1.

Record Nr.	UNINA9910349320103321	

Titolo
Advanced Mathematical Methods in Biosciences and Applications / / edited by Faina Berezovskaya, Bourama Toni

Pubbl/distr/stampa
Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019

ISBN
3-030-15715-6

Edizione
[1st ed. 2019.]

Descrizione fisica
1 online resource (XII, 264 p. 108 illus., 63 illus. in color.)

Collana
STEAM-H: Science, Technology, Engineering, Agriculture, Mathematics & Health, , 2520-193X

Disciplina
570.285
570.15195

Soggetti
Biomathematics
Mathematical and Computational Biology

Lingua di pubblicazione
Inglese

Formato
Materiale a stampa

Livello bibliografico
Monografia

Nota di bibliografia
Includes bibliographical references and index.

Nota di contenuto
Preface -- Berezovskaya F. and Karev G.: Arnold's Weak Resonance Equation as a model of Greek ornamental designs -- Bratus A., Novozhilov A. and Semenov, Y.: Rigorous mathematical analysis of the quasispecies model: From Manfred Eigen to recent developments -- De Leo, R.: A survey on quasiperiodic topology -- Karev, G.: Natural selection strategies in evolutionary game theory -- Karev, G. and Berezovskaya, F.: Struggle for Existence: the models for Darwinian and non-Darwinian selection -- Kareva, I.: Combining bifurcation analysis and population heterogeneity to ask meaningful questions -- Logofet, D: Polyvariant Ontogeny in Plants: A Primary Role of the Second Positive Eigenvalue -- Alvaro G. López, A.G., Seoane, J.M., Miguel A. F. Sanjuán, M.A.F.: Modelling cancer dynamics using cellular automata -- Medvinsky, A.: Recurrence as a basis for the assessment of predictability of the irregular population dynamics -- Nedorezov, L.V.: Total Analysis of Population Time Series: Estimation of Model Parameters and Identification of Population Dynamics Type -- Tsyganov M., Zemskov, E.P.: Analytical solutions for traveling pulses and wave trains in neural models: Excitable and oscillatory regimes -- Tyutyunov, Y., Zagrebneva, A.D., V.N.Govorukhin, L.I.Titova, L.I.: Numerical study of bifurcations occurring at fast time-scale in a

predator-prey model with inertial prey-taxis -- Wirkus, S., Soho, E.: Within host dynamical immune response to co-infection with malaria and tuberculosis -- Index.

Sommario/riassunto	Featuring contributions from experts in mathematical biology and biomedical research, this edited volume covers a diverse set of topics on mathematical methods and applications in the biosciences. Topics focus on advanced mathematical methods, with chapters on the mathematical analysis of the quasispecies model, Arnold's weak resonance equation, bifurcation analysis, and the Tonnelier-Gerstner model. Special emphasis is placed on applications such as natural selection, population heterogeneity, polyvariant ontogeny in plants, cancer dynamics, and analytical solutions for traveling pulses and wave trains in neural models. A survey on quasiperiodic topology is also presented in this book. Carefully peer-reviewed, this volume is suitable for students interested in interdisciplinary research. Researchers in applied mathematics and the biosciences will find this book an important resource on the latest developments in the field. In keeping with the STEAM-H series, the editors hope to inspire interdisciplinary understanding and collaboration.

2. Record Nr.   UNINA9910895778903321

   Titolo   ESCAP studies in trade and investment

   Pubbl/distr/stampa New York, : United Nations

   Descrizione fisica 1 online resource

   Disciplina   330.9051

   Soggetti   International economic relations

   Lingua di pubblicazione   Inglese

   Formato   Materiale a stampa

   Livello bibliografico   Periodico