1. Record Nr. UNINA9911019879403321

Titolo	Global Positioning System : a field guide for the social sciences / / John Spencer ... [et al.]
Pubbl/distr/stampa	Malden, MA, : Blackwell Pub., 2003
ISBN	9786612348525 9781282348523 1282348523 9780470693933 0470693932 9780470693155 0470693150
Descrizione fisica	1 online resource (232 p.)
Altri autori (Persone)	SpencerJohn
Disciplina	910 910.285 910.85
Soggetti	Global Positioning System
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. [204]-207).
Nota di contenuto	Global Positioning System: A Field Guide for the Social Sciences; Contents; List of Figures; List of Tables; Acknowledgments; 1 Introduction; Part I Understanding GPS; 2 Why use GPS?; 3 What is GPS?; 4 Coordinate Systems and Datums; 5 GPS Considerations: Getting Started; Part II Utilizing GPS; 6 Developing a GPS Project; 7 Project Fundamentals; 8 Fieldwork Planning and Preparations: Data and Methods; 9 Fieldwork Planning and Preparations: Field Resources; 10 Fieldwork Planning and Preparations: Data Quality and Logistics; 11 Transitioning to Fieldwork; 12 Post-Fieldwork Processing 13 Utilizing GPS Data within Geographic Information Systems14 Conclusion; References; Appendix A GPS Manufacturers; Appendix B Sample Field Instrument; Appendix C UTM Zones; Index
Sommario/riassunto	Global Positioning System is the first book to guide social scientists with little or no mapping or GPS experience through the process of

collecting field data from start to finish. Takes readers step-by-step through the key stages of a GPS fieldwork project. Explains complex background topics in clear, easy-to-understand language. Provides simple guidelines for GPS equipment selection. Provides practical solutions for real GPS data collection issues. Offers a concise guide to using GPS-collected data within geographic information systems.

2. Record Nr. UNINA9910890900703321

Autore	Li Wei
Titolo	Alternating Current Field Measurement Technique for Detection and Measurement of Cracks in Structures / / by Wei Li, Xin'an Yuan, Jianming Zhao, Xiaokang Yin, Xiao Li
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2025
ISBN	981-9772-55-9
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (X, 148 p. 126 illus., 111 illus. in color.)
Disciplina	621.381
Soggetti	Electronics Petrology Mechanical engineering Electronics and Microelectronics, Instrumentation Mechanical Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Research on Real-time and High- precision Cracks Inversion Algorithm for ACFM Based on GA-BP Neural Network -- Identification of Tiny Surface Cracks in a Rugged Weld by Signal Gradient Algorithm using the ACFM Technique -- Visual Evaluation of Irregular Cracks in Steel by Double Gradient Fusion Algorithm using Composite ACFM-MFL Testing Method -- Design and Experiment Research of Oblique Crack Detection System for Rail Tread Based on ACFM Technique -- Design and testing of high-resolution probe arrays using Alternating Current Field Measurement technique -- Design and experimental study of inner uniform electromagnetic probe in stainless steel pipe -- Research on

	the detection of surface cracks on drilling riser using the chain alternating current field measurement probe array -- An electromagnetic Helmholtz-coil probe for arbitrary orientation crack detection on the surface of pipeline -- Circumferential Current Field Testing System with TMR Sensor Array for Non-contact Detection and Estimation of Cracks on Power Plant Piping.
Sommario/riassunto	This open access book serves as a comprehensive exploration of Alternating Current Field Measurement (ACFM), encompassing the foundational theory crucial for subsequent chapters, as well as the design and testing of ACFM probes, instruments, and software. Providing guidance and serving as a reference for ACFM instrument development, the text delves into visualization research in ACFM, offering valuable insights for technical engineering applications. Nondestructive testing (NDT) emerges as a pivotal method for detecting and assessing defects, offering support for safety pre-warning and maintenance decisions in industrial structures. Originating from the 1980s, the demand for an NDT technique arose to inspect fatigue cracks at welded intersections in offshore underwater structures in the North Sea. Conventional NDT methods proved impractical in this distinct underwater environment with quantitative evaluation requirements, prompting the development of the ACFM technique by researchers in the mechanical engineering department at University College London. Over the past four decades, ACFM's theory model, inspection methods, and equipment have undergone rapid advancements, gaining widespread utilization in ocean engineering, the power industry, rail traffic, and special equipment fields. This book encompasses diverse facets, including the global development history of alternating current field measurement technology, core basic theory, signal processing methods, probe instrument development, standardization construction, and engineering applications. Serving as a valuable learning reference for students and offering fundamental theoretical guidance for scientific researchers, it also provides case introductions for engineering applications. The book aims to propel both theoretical research and practical applications of alternating current field measurement technology, contributing significantly to its popularization and widespread application.