Record Nr. UNINA9910812652803321 Autore Choi Seung-Bok Titolo Piezoelectric actuators: control applications of smart materials / / Seung-Bok Choi, Young-Min Han Boca Raton, : Taylor & Francis, 2010 Pubbl/distr/stampa 0-429-14746-5 **ISBN** 1-4398-1809-6 Edizione [1st ed.] 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

be the best choice. <STRONG

control devices that provide sufficient speed and sensitivity. While there are other candidates, piezoelectric actuators and sensors are proving to