

1. Record Nr.	UNINA9910453640203321
Titolo	Fish osmoregulation // editors, Bernardo Baldisserotto, Juan Miguel Mancera, B.G. Kapoor
Pubbl/distr/stampa	Boca Raton : , : CRC Press, , 2018
ISBN	0-429-06390-3 1-281-73692-9 9786611736927 1-4398-4311-2 1-57808-555-1
Descrizione fisica	xii, 527 p. : ill
Disciplina	571.1/7
Soggetti	Fishes - Physiology Osmoregulation Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"First published 2007 by Science Publishers."
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Immune and Osmoregulatory System Interaction -- The Involvement of the Thyroid Gland in Teleost Osmoregulation -- Diet and Osmoregulation -- The Renin-Angiotensin Systems of Fish and their Roles in Osmoregulation -- Effect of Water pH and Hardness on Survival and Growth of Freshwater Teleosts -- Arginine Vasotocin and Isotocin: Towards their Role in Fish Osmoregulation -- Cellular and Molecular Approaches to the Investigation of Piscine Osmoregulation: Current and Future Perspectives -- Osmoregulation and Fish Transportation -- Special Challenges to Teleost Fish Osmoregulation in Environmentally Extreme or Unstable Habitats -- Energy Metabolism and Osmotic Acclimation in Teleost Fish -- The Renal Contribution to Salt and Water Balance -- Intestinal Transport Processes in Marine Fish Osmoregulation -- The Use of Immunochemistry in the Study of Branchial Ion Transport Mechanisms -- Rapid Regulation of Ion Transport in Mitochondrion-rich Cells -- Control of Calcium Balance in Fish -- Role of Prolactin, Growth Hormone, Insulin-like Growth Factor I and Cortisol in Teleost Osmoregulation.

Fish lives in environments with a wide variety of chemical characteristics (fresh, brackish and seawater, acidic, alkaline, soft and hard waters). From an osmoregulatory point of view, fish have developed several mechanisms to live in these different environments. Fish osmoregulation has always attracted considerable attention and in the last years several studies have increased our knowledge of this physiological process. In this book several specialists have analyzed and reviewed the new data published regarding fish osmoregulation. The chapters present an integrative synthesis of the different aspects of this field focusing on osmoregulation in specific environments or situations, function of osmoregulatory organs, general mechanisms and endocrine control. In addition, interactions of osmoregulatory mechanisms with the immune system, diet and metabolism were also reviewed. New emerging techniques to study osmoregulation has also been analysed.
