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Descrizione fisica	1 online resource (185 pages)
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Nota di contenuto	Introduction -- Genesis of DNA and cells like ours -- DNA and the diversity of life sustains us and our environment -- The evolving story of DNA, genes and genomes -- We come from single cells – from gene regulation to stem cells -- The cell division cycle and the biology of cancer -- Generation upon generation -- DNA and ageing -- RNA and DNA viruses reproduce in cells -- DNA and the rise of modern biotechnology -- DNA and food and nutrition for 10 billion people -- DNA and the environment -- Gene therapy for human disease -- Synthetic biology – a new frontier -- We have the whole world in our hands.
Sommario/riassunto	The book provides a concise, integrated view of DNA biology and biotechnology in various aspects, such as human health, food production, environmental sustainability, and industry development. It

covers the evolution of DNA, genes, cancer, aging biology, and plant gene technology. The chapters delve into the evolution of DNA, cells, genes, and regulation and its influence on cancer, aging, and development. The book emphasizes modern DNA biotechnology, including plant gene technology, gene therapy, and synthetic biology, and highlights the relevance of DNA knowledge in addressing global challenges. It focuses on providing a contemporary understanding and the background of DNA biology, making it suitable for science and medicine programs or as an introduction to specialized DNA/biotechnology areas. The book targets academicians, researchers, and clinicians in related fields. It is also a valuable resource for anyone interested in understanding DNA and its applications in various fields.