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Altri autori (Persone)	IonescuClara Mihaela
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Nota di contenuto	Volterra type model analyzed through different techniques" -- Rate-induced tipping and chaos in models of epidemics -- Numerical simulation and validation of a nonlinear differential system for drug release boosted by light -- Lipschitz Qiasistability of Impulsive Cohen–Grossberg Neural Network Models with Delays and Reaction-Diffusion Terms -- Study of the nonelementary singular points and the dynamics near the infinity in predator-prey systems -- -- Fractional order event-based control meets biomedical applications -- A model based optimal distributed predictive management of multi-drug infusion in lung cancer patient therapy -- From Duffing equation to bio-oscillations. -- Impact of Travel on Spread of Infection -- Mathematical

Oncology. Tumor evolution models" -- Digital operators and discrete equations as computational tools -- Numerical simulations for viscous reactive micropolar real gas flow.

**Sommario/riassunto**

This book provides the most valuable and updated research on computational and mathematical models in biological systems from influential researchers around the world and contributes to the development of future research guidelines in this topic. Topics include (but are not limited to): modeling infectious and dynamic diseases; regulation of cell function; biological pattern formation; biological networks; tumor growth and angiogenesis; complex biological systems; Monte Carlo methods; Control theory, optimization and their applications.