

1. Record Nr.	UNISA996466718803316
Titolo	Chaos and Quantum Chaos [[electronic resource] ] : Proceedings of the Eighth Chris Engelbrecht Summer School on Theoretical Physics, Held at Blydepoort, Eastern Transvaal, South Africa, 13–24 January 1992 // edited by W.Dieter Heiss
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1992
ISBN	3-540-47495-1
Edizione	[1st ed. 1992.]
Descrizione fisica	1 online resource (XIV, 330 p. 43 illus.)
Collana	Lecture Notes in Physics, , 0075-8450 ; ; 411
Disciplina	003.7
Soggetti	Statistical physics Dynamical systems Mathematics Mechanics Mechanics, Applied Complex Systems Mathematics, general Solid Mechanics Statistical Physics and Dynamical Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	The problem of quantum chaos -- Semi-classical quantization of chaotic billiards -- Stochastic scattering theory random-matrix models for fluctuations in microscopic and mesoscopic systems -- Atomic and molecular physics experiments in quantum chaology -- Topics in quantum chaos -- Dynamical localization in open quantum systems.
Sommario/riassunto	Until now the important concept of quantum chaos has remained somewhat ill defined. This volume tackles the ubiquitous borderline between classical and quantum mechanics, studying in particular the semiclassical limit of chaotic systems. The effects of disorder from dynamics and their relation to stochastic systems, quantum coherence effects in mesoscopic systems, and the relevant theoretical approaches are fruitfully combined in this volume. The major paradigms of what is

called quantum chaos, random matrix theory and applications to condensed matter and nuclear physics are presented. Detailed discussions of experimental work with particular emphasis on atomic physics are included. The book is highly recommended for graduate-student seminars.

2. Record Nr.	UNINA9910896524703321
Titolo	Oxygen Transport to Tissue XLV // edited by Kaoru Sakatani, Kazuto Masamoto, Yukio Yamada, Felix Scholkmann, Joseph C. LaManna
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2024
ISBN	3-031-67458-8
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (362 pages)
Collana	Advances in Experimental Medicine and Biology, , 2214-8019 ; ; 1463
Disciplina	612.26
Soggetti	Cytology Regenerative medicine Medicine - Research Biology - Research Bioinformatics Cell Biology Regenerative Medicine and Tissue Engineering Biomedical Research
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	CELEBRATION OF THE 50th ANNIVERSARY OF ISOTT -- Biophysical modeling for insight into oxygen diffusion, distribution, and measurement -- Master Role of Hypoxia in Cancer Progression: Major Insights during ISOTT's Half-Century -- Microvascular Shunts, Intracranial Pressure and the Impact of Drag-Reducing Polymers -- Optical Methods for the Study of Brain Metabolism in Situ -- Brain tissue oxygen dynamics under localized hypoxia in the awake state and the physical neuroprotective effects of general anesthesia -- Cerebral

Oximetry in the Neonatal Intensive Care Unit: Discussion of Two Contradicting Study Results (Safe-BoosC-II, SafeBoosC-III) -- Cerebral Oxygen Dynamics in a Patient after Subdural Hematoma Removal Surgery (A Case report) -- Changes in regional cortical blood volume and oxygenation during induction of general anesthesia with sevoflurane versus propofol in a pediatric case of moyamoya disease, evaluated by near-infrared spectroscopy -- Comparison of cerebral saturation and brain net water uptake at moderate traumatic brain injury -- Comparison of secondary ischemia incidence, intracranial pressure and cerebrovascular reactivity dynamics during intrahospital transportation of severe TBI patients -- Dependence of cerebral oxygenation and task performance on colored light exposure and chronotype Blue and red do not have the same effects on the prefrontal cortex -- Differences in brain activity during real and virtual reality motor tasks in normal healthy individuals -- Effects of head elevation on cerebral oxygenation in acute cerebral infarction -- Evaluating the Status of the Injured Brain Cerebrovascular Reserve (CVR) is Not Equivalent to Induced Cerebrovascular Reactivity (iCVRx) and Induced Pressure Reactivity (iPRx) in Defining the Critical Cerebral Perfusion Pressure (CPP) -- Hemodynamic response to spontaneous neural activity on the electroencephalogram in preterm infants -- Making Neuroendovascular Therapy for Cerebrovascular Disease Using Distaltrans-radial Artery Access Safer -- Mental workload and prefrontal brain activity during silent reading task in university students with problematic smartphone use -- Monoacylglycerol Lipase Inhibition Using ABX-1431 Attenuates Cerebral Ischemia Early after Traumatic Brain Injury -- Neural function desynchronization in left and right dorsolateral prefrontal cortices during virtual-reality earthquake video viewing -- Relationship of cognitive function with the oxygenated hemoglobin concentration difference between the left and right prefrontal cortex during 40-min moderate-intensity exercise -- Analysis of changes over time in blood amino acids during online hemodiafiltration dialysis in acute liver failure patients with hepatic encephalopathy -- Cerebral hypoxia during intermittent hypoxic-hyperoxic training (IHHT): A case study using cerebral oximetry based on time-domain near-infrared spectroscopy -- Comparison of eye-tracking parameters and brain oxygen saturation in patients with COVID-19 moderate pneumonia -- Effect of combined oxygen therapy and use of a surgical mask or N95 mask on inspired oxygen fraction and expired carbon dioxide fraction -- Effects of dual tasks including gum chewing on PFC activity -- Evaluation of the relationship between pulmonary perfusion via chest digital X-ray video imaging system and diffusing capacity test -- How to prevent fluid retention while preventing cerebral vasospasm after subarachnoid hemorrhage with endothelin receptor antagonist -- Hyperoxia-induced secondary respiratory failure in a systemic ischemia-reperfusion injury -- Prefrontal Cortex Oxygenation During Walking in an Acute Ischemic Stroke Patient with Severe Internal Carotid Artery Stenosis: A Case Report -- Relationship Between Regional Cerebral Oxygen Saturation and Percutaneous Oxygen Saturation at Initial Mobilization in Patients with Acute Heart Failure -- Relevance between reduction of SpO<sub>2</sub> and para-sympathetic nervous activity during sleep -- Therapeutic Potentials of Near-Infrared II Photobiomodulation to Treat Cardiovascular and Neurological Diseases via Augmenting Nitric Oxide Bioavailability -- Alleviation of Post-Sepsis Ischemia by Drag-Reducing Polymers -- Assessing Near-Infrared Optical Tomography's Depth Capability in Imaging Brain Vessels An experimental study -- Augmenting Blood Test and Periodontal Examination Data with

