1. Record Nr. UNINA9910253954703321

Titolo	Avian Reproduction : From Behavior to Molecules / / edited by Tomohiro Sasanami
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2017
ISBN	981-10-3975-5
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (VII, 214 p. 80 illus., 41 illus. in color.)
Collana	Advances in Experimental Medicine and Biology, , 2214-8019 ; ; 1001
Disciplina	598.138
Soggetti	Developmental biology Physiology Developmental Biology and Stem Cells Animal Physiology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Preface -- 1 Avian primordial germ cells -- 2 Sex-determining mechanism in avian -- 3Female reproductive system and immunology -- 4Development and preservation of avian sperm -- 5 Avian egg and egg coat -- 6Fertilization 1: Sperm-egg interaction -- 7Fertilization 2: Polyspermic fertilization -- 8Molecular and neuroendocrine mechanisms of avian seasonal reproduction -- 9Hormonal responses to a potential mate in male birds -- 10Neuroendocrine control of broodiness -- 11Sperm storage in the female reproductive tract - A conserved reproductive strategy for better fertilization success -- 12Avian biotechnology.
Sommario/riassunto	This book provides everything from basic knowledge to the recent understandings of avian reproductive physiology, covering many unique aspects. It will inspire avian biologists as well as researchers in varied fields and will offer important steps towards better fertilization success in birds. In spite of the recent remarkable developments in modern technology, a comprehensive understanding of the reproductive mechanisms is still far in the future due to the diverse reproductive tactics in vertebrates. Birds have highly refined reproductive strategies and some of those strategies are unique to birds. However, together with ongoing progress of the genome analysis

of birds and the crying need for further increase in meat and egg production, research on avian reproduction is now accelerating and becoming more important. With contributions by leading scientists, the book explains avian primordial germ cells; the sex-determining mechanism; reproductive endocrinology and immunology; sperm, egg, and egg coat; sperm–egg interaction; polyspermic fertilization; seasonal reproduction; social triggers; hormonal and behavioral changes; broodiness; oviductal sperm storage; and biotechnology. This book is recommended for all researchers and students who are interested in birds or reproduction.