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Titolo	Seafood Processing By-Products : Trends and Applications // edited by Se-Kwon Kim
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Descrizione fisica	1 online resource (593 p.)
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Soggetti	Food—Biotechnology Biochemistry Biochemical engineering Food Science Animal Biochemistry Biochemical Engineering
Lingua di pubblicazione	Inglese
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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	Introduction to seafood processing by-products -- Trends in use of seafood processing by-products in Europe -- Prospective utilization of fishery by-products in Indonesia -- Development of functional materials from seafood by-products by membrane separation technology -- Processing and characterization of salt-fermented fish (Jeotgal) using seafood by-products in Korea -- Isoelectric Solubilization/Precipitation as a Means to Recover Protein and Lipids from Seafood By-products -- Advances in processing of marine discard & by-products -- Recovery of gelatin with improved functionality from seafood processing waste -- Utilization of fish waste for the making fish sauce -- Enzymes from fish processing waste materials and their commercial applications -- Functional proteins and peptides from Fish Skin -- Seafood processing by-products - collagen and gelatin -- Bycatch utilization in Asia -- Biological, Physical and Chemical

Properties of Fish Oil and Industrial Applications -- Use of Seafood Processing By-products in Animal Feed Industry -- Potential use of lactic acid bacteria in seafood products -- Chitin and its beneficial activity as an immunomodulator in allergic reaction -- Chitosan Nanoparticles: Preparation, Characterization and Applications -- Chitin, Chitosan and Their Derivatives against Oxidative Stress, Inflammation and Some Application -- Lipid bodies isolated microalgae residues as a source for bio-ethanol production -- Bioactive metabolites and value added products from marine macroalgae -- The application of fish collagen to the dental and hard tissue regenerative medicine -- Applications of seafood by-products in the food industry and human nutrition -- Anti-diabetic and obesity effect of materials from seafood by-products -- Bioluminescence isolated from seafood by-products and its applications -- Preparation of useful components from marine algal processing by-products and their applications -- Functional properties of ascidians by-products: nutritional and medicinal value.

Sommario/riassunto

The seafood processing industry produces a large amount of by-products that usually consist of bioactive materials such as proteins, enzymes, fatty acids, and biopolymers. These by-products are often underutilized or wasted, even though they have been shown to have biotechnological, nutritional, pharmaceutical, and biomedical applications. For example, by-products derived from crustaceans and algae have been successfully applied in place of collagen and gelatin in food, cosmetics, drug delivery, and tissue engineering. Divided into four parts and consisting of twenty-seven chapters, this book discusses seafood by-product development, isolation, and characterization, and demonstrates the importance of seafood by-products for the pharmaceutical, nutraceutical, and biomedical industries. About the Editor Professor Se-Kwon Kim, Ph.D., is director of the Marine Process Research Center (MBPRC) and a distinguished professor in the graduate school of marine biotechnology at Pukyong National University in the Republic of Korea. His major research interests are the investigation and development of bioactive substances derived from marine organisms, and their application in eastern medicine, nutraceuticals, and cosmeceuticals via marine bioprocessing and mass-production technologies.
