



Gislin Dagnelie (Ed.)

# Visual Prosthetics

Physiology, Bioengineering, Rehabilitation

- Uniquely describes the human visual system in health and disease
- Unlike competitive texts, covers electrical, molecular chemical, and synthetic chromophore stimulation of the visual system
- Addresses both the biophysics and the psychological aspects of vision restoration, including electrode interface and tissue activation, in addition to patient visual experiences and learning in simulated and experimental prosthetic vision

Visual Prosthetics provides an in-depth analysis of the principles of operation, current state, anticipated developments, and functional aspects of visual prosthetics restoring sight to visually impaired individuals. This volume uniquely describes the human visual system in health and disease in a pedagogical and didactic manner, fitting to professionals and researchers with a bioengineering background. Readers will find a balanced overview of electrical, molecular chemical and synthetic chromophore stimulation, in addition to the biophysics and psychological aspects of vision restoration. Unlike competitive texts, this introduction also includes the need and methods for functional evaluation and rehabilitation. Professionals in the field of biomedical engineering and graduate and postgraduate researchers will find Visual Prosthetics a valuable reference.

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