Record Nr. UNINA9910458725003321 Sensory systems neuroscience [[electronic resource] /] / edited by **Titolo** Toshiaki J. Hara, Barbara S. Zielinski Pubbl/distr/stampa Amsterdam, Netherlands;; Oxford,: Elsevier Academic Press, c2007 **ISBN** 1-280-75145-2 9786610751457 0-08-046961-2 Descrizione fisica 1 online resource (536 p.) Collana Fish physiology;; v. 25 Altri autori (Persone) HaraToshiaki J ZielinskiBarbara <1952-> Disciplina 573.8717 Soggetti Fishes - Sense organs Electric organs in fishes 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 Cover; Copyright page; Table of contents; Contributors; Preface; Chapter 1: Olfaction; 1. Introduction; 2. Olfactory Repertoire; 3. An Evolutionary Assessment of the Function of the Nasal Cavity; 4. Olfactory Sensory Neurons; 4.1. Morphology and Central Projections; 4.2. The Transduction of Olfactory Signals; 4.3. The Specificity of Odorant Detection: Odorant Receptors; 4.4. Odorant Responses; 5. The Olfactory Bulb; 5.1. Neural Composition; 5.2. Information Flow; 6. Central Processing of Olfactory Signals; 7. Concluding Remarks; Acknowledgments; References; Chapter 2: Gustation 1. Introduction2. Structural Organization; 2.1. Taste Buds; 2.2. Central Gustatory Nuclei and Pathways; 3. Functional Properties; 3.1. Responses to Chemical Stimuli; 3.2. Responses to Mechanical/Tactile Stimuli; 4. Gustatory Behaviors; 4.1. Feeding Behavior; 4.2. Aversive Behavior; 5. Conclusions and Prospects; Acknowledgments; References; Chapter 3: Branchial Chemoreceptor Regulation of Cardiorespiratory Function: 1. Introduction: 2. Cardiorespiratory Responses: 2.1.

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6. Inherited and Acquired Impairments of Visual Sensitivity

Sommario/riassunto

Fish sensory systems have been extensively studied not only because of a wide general interest in the behavioral and sensory physiology of this group, but also because fishes are well suited as biological models for studies of sensory systems. This volume describes how fish are able to perceive their physical and biological surroundings, and highlights some of the exciting developments in molecular biology of fish sensory systems. Volume 25 in the Fish Physiology series offers the only updated thorough examination of fish sensory systems at the molecular, cellular and systems le