

1. Record Nr.	UNINA9910484029303321
Autore	Li Xue-Zhi
Titolo	Age Structured Epidemic Modeling // by Xue-Zhi Li, Junyuan Yang, Maia Martcheva
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
ISBN	3-030-42496-0
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (xii, 383 pages)
Collana	Interdisciplinary Applied Mathematics, , 0939-6047 ; ; 52
Disciplina	614.4
Soggetti	Biomathematics Mathematical models Systems biology Mathematical and Computational Biology Mathematical Modeling and Industrial Mathematics Systems Biology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Linear Age-Structured Population Models as a Base of Age-structured Epidemic Models -- Age-Structured Epidemic Models -- Nested immuno-epidemiological models -- Age-since-infection structured models based on game theory -- Age structure models on complex networks -- Vector borne age structured models -- Metapopulation and Multigroup age-structured models -- Class age-structured epidemic models -- Appendix. .
Sommario/riassunto	This book introduces advanced mathematical methods and techniques for analysis and simulation of models in mathematical epidemiology. Chronological age and class-age play an important role in the description of infectious diseases and this text provides the tools for the analysis of this type of partial differential equation models. This book presents general theoretical tools as well as large number of specific examples to guide the reader to develop their own tools that they may then apply to study structured models in mathematical epidemiology. The book will be a valuable addition to the arsenal of all researchers interested in developing theory or studying specific models

with age structure.

---