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Titolo	Reliability of MEMS [[electronic resource]] : testing of materials and devices / / edited by Osamu Tabata, Toshiyuki Tsuchiya
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Collana	Advanced micro & nanosystems
Altri autori (Persone)	TabataOsamu TsuchiyaToshiyuki
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Nota di contenuto	Title Page; Preface; Foreword; Contents; List of Contributors; Overview; 1 Evaluation of Mechanical Properties of MEMS Materials and Their Standardization; 2 Elastoplastic Indentation Contact Mechanics of Homogeneous Materials and Coating - Substrate Systems; 3 Thin film Characterization Using the Bulge Test; 4 Uniaxial Tensile Test for MEMS Materials; 5 On chip Testing of MEMS; 6 Reliability of a Capacitive Pressure Sensor; 7 Inertial Sensors; 8 High accuracy, High reliability MEMS Accelerometer; 9 Reliability of MEMS Variable Optical Attenuator; 10 Eco Scan MEMS Resonant Mirror; Index
Sommario/riassunto	Now available in softcover, this book closely examines the enabling technologies for the fabrication of micro- and nanodevices. Divided into two clearly structured sections, the first begins with an insider's view of industrial MEMS commercialization, followed by chapters on capacitive interfaces for MEMS, packaging issues of micro- and nanosystems, MEMS contributions to high frequency integrated resonators and filters, as well as the uses of MEMS in mass data storage and electrochemical imaging by means of scanning micro- and nanoprobes. The second section on nanodevices first tackles the