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Nota di contenuto	Antioxidants and Functional Components in Aquatic Foods; Copyright; Contents; List of Contributors; Preface; 1 Oxidation in aquatic foods and analysis methods; 1.1 Introduction; 1.2 Analysis of lipid oxidation; 1.2.1 Reactants and initiation of lipid oxidation; 1.2.2 Intermediate products of lipid oxidation; 1.2.3 Lipid oxidation products (primary, secondary, and tertiary); 1.2.4 Other methods of monitoring lipid oxidation; 1.3 Conclusions; References; 2 Protein oxidation in aquatic foods; 2.1 Introduction; 2.2 Mechanisms involved in protein oxidation; 2.2.1 A free radical mechanism 2.2.2 Initiation of protein oxidation in aquatic foods 2.2.3 Interaction between lipid and protein; 2.3 Impact of protein oxidation on aquatic food; 2.3.1 Protein functionality; 2.3.2 Texture; 2.3.3 Nutritional value; 2.4 Case studies; 2.4.1 Protein and lipid oxidation during frozen storage of rainbow trout; 2.4.2 Protein and lipid oxidation during ripening of salted herring; 2.5 Conclusions and perspectives; References; 3 Influence of processing on lipids and lipid oxidation in

aquatic foods; 3.1 Effect of freezing on lipid oxidation; 3.1.1 Introduction
3.1.2 Effect of the freezing process on lipid oxidation 3.1.3 Nature of lipids in frozen seafoods; 3.1.4 Pro-oxidants in frozen seafoods; 3.1.5 Antioxidants in frozen seafoods; 3.2 Effect of salting and drying on lipid oxidation; 3.2.1 Introduction; 3.2.2 The process of salting; 3.2.3 Dry salting; 3.2.4 Wet salting; 3.2.5 Acid-salt curing and fermentation; 3.3 Effect of fermentation on lipid oxidation; 3.3.1 Introduction; 3.3.2 Lipid oxidation during fermentation; 3.3.3 Antioxidants in seafood fermentation; 3.4 Effect of smoking on lipid oxidation; 3.4.1 Introduction
3.4.2 Effect of processing parameters on lipid oxidation during smoking 3.5 Effect of high-pressure processing on lipid oxidation; 3.5.1 Introduction; 3.5.2 Effect of HPP on antioxidants; 3.5.3 Effect of enzymes; 3.5.4 Effect of lipids; 3.5.5 Effect of processing conditions; 3.6 Effect of irradiation on lipid oxidation; 3.6.1 Introduction; 3.6.2 Lipids; 3.6.3 Irradiation dose; 3.6.4 Exogenous and endogenous antioxidants; 3.6.5 Processing conditions; 3.7 Effect of microwave processing on lipid oxidation; 3.7.1 Introduction; 3.7.2 Effect on lipids; 3.7.3 Influence on lipid oxidation
3.8 Effect of modified atmospheres on lipid oxidation 3.8.1 Introduction; 3.8.2 Vacuum packaging; 3.8.3 Modified atmosphere packaging; 3.8.4 Carbon monoxide; 3.9 Effect of the pH shift extraction method on lipid oxidation; 3.9.1 Introduction; 3.9.2 Effect on lipids; 3.9.3 Effect on antioxidants; 3.9.4 Effect on oxidation; 3.10 Effect of canning on lipid oxidation; 3.10.1 Introduction; 3.10.2 Cooking; 3.10.3 Fill medium; 3.10.4 Antioxidants; 3.10.5 Lipid oxidation; References; 4 Strategies to minimize lipid oxidation of aquatic food products post harvest; 4.1 Introduction
4.2 Lipid oxidation and quality deterioration in post-harvest aquatic food products

Sommario/riassunto

Antioxidants and Functional Components in Aquatic Foods compiles for the first time the past and present research done on pro and antioxidants in aquatic animals. The book addresses an area of extreme importance for aquatic foods, since lipid oxidation leads to such a large number of quality problems. Many of these problems are also seen in other muscle based foods,
