1. Record Nr. UNINA9910792389503321

Titolo	Lipid oxidation in health and disease / / edited by Corinne M. Spickett, Henry Jay Forman
Pubbl/distr/stampa	Boca Raton, Florida : , : CRC Press : , : Taylor & Francis Group, , [2015] ©2015
ISBN	0-429-08907-4 1-4822-0286-7
Descrizione fisica	1 online resource (428 p.)
Collana	Oxidative Stress and Disease
Disciplina	612.397
Soggetti	Lipids - Research - Oxidation Phospholipids Energy Metabolism Physicochemical Processes Stress, Physiological Metabolism Physiological Processes Metabolic Phenomena Chemical Processes Physicochemical Phenomena Physiological Phenomena Chemical Phenomena Oxidation-Reduction Oxidative Stress Lipid Metabolism Human Anatomy & Physiology Health & Biological Sciences Animal Biochemistry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	Front Cover; Contents; Series Preface; Editors; Contributors; Introduction; Chapter 1: An Introduction to Redox Balance and Lipid

Oxidation; Chapter 2: Nonenzymatic Mechanisms of Lipid Oxidation; Chapter 3: Enzymatic Oxidation of Polyunsaturated Fatty Acids; Chapter 4: Halogenated Lipids : Products of Peroxidase-Derived Reactive Halogenating Species Targeting Conventional Lipids; Chapter 5: Formation of Nitrated Lipids and Their Biological Relevance; Chapter 6: Protein Lipoxidation; Chapter 7: Analysis of Lipid Peroxidation Products in Health and Disease
Chapter 8: Oxidized Lipids as Damage-Associated Molecular Patterns in Inflammatory ResponsesChapter 9: Formation and Beneficial Roles of Polyunsaturated Lipid Mediators : Lipoxins, Resolvins, Protectins, and Maresins; Chapter 10: Pro- and Anti-Inflammatory Action of Oxidized Phospholipids; Chapter 11: Modulation of Toll-Like Receptor Signaling by Oxidized Phospholipids; Chapter 12: Dietary Oxidized Lipids as Regulators of Intracellular Signaling Pathways : PPAR and NF-B; Chapter 13: Oxidized and Nitrated Lipid Interactions with the Keap1-Nrf2 Pathway
Chapter 14: Role of Oxidized Phospholipids in Cardiovascular DiseaseChapter 15: Cholesterol Oxidation Products in the Initiation, Progression, and Fate of Atherosclerotic Lesions; Chapter 16: Lipid Peroxidation and Age-Related Neurodegenerative Disorders; Chapter 17: Association of Oxidative Stress and Lipids with Risk Factors of Metabolic Syndrome; Chapter 18: Oxidized Lipid Products and Carcinogenesis; Back Cover

Sommario/riassunto

Oxidative modification of lipids and phospholipids-including radical damage, halogenation, and nitration-result in significant changes to the chemical properties of the molecules, which in turn have a major effect on their biochemical functions. Lipid oxidation has long been regarded as a deleterious process responsible for lipid rancidity, loss of function, and generation of toxic products. However in recent years, research has also focused on the non-detrimental physiological and pathological effects of these chemical reactions. Lipid Oxidation in Health and Disease provides an up-to-date re