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Nota di contenuto	section 1. NDT methods for the characterization of materials and structures -- section 2. NDT for material and property characterization -- section 3. Early age NDT of concrete and other materials -- section 4. NDT for material characterization : metallurgical perspective -- section 5. NDT of metals and composites -- section 6. Theoretical modeling and simulation studies as a basis for NDT -- section 7. NDT of civil infrastructures -- section 8. Geotechnical and geophysical applications of NDT -- section 9. Health monitoring of structures -- section 10. NDT and evaluation of historic buildings and monuments -- section 11. NDT planning, practice, reliability, codes and standards.
Sommario/riassunto	Condition assessment and characterization of materials and structures by means of nondestructive testing (NDT) methods is a priority need around the world to meet the challenges associated with the durability, maintenance, rehabilitation, retrofitting, renewal and health monitoring of new and existing infrastructures including historic monuments. Numerous NDT methods that make use of certain components of the electromagnetic and acoustic spectra are currently in use to this effect with various levels of success and there is an intensive worldwide research effort aimed at improving the existing methods and developing new ones. The knowledge and information compiled in this book captures the current state-of-the-art in NDT methods and their

application to civil and other engineering materials and structures. Critical reviews and advanced interdisciplinary discussions by world-renowned researchers point to the capabilities and limitations of the currently used NDT methods and shed light on current and future research directions to overcome the challenges in their development and practical use. In this respect, the contents of this book will equally benefit practicing engineers and researchers who take part in characterization, assessment, evaluation and health monitoring of materials and structures.
