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Titolo	Active Vibration Control and Stability Analysis of Flexible Beam Systems // by Wei He, Jinkun Liu
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ISBN	981-10-7539-5
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (202 pages)
Disciplina	531
Soggetti	Control engineering Robotics Mechatronics Mechanics Mechanics, Applied Aerospace engineering Astronautics Control, Robotics, Mechatronics Classical Mechanics Solid Mechanics Aerospace Technology and Astronautics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Mathematical Preliminaries -- Modeling -- Vibration Control of a Flexible Beam -- Vibration Control of a Flexible Beam with Output Constraint -- Vibration Control of a Flexible Beam with Input Constraint -- Vibration Control of a Flexible Beam with Input Saturation/Deadzone/Hysteresis -- Distributed Control of a Flexible Beam 37 -- Iterative Learning Control of a Flexible Beam -- Neural Network Control of a Flexible Beam -- Fuzzy Logic Control of a Flexible Beam -- Conclusion.
Sommario/riassunto	This book presents theoretical explorations of several fundamental problems in the dynamics and control of flexible beam systems. By integrating fresh concepts and results to form a systematic approach to control, it establishes a basic theoretical framework. It includes typical

control design examples verified using MATLAB simulation, which in turn illustrate the successful practical applications of active vibration control theory for flexible beam systems. The book is primarily intended for researchers and engineers in the control system and mechanical engineering community, offering them a unique resource.
