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Titolo	Oxidative Stress in Human Reproduction : Shedding Light on a Complicated Phenomenon / / edited by Ashok Agarwal, Rakesh Sharma, Sajal Gupta, Avi Harlev, Gulfam Ahmad, Stefan S. du Plessis, Sandro C. Esteves, Siew May Wang, Damayanthi Durairajanayagam
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Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XIV, 190 p. 38 illus., 26 illus. in color.)
Collana	SpringerBriefs in Reproductive Biology
Disciplina	612.6
Soggetti	Reproductive medicine Oxidative stress Embryology Reproductive Medicine Oxidative Stress
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Overview and Sources of Reactive Oxygen Species (ROS) in the Reproductive System -- Methods to Measure ROS and Total Antioxidant Capacity (TAC) in the Reproductive System -- Physiological Roles of ROS in the Reproductive System -- Negative Effects of Oxidative Stress in the Reproductive System at the Cellular Level -- Extrinsic Factors Inducing Oxidative Stress in the Male and Female Reproductive Systems -- Pathological Roles of OS in Diseases Related to the Female Reproductive System -- Therapeutic Role of Antioxidants (AOX) in the Treatment of Infertility -- Compendium of Oxidative Stress Studies Published by the Cleveland Clinic (1993-2016) -- References.
Sommario/riassunto	This book discusses the role of oxidative stress in the reproductive system. The book reviews endogenous sources, methods of determining its levels in body fluid/tissues, the physiological roles of ROS, as well as its negative effects on the human reproductive processes. Also discussed are multiple extrinsic factors that could induce oxidative stress in the reproductive system. This brief covers

various clinical pathologies related to the reproductive system that arise from or produce oxidative stress, both in the male and female. The use of antioxidants as a therapeutic measure to keep ROS levels in check are highlighted, describing the outcome of various clinical studies involving antioxidant supplementation in infertile patients. Infertility is a global disease that affects 15-25% of all couples, and oxidative stress arising from a multitude of sources has been implicated as one of the major contributing factors to the decline in human fertility. As such, this book provides an up-to-date review on the significance of ROS in human reproduction.