1. Record Nr. UNINA9910137088303321

Autore	Marta Magarinos
Titolo	Aging, neurogenesis and neuroinflammation in hearing loss and protection / / Marta Magariños, Marta Milo and Isabel Varela-Nieto
Pubbl/distr/stampa	Frontiers Media SA, 2015 [Lausanne, Switzerland] : , : Frontiers Media SA, , [2015] ©2015
ISBN	9782889196449
Descrizione fisica	1 online resource (151 pages) : illustrations (chiefly colour); digital file (s)
Collana	Frontiers Research Topics
Disciplina	617.8
Soggetti	Presbycusis Vestibular apparatus Deafness - Etiology Deafness - Treatment
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Sommario/riassunto	Worldwide, 278 million people are estimated to have moderate to profound hearing loss. Age-related hearing loss, also known as presbyacusis, affects approximately half of the population over 60 years old, making it the second most common cause of disability in older people. Hearing loss occurs when the sensory cells and neurons of the cochlea degenerate and die. The vestibular system, which holds the sense of balance, shares a common embryonic origin with the cochlea and together conform the inner ear. Balance problems are a trait of ageing to the point that balance ability is considered a sensor of physical decline and vestibular degeneration is the most common cause of falls in the elderly. Still the molecular bases of ageing in the vestibular system have not been studied in detail. Genetic and environmental factors contribute to the progression of age-related hearing loss (ARHL). Being noise the main environmental noxious agent for human hearing in the industrialized societies.There is no restorative treatment for deafness but functional replacement by means of

prosthesis. Therefore, prevention and treatment of hearing loss is an unmet medical need. To develop innovative medical strategies against hearing loss, it is critical to understand the causes of ARHL and the essential pathways responsible for the manifestation of this complex disease.In this research topic, experts will discuss the stages and molecular elements of the damage and repair processes involved in ARHL, from cellular processes involved in ageing as senescence and autophagy, to molecules essential for hearing as IGF-1 and neurotrophins. Neuroinflammation takes a central stage as an essential element in the progression of injury and cell loss, and a target for cell protection strategies. Neurogenesis is also essential to understand the adult cochlea self-repair potential. Finally, the mechanisms of action and the potential of novel therapies for hair cell repair and protection will be discussed along with drug delivery strategies.

2. Record Nr. UNIORUON00383556

Titolo	Aethiopien : Christentum zwischen Orient und Afrika / herausgegeben von Girma Fisseha
Pubbl/distr/stampa	Munchen, : Staatliches Museum fur Volkerkunde, c2002
ISBN	39-8075-613-0
Descrizione fisica	160 p. : ill. ; 27 cm
Disciplina	709.63
Soggetti	Arte - Etiopia
Lingua di pubblicazione	Tedesco
Formato	Materiale a stampa
Livello bibliografico	Monografia

3.

Record Nr.	UNINA9910855378203321
Autore	Anita Sebastian
Titolo	Mathematical Modeling and Control in Life and Environmental Sciences : Regional Control Problems / / by Sebastian Ania, Vincenzo Capasso, Simone Scacchi
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Birkhäuser, , 2024
ISBN	9783031499715
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (284 pages)
Collana	Modeling and Simulation in Science, Engineering and Technology, , 2164-3725
Disciplina	570.15118
Soggetti	Mathematical models Biomathematics System theory Control theory Dynamics Mathematical Modeling and Industrial Mathematics Mathematical and Computational Biology Systems Theory, Control Dynamical Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Part I: Regional Control of Spatially Structured Epidemics -- Regional Control for a Class of Spatially Structured Epidemics -- Controlling the Spread of a Vector-Borne Epidemic: The Case of Malaria -- Part II: Optimal Harvesting -- Optimal Harvesting: Space Dependence -- Optimal Harvesting: Age Dependence -- Part III: Controlling Epidemics in Agriculture -- Controlling Xyllela fastidiosa -- Controlling an Epidemic in Agriculture by Predators -- Part IV: Controlling Environmental Pollution in Geographical Economics -- Appendix A: Special Topics for Integro-Differential Equations -- Appendix B: Essentials of Numerical Methods.
Sommario/riassunto	This monograph explores the use of mathematical modeling and control theory in a variety of contemporary challenges in mathematical

biology and environmental sciences. Emphasizing an approach of learning by doing, the authors focus on a set of significant case studies emerging from real-world problems and illustrate how mathematical techniques and computational experiments can be employed in the search for sustainable solutions. The following topics are extensively discussed: Eradicability and control of a paradigmatic epidemic model, with a view to the existence of endemic states, their stability, and the existence of travelling waves A spatially structured epidemic model concerning malaria as an example of vector-borne epidemics Optimal harvesting problems for space-structured and age-structured population dynamics Controlling epidemics in agriculture due to pest insects The role of predators as a possible biocontrol agent of epidemics in agriculture Control by taxation of the environmental pollution produced by human activities The originality of this text is in its leitmotif – regional control – along the principle of “Think Globally, Act Locally.” Indeed, for example, in many real spatially structured ecosystems, it is practically impossible to control the relevant system by global interventions in the whole habitat. Proofs are given whenever they may serve as a guide to the introduction of new concepts. Each chapter includes a comprehensive description of the numerical methods used for the computational experiments, and MATLAB© codes for many of the numerical simulations are available for download. Several challenging open problems are also provided to stimulate future research. This text is aimed at mathematicians, engineers, and other scientists working in areas such as biology, medicine, and economics. Graduate and advanced undergraduate students of a quantitative subject related to the analysis and applications of dynamical systems and their control will also find it to be a valuable resource.