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Nota di contenuto	Intro -- Preface -- Volume 1: Nonlinear Dynamics of Structures, Systems, and Devices -- Volume 2: Nonlinear Dynamics and Control -- Volume 3: New Trends in Nonlinear Dynamics -- Preface for Volume 3: New Trends in Nonlinear Dynamics -- Contents -- Part I Complex Dynamics of COVID-19: Modeling, Prediction and Control -- Prediction and Control of the Impact of the Onset Influenza Season on the Spread of COVID-19 -- 1 Introduction -- 2 Fractional-Order Generalized SEIQRD Model -- 3 Influenza-Like Illness Time Series Analysis and Prediction -- 3.1 SARIMA Model -- 3.2 Results -- 3.3 Prediction -- 4 Conclusions and Future Works -- References -- A Fractional-Order Age-Structured Generalized SEIR Model: The Role of "COVID-19 Symptom Data Challenge" Dataset -- 1 Introduction -- 2 Preliminaries -- 2.1 Fractional Calculus -- 2.2 Fractional-Order SEIR Models -- 3 Symptom Data Challenge -- 3.1 Analyses of Symptom Data -- 3.2 Incidence Rate and Psychological Effect -- 3.3 The Age-Structured Model with Psychological Effects -- 4 Simulations and Discussions -- 4.1 Fitting and Forecast -- 4.2 Mobility and Psychological Effect Factors -- 4.3 Analysis -- 5 Conclusions -- References -- Dynamical Analysis of a COVID-19 Epidemic Model with Social Confinement and Acquired Immunity Loss -- 1 Introduction -- 2 Model and Preliminaries -- 2.1 Modified SIDARTH Model -- 2.2 Basic Reproduction Number -- 3 Stability Analysis -- 3.1 Global Stability Analysis of the Disease-Free

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