

1. Record Nr.	UNINA9910799966803321
Autore	Choi Seung-Bok
Titolo	Piezoelectric actuators : control applications of smart materials // Seung-Bok Choi and Young-Min Han
Pubbl/distr/stampa	Boca Raton : , : Taylor & Francis, , 2010
ISBN	0-429-14746-5 1-4398-1809-6
Descrizione fisica	1 online resource (278 p.)
Altri autori (Persone)	HanYoung-Min
Disciplina	537/.2446
Soggetti	Piezoelectric devices - Materials Actuators - Materials Smart materials Intelligent control systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	A CRC title.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front cover; Contents; Preface; Authors; Chapter 1. Introduction; Chapter 2. Control Strategies; Chapter 3. Vibration Control of Flexible Structure; Chapter 4. Vibration Control Using Active Mount; Chapter 5. Control of Flexible Robotic Manipulators; Chapter 6. Application to Fine Motion Control System; Chapter 7. Application to Hydraulic Control System; Chapter 8. Piezoelectric Shunt Technology; Index; Back cover
Sommario/riassunto	Currently, many smart materials exhibit one or multifunctional capabilities that are being effectively exploited in various engineering applications, but these are only a hint of what is possible. Newer classes of smart materials are beginning to display the capacity for self-repair, self-diagnosis, self-multiplication, and self-degradation. Ultimately, what will make them practical and commercially viable are control devices that provide sufficient speed and sensitivity. While there are other candidates, piezoelectric actuators and sensors are proving to be the best choice. <STRONG