Record Nr. UNINA9910298453503321 Advanced Microscopy in Mycology / / edited by Tanya E. S. Dahms, Kirk **Titolo** J. Czymmek Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2015 **ISBN** 3-319-22437-9 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (171 p.) Collana Fungal Biology, , 2198-7777 Disciplina 589.2 Soggetti Microscopy Plant physiology Cell biology Developmental biology Biological Microscopy Plant Physiology Cell Biology **Developmental Biology** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Nota di contenuto Applications of Confocal Laser Scanning Microscopy in Filamentous Fungi -- Fluorescence-based Methods for the Study of Protein Localization, Interaction, and Dynamics in Filamentous Fungi -- Super Resolution Microscopy: SIM. STED and Localization Microscopy --Fourier Transform Infrared (FTIR) Microscopy and Imaging of Fungi --Whole Cells Imaged by Hard X-ray Transmission Microscopy -- In situ Nanocharacterization of Yeast Cells Using ESEM and FIB -- Imaging Living Yeasts Cells and Quantifying Their Biophysical Properties by Atomic Force Microscopy -- Future Directions in Mycological Microscopy. Sommario/riassunto This volume provides insight into the principles underscoring various advanced microscopy methods and how they have been, or have the

potential to be, applied to mycology. Offering a comprehensive

overview of the confocal principle, confocal laser scanning microscopy

and its application to fungal biology, this text also examines the newer sophisticated fluorescence-based methods of technology.