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Nota di contenuto	1 J. Carballido-Landeira and B. Escibano, Biological Systems: Nonlinear Dynamics approach -- 2 M. Stich and C. Beta, Time-delay feedback control of an oscillatory medium -- 3 A. Peñaranda et al., Electrophysiological effects of small conductance Ca ²⁺ -activated K ⁺ channels in atrial myocytes -- 4 D. Hochberg et al., Spontaneous Mirror Symmetry Breaking from Recycling in Enantioselective Polymerization -- 5 D. de Santos-Sierra et al., Self-organized cultured neuronal networks: longitudinal analysis and modeling of the underlying network structure -- 6 S. Alonso, Onset of mechanochemical pattern formation in poroviscoelastic models of active cytoplasm.
Sommario/riassunto	This book collects recent advances in the field of nonlinear dynamics in biological systems. Focusing on medical applications as well as more fundamental questions in biochemistry, it presents recent findings in areas such as control in chemically driven reaction-diffusion systems, electrical wave propagation through heart tissue, neural network growth, chiral symmetry breaking in polymers and mechanochemical

pattern formation in the cytoplasm, particularly in the context of cardiac cells. It is a compilation of works, including contributions from international scientists who attended the “2nd BCAM Workshop on Nonlinear Dynamics in Biological Systems,” held at the Basque Center for Applied Mathematics, Bilbao in September 2016. Embracing diverse disciplines and using multidisciplinary approaches – including theoretical concepts, simulations and experiments – these contributions highlight the nonlinear nature of biological systems in order to be able to reproduce their complex behavior. Edited by the conference organizers and featuring results that represent recent findings and not necessarily those presented at the conference, the book appeals to applied mathematicians, biophysicists and computational biologists.
