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Sommario/riassunto	This book covers the latest advances in the popular research areas in Earthquake Engineering: Seismic Protection, Non-Destructive Testing and Structural Health Monitoring, Seismic Performance Assessment. Part I includes seven chapters on seismic protection systems, a new passive isolation system for tower structures, frictional base isolation systems, period changeable isolation systems and presented applications, and recent developments in Italy, Japan and Macedonia. Also, particularities of design basis ground motion for long period structures are explained. Soil-Structure interaction models on the

relevant subject are presented by classifying them. Part II presents three chapters on the new developments on Non-Destructive Testing (NDT) and Structural Health Monitoring (SHM) for Performance Assessment of Structures. Applications and recent developments in USA, Canada, and Turkey are presented. Part III includes eight chapters on Seismic Performance Assessment. The subject of this chapter is presented on its following important components, and results are discussed: New criterion on performance based seismic design with application to a high-rise building; seismic design and performance assessment of a super tall concrete core wall building; seismic design and evaluation of high-performance modular tall timber building; challenges to detailed finite element analysis of entire building structures; seismic performance evaluation of traditional Japanese wooden houses with outer-frame reinforcement; dynamic response of pipeline, subjected to subsurface and surface blast explosion; bond behavior of sand-coated CFRP rebar embedded in concrete are given; seismic resistant large-span shell structures are presented. The book presents a concise summary of latest research findings, and will be of interest to a wide range of professionals in earthquake engineering, including graduate students, instructors, designers, and researches.