

1. Record Nr.	UNINA9910805571203321
Autore	Mayevsky Avraham
Titolo	Hyperbaric Oxygenation : Mitochondrial Activity and Brain Physiological Functions / / by Avraham Mayevsky
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2023
ISBN	9783031496813 3031496817
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (365 pages)
Disciplina	612.81046
Soggetti	Neurophysiology Neurons Toxicology Neurosciences Metabolism Cytology Cellular Neuroscience Neuroscience Cell Biology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1-Introduction and Historical Background -- Chapter 2-Basic Concepts of Brain Monitoring Systems -- Chapter 3-Scientific Background to Hyperbaric Oxygenation(HBO) -- Chapter 4-Typical Brain Mitochondrial Responses to Hyperbaric Oxygenation -- Chapter 5-Effect of the Pressure Level on the Oxygen Toxicity Process -- Chapter 6-Responses to Oxygen Toxicity after Various Treatments -- Chapter 7-Interaction between Carbon Monoxide(CO) and Hyperbaric Oxygenation -- Chapter 8-Effects of Age on the Responses to Hyperbaric Hyperoxia -- Chapter 9-Brain Multiparametric Responses to Hyperbaric Hyperoxia -- Chapter 10-Effects of Age on the Responses to Hyperbaric Hyperoxia -- Chapter 11-Hyperbaric Hyperoxia in Patients After Chest Injury or Ischemic Stroke -- Chapter 12-Discussion and Conclusions.

Exposure of patients to a high oxygen environment is a standard treatment in a select group of patients. The development of oxygen toxicity must be avoided in those patients. This book describes the effects of normobaric and hyperbaric oxygen treatment of animal models on brain biochemical and physiological responses. This book provides a summary of our knowledge on the effects of hyperbaric oxygenation on mitochondrial activity in vivo, and other functions of the brain. A chapter covering the use of hyperbaric hyperoxia in patients' brain pathology and care is also included. This is an ideal book for students, research groups, and clinicians studying hyperbaric oxygen and its connection to mitochondrial activity and brain physiological functions.
