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Nota di contenuto	Chapter 1 Oxidaitve Stress in Aging -- Chapter 2 Oxidaitve Stress in Inflammation -- Chapter 3 Oxidative Stress in Cardiovascular Diseases -- Chapter 4 Oxidative Stress in Neurodegenerative Diseases -- Chapter 5 Oxidative Stress in Type-2 Diabetes Mellitus -- Chapter 6 Oxidaitve Stress in Infertility -- Chapter 7 Oxidaitve Stress in -Thalassemia, Myelodysplastic Syndrome and Acute Leukemia -- Chapter 8 Oxidaitve Stress in Chronic Kidney Disease -- Chapter 9 Oxidaitve Stress in Inflammatory diseases -- Chapter 10 Oxidaitve Stress in Preeclampsia and Preterm Newborn -- Chapter 11 Other Pathologies Related to Oxidative Stress -- Chapter 12 Oxidative Stress-Based Toxicity of Chemical and Physical Agents -- Chapter 13 Antioxidant treatments -- Chapter 14 Antioxidant paradox.
Sommario/riassunto	This book pinpoints one of the fastest growing, complex subjects in chemistry and medical science: the dangers of oxidative stress to human beings. It provides a solid background on the chemistry behind the generation of reactive species as well as how reactive species are

involved in essential physiological processes and in almost every human disease. It also covers the most recent developments in the study of oxidative and reductive stress (redox stress), including the role of radical and reactive species, novel antioxidant therapies, and methods for assessing free radicals and redox stress. The chapters present concise, yet thorough, summaries of the state-of-the-art methods and techniques that any investigator working in the oxidative/reductive stress field needs to access. The current methodologies including the development of sensors and biosensors for the detection of ROS/RNS/RHS and of biomarkers of redox stress are thoroughly discussed. This book is a useful resource for all researchers and students interested in oxidative stress, molecular biology, and chemistry. Physicians and healthcare professionals interested in understanding the molecular mechanisms underlying the redox stress-related diseases also stand to benefit from this book.