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Autore	Bowen Christopher R
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Nota di contenuto	Preface -- The Piezoelectric Medium and Its Characteristics -- Electromechanical Coupling Factors and Their Anisotropy in Piezoelectric and Ferroelectric Materials -- Figures of Merit of Modern Piezo-active Ceramics and Composites -- Piezoelectric Mechanical Energy Harvesters and Related Materials -- Piezoelectric Energy-harvesting Materials Characterization: New Trends in the Study.
Sommario/riassunto	This book covers the topic of vibration energy harvesting using piezoelectric materials. Piezoelectric materials are analyzed in the context of their electromechanical coupling, heterogeneity, microgeometry and interrelations between electromechanical properties. Piezoelectric ceramics and composites based on

ferroelectrics are advanced materials that are suitable for harvesting mechanical energy from vibrations using inertial energy harvesting which relies on the resistance of a mass to acceleration and kinematic energy harvesting which couples the energy harvester to the relative movement of different parts of a source. In addition to piezoelectric materials, research efforts to develop optimization methods for complex piezoelectric energy harvesters are also reviewed. The book is important for specialists in the field of modern advanced materials and will stimulate new effective piezotechnical applications.