

1. Record Nr.	UNINA9910968558703321
Autore	Schachar Ronald A. <1941->
Titolo	The mechanism of accommodation and presbyopia / / Ronald A. Schachar
Pubbl/distr/stampa	Amsterdam, : Kugler Publications, 2012
ISBN	9789062998586 9062998585
Edizione	[1st ed.]
Descrizione fisica	1 online resource (280 pages)
Disciplina	617.7/55 617.755
Soggetti	Presbyopia
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