1. Record Nr. UNINA9910463148403321

Autore	Schachar Ronald A. <1941->
Titolo	The mechanism of accommodation and presbyopia [[electronic resource] /] / by Ronald A. Schachar
Pubbl/distr/stampa	Amsterdam, : Kugler Publications, 2012
ISBN	90-6299-858-5
Descrizione fisica	1 online resource (280 p.)
Disciplina	617.7/55 617.755
Soggetti	Presbyopia Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. History of Accomodation and the Steep Profile -- 2. Mechanism of Accomodation -- 3. Aspect Ratio of Vertebrate Lenses Predicts Accommodative Amplitude -- 4. Anatomy and Physiology -- 5. Experimental Evidence -- 6. Mathematical Modeling of Accommodation -- 7. Presbyopia and Age-related Ocular Hypertension -- 8. Importance of Controlled Studies -- 9. The Steep Profile: A Fundamental Structure in the Universe -- 10. Summary.
Sommario/riassunto	The human eye is a remarkable optical device. In less than a second, a young human eye can accommodate from infinity to closer than 10 cm. Accommodation occurs with minimal effort and can be rapidly repeated with no apparent evidence of fatigue. Unfortunately, maximum accommodation decreases throughout life and by the fifth decade leads to presbyopia, the inability to read at a normal working distance. Interestingly, the mechanism by which the human eye is able to adjust focus has been debated for over 300 years. No previous theory has been put forth that can account for all the physical chang

2. Record Nr. UNINA9910847594203321

Titolo	Nanomaterials for Biomedical and Bioengineering Applications / / edited by Rabia Javed, Jen-Tsung Chen, Ali Talha Khalil
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2024
ISBN	981-9702-21-6
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (479 pages)
Disciplina	610.28
Soggetti	Nanobiotechnology Drug delivery systems Nanoparticles Biomaterials Biomedical engineering Imaging systems in biology Drug Delivery Biomedical Materials Biomedical Engineering and Bioengineering Biological Imaging
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Chapter 1. The Application of Nanomaterials in Biological and Biomedical Processes: Advances and Perspectives -- Chapter 2. The magnetic nanoparticles actions: a subtle border between biomedicine and toxicology -- Chapter 3. Harnessing the Power of Metallic Nanoparticles: Antimicrobial Peptide Functionalization with gold and silver nanoparticles -- Chapter 4. Therapeutic and Diagnostic Uses of Magnetic Nanoparticles in Cancer -- Chapter 5. Biomedical Applications of Magnesium Oxide Nanoparticles -- Chapter 6. Advances in Electrospinning Technology for Fast-Dissolving Oral Film Applications -- Chapter 7. Monte Carlo Phantom Studies on Radiation Dosimetry using Flattening-filter-free Photon Beam in Nanoparticle-enhanced Radiotherapy -- Chapter 8. Emerging Carbon-based Nanomaterials for Biomedical and Bioengineering Applications --

Chapter 9. Nanomaterial-based wound therapy: Recent advances and future perspectives -- Chapter 10. Bioactive electrospun gelatin membranes for skin wound dressings -- Chapter 11. Design Ag-based semiconductors for antimicrobial technologies: challenges and future trends -- Chapter 12. Hybrid Theranostics Nanomaterials -- Chapter 13. Nanodiamond-based materials for biomedical sensors and drug delivery -- Chapter 14. Foodmicrobiology and the application of nanotechnology in food processing and safety -- Chapter 15. Polymer nanocomposites of 2D nanomaterials for biosensing and imaging applications -- Chapter 16 -- Polymer nanocomposites of 2D nanomaterials for biosensing and imaging applications -- Chapter 17. Nanoparticles in biomedical and clinical research: A current perspective and future implications -- Chapter 18. Metallic nanoparticles for biomedical applications.

Sommario/riassunto

This book accumulates the most recent advancements in the field of bioengineering regarding hybrid science named nanobiotechnology and enriches the readers with vast and comprehensive knowledge about different biomedical applications of nanomaterials. It includes drug and gene delivery, tissue engineering, antimicrobial properties, hyperthermia, cancer therapy, bioimaging, biosensing, photoablation therapy, etc., utilizing the potential of different nanomaterials that are helpful for the well-being of diseased individuals. Furthermore, the concerns about multidrug-resistant microorganisms are increasing daily in the healthcare system. Since conventional therapies fail to combat various infectious diseases, novel nanotechnology techniques provide an alternative approach to developing innovative biomaterials. The novel features of nanomaterials need to be exploited for use in the biomedical engineering domain. They should be fabricated so that the novel multifunctional nanomaterials not only improve drug efficacy but also reduce their side effects. Moreover, a detailed understanding of the nanotoxicological effects of promising biomedical nanomaterials should necessarily be explored using the cell culture approach. Corona of nanomaterials should be investigated in detail to determine its fate in the biological system regarding safety concerns. This is the most important feature that is novel and explored in this book and would be very helpful for customers like clinicians, scientists, engineers, and technicians who will gain extensive knowledge from this book and work together to get the desired results in the healthcare sector. .