Record Nr. UNINA9910746286803321 Fungal machines: sensing and computing with fungi / / Andrew **Titolo** Adamatzky, editor Pubbl/distr/stampa Cham, Switzerland:,: Springer, Springer Nature Switzerland AG,, [2023] ©2023 **ISBN** 3-031-38336-2 Edizione [First edition.] Descrizione fisica 1 online resource (ix, 425 pages): illustrations (some color) Collana Emergence, Complexity and Computation Series 660.62 Disciplina Soggetti Fungi - Biotechnology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes bibliographical references and index. Nota di bibliografia Sommario/riassunto This unique book explores fungi as sensors, electronic devices, and potential future computers, offering eco-friendly alternatives to traditional electronics. Fungi are ancient, widely distributed organisms ranging from microscopic single cells to massive mycelium spanning hectares. They possess senses similar to humans, detecting light, chemicals, gases, gravity, and electric fields. It covers fungal electrical activity, sensors, electronics, computing prototypes, and fungal language. Authored by leading experts from diverse fields, the book is accessible to readers of all backgrounds, from high-schoolers to professors. It reveals the remarkable potential of fungal machines while minimizing environmental impact.