1. Record Nr. UNINA9910298330003321 Autore Daw Nigel W Titolo Visual Development / / by Nigel W. Daw New York, NY:,: Springer US:,: Imprint: Springer,, 2014 Pubbl/distr/stampa **ISBN** 1-4614-9059-6 Edizione [3rd ed. 2014.] Descrizione fisica 1 online resource (252 p.) 610 Disciplina 610.28 612.8 617.7 Soggetti Neurosciences Ophthalmology Biomedical engineering Biomedical Engineering and Bioengineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Previous edition: 2006. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Introduction -- Functional Organization of the Visual System -- Part I: Development of the Visual System -- Development of Visual Capabilities -- Anatomical Development of the Visual System --Development of Receptive Field Properties -- Part II: Amblyopia and the Effects of Visual Deprivation -- Modifications to the Visual Input that lead to Nervous System changes -- Known Physiological and Anatomical changes from optical and motor deficits -- What is Amblyopia? -- Critical Periods -- Treatment of Amblyopia -- Part III: Mechanisms of Plasticity -- Concepts of Plasticity -- Mechanisms of Plasticity in the Visual Cortex -- Deprivation Myopia and Emmetropization -- Index. Sommario/riassunto The only book on the market to cover the psychophysics, anatomy, physiology, and clinical deficits of the developing visual system in an accessible format and length. The visual system is the most commonly studied aspect of the nervous system and is the primary model for the study of both normal development and the effects of environment and

sensory deprivation on development. This third edition highlights new research and features a large number of illustrations, many in color. It

can be used as a supplementary text in neuroscience and ophthalmology courses. This book is a great resource for both novice and advanced researchers in the field of vision.