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Descrizione fisica	1 online resource (254 pages)
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Nota di contenuto	Chapter 1_ Recent developments in Biosensor Technology for Fisheries and Aquaculture -- Chapter 2_Application of CRISPR-Cas9 Technology in Fish -- Chapter 3_ Nano-technological applications in Aquatic Health Management -- Chapter 4_Phenotypic plasticity and transgenerational immune priming: opportunities and potential in fisheries -- Chapter 5_Heat shock proteins in stress response: a promising tool for fish health management -- Chapter 6_Immunostimulants: Boon for disease management in Aquaculture -- Chapter 7_Molecular markers and their application in fisheries and aquaculture -- Chapter 8_Applications of Electronics in Fisheries and Aquaculture -- Chapter 9_Metatranscriptomics: A tool to study the host-microbe interactions and functional profile of fish intestinal microbiota under changing environmental conditions -- Chapter 10_Bioremediation and its application in aquaculture -- Chapter 11_Application of Probiotics in Aquaculture -- Chapter 12_Identifying novel antibiotic resistance genes (ARGs): Important aspect of metagenomic research.

Sommario/riassunto

This edited book is focused on SDG 14: life below water. This book covers all aspects of fish biotechnology and health management. A detailed description is provided of CRISPR Cas9 technology application in the development of superior variety of fish with better growth, disease resistance, etc., accompanied by numerous helpful photographs and schematic diagrams. In addition, recent developments in nanotechnology and its application in fisheries production enhancement have been discussed. Further, topics includes, probiotics, immunostimulants, fish genetic markers, bioremediation, metagenomics, transgenerational immune priming, application of cell culture in fisheries and nano-biosensor application on fish disease diagnosis, pollution monitoring, etc. are provided in details. . The book is helpful for researchers, teachers, students, farmers, and entrepreneurs in utilizing the knowledge on recent advancements in different aspects of fish genetics and biotechnology for future researchand aquaculture production enhancement.