Generative Adversarial Networks for Enhanced Dementia Risk Prediction.-Cerebral oxygen monitoring in extremely low-birth-weight infants using time-domain near-infrared spectroscopy in transmittance mode -- Development of a remote health-monitoring system for frail people: a preliminary study -- Eumelanin and pheomelanin modelling in optical oximetry using pulse oximetry DC component -- Fabrication of tuneable tissue-mimicking phantom for optical methods.-Imaging Deep Hemorrhage and Ischemia in Preterm Infants' Head with Time Domain Near-Infrared Optical Tomography phantom study -- Importance of serum albumin in machine learning based prediction of cognitive function data in the aged using a basic blood test -- PSAA-nnUNet An Efficient Method for Carotid Artery Segmentation -- Relationship between dementia and systemic metabolic disorders -- Understanding oxygen "buffering" by caveolae using coarse-grained molecular dynamics simulations -- Analysis of Connexin 43 and Spermin Co-Localization in Glioblastomas -- Impact of acute or chronic acidosis and hypoxia on gene expression patterns in tumor cells: potential functional implications -- Key Biophysical and Physiological Properties Impacting the Oxygenation Status of Breast Cancers During Thermo-Radiotherapy -- Changes in blood volume and oxygenation in lower limb tissue in patients maintaining the lithotomy position under general anesthesia -- Recognizing potential ambiguities in measurements of oxygen in tissues -- Tissue Oxygenation in Individuals with Spinal Cord Injury A pilot study -- Changes in cerebral oxygenation in the prefrontal cortex during cardiopulmonary exercise testing in patients following cardiovascular surgery -- Effect of Gum Chewing Training on Masseter Muscle Oxygen Dynamics -- Effect of resistance training on skeletal muscle mass and brown adipose tissue activity -- Effects of different gum hardness on masseter muscle activity during gum chewing: A NIRS Oximetry Study -- Muscle oxygen dynamics measured by NIRS -- Near-infrared spectroscopy analysis of triceps brachii muscle oxygenation during sprinting in wheelchair basketball players a pilot study -- Pupil dynamics, salivary alpha-amylase and Prefrontal Hemodynamics in Response to very light exercise -- Regional differences in skeletal muscle O<sub>2</sub> dynamics during body weight resistance exercise with slow movement and tonic force generation -- Reversal of rocuronium-induced muscle relaxation with sugammadex enhances oxygen metabolism in skeletal muscle.

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### Sommario/riassunto

This book presents cutting-edge papers and perspectives on the transport of oxygen to tissues by scientists in a multitude of disciplines such as biochemistry, engineering, mathematics, medicine, physics, physiology, veterinary and complementary medicine. The book is composed of the following 7 parts: 50th Anniversary, Brain, Clinical applications, Methods and techniques, Tumor Oxygenation, Tissue oxygenation and Muscle. The articles in this book have been presented at the 50th annual meeting of the International Society on Oxygen Transport to Tissue (ISOTT 2023). Academics, clinical and industry researchers, engineers, as well as graduate students who are interested in oxygen transport to tissue will find this book a great reference and a useful learning resource.

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