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Collana	CISM International Centre for Mechanical Sciences, Courses and Lectures, , 0254-1971 ; ; 558
Disciplina	624.17
Soggetti	Vibration Dynamical systems Dynamics Control engineering Mechanics Mechanics, Applied Vibration, Dynamical Systems, Control Control and Systems Theory Solid Mechanics
Lingua di pubblicazione	Inglese
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapter.
Nota di contenuto	Mechanical systems: Equations of motion and stability -- Variational principles in mechanics and control -- Hybrid mass damper: A tutorial example -- Electromagnetic and piezoelectric transducers -- LMIs in control optimization -- Damping mechanisms -- Vibration control and failure diagnosis in rotating machinery by means of active magnetic bearings.
Sommario/riassunto	Active and Passive Vibration Control of Structures form an issue of very actual interest in many different fields of engineering, for example in the automotive and aerospace industry, in precision engineering (e.g. in large telescopes), and also in civil engineering. The papers in this volume bring together engineers of different background, and it fill gaps between structural mechanics, vibrations and modern control theory. Also links between the different applications in structural control are shown.

