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Titolo	Fish Structural Proteins and its Derivatives: Functionality and Applications / / edited by Maya Raman, Abhilash Sasidharan, S. Sabu, Dhanya Pulikkottil Rajan
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Descrizione fisica	1 online resource (202 pages)
Altri autori (Persone)	SasidharanAbhilash SabuS RajanDhanya Pulikkottil
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Soggetti	Freshwater ecology Marine ecology Proteins Animal culture Animal biotechnology Freshwater and Marine Ecology Protein Biochemistry Animal Science Animal Biotechnology
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Nota di contenuto	Chapter_1 Introduction to fish proteins -- Chapter_2 Fish structural proteins -- Chapter_3 Extraction, isolation, and characterization techniques of structural proteins -- Chapter_4 Derivatives of structural proteins -- Chapter_5 Bioinformatics and computational tools -- Chapter_6 Food and Biomedical Applications of Fish Proteins -- Chapter_7 Pharmaceutical and hydrogel applications of marine collagen -- Chapter_8 Biomaterials.
Sommario/riassunto	This book brings out a comprehensive collection of information on the structural proteins of fish in both marine and fresh water system. The main focus of this book is to address all relevant aspects of structural

proteins of fish and its commercial significance. Fish is a rich and cheap source of protein, and the collagen and myofibrillar proteins, play a key role in food and pharmaceutical industries. Marine-based collagen due to its unique properties have fewer risks of transmitting diseases. These have low molecular weight, are biocompatible, lack religious constraints, and involves cost-effective extraction process. Therefore, it finds wide biomedical applications. The details of its extraction, isolation and characterization, supported with photographs and flow-charts are provided. This book also discusses the different peptides and derivatives of proteins that may have beneficial health significance and other commercial importance. Further, the application of bioinformatics and artificial intelligence in understanding the protein structure in-silico are also discussed in detail. This book is of interest and useful to students, academician, researchers and industrialists/ entrepreneurs, and is a valuable source of reference to the relevant researchers/ students. .