -- Septum Formation and Cytokinesis in Ascomycete Fungi -- The Cytoskeleton and Polarity Markers during Polarized Growth of Filamentous Fungi -- Developmental Decisions in Aspergillus nidulans -- Biomechanics of Hyphal Growth -- Molecular signalling during the ectomycorrhizal symbiosis -- Calcium cation cycling and signaling pathways in fungi.
Sommario/riassunto	This volume provides a detailed look at various biochemical and developmental aspects of fungal cell biology, and offers extensive information on model organisms of filamentous fungi, such as Aspergillus, and yeasts, such as Saccharomyces, while also highlighting molecular differences between ascomycetes and basidiomycetes. The book's seven chapters, prepared by experts in the fields of mycology, have been grouped into two closely connected sections: "Fungal Cell Growth" and "Signals and Development". The first section addresses bio-molecular mechanisms of fungal cell division and polarized cell

growth, with a special emphasis on cell-cell connections, cell wall synthesis, and directed protein transport. In turn, the second section describes the intra- and extracellular signals that set off biochemical and conformational changes of cell type during development. Here, the authors focus on the molecular signalling pathways, including their impact on plant-fungus interactions, referred to as ectomycorrhizal symbiosis. Given its scope, the book offers a valuable guide for all microbiologists, geneticists, cell biologists, biochemists and plant biologists, as well as advanced students of biology, who share an interest in the field of mycology.
