

1. Record Nr.	UNINA9910647774803321
Autore	Sugasawa Shonosuke
Titolo	Mixed-Effects Models and Small Area Estimation / / by Shonosuke Sugasawa, Tatsuya Kubokawa
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2023
ISBN	9789811994869 9811994862
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (127 pages)
Collana	JSS Research Series in Statistics, , 2364-0065
Disciplina	519.5
Soggetti	Statistics Applied Statistics Statistical Theory and Methods Bayesian Inference Bayesian Network Models multinivell (Estadística) Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- General Mixed-Effects Models and BLUP -- Measuring Uncertainty of Predictors -- Basic mixed-effects Models for Small Area Estimation -- Hypothesis Tests and Variable Selection -- Advanced Theory of Basic Small Area Models -- Small Area Models for Non-normal Response Variables -- Extensions of Basic Small Area Models.
Sommario/riassunto	This book provides a self-contained introduction of mixed-effects models and small area estimation techniques. In particular, it focuses on both introducing classical theory and reviewing the latest methods. First, basic issues of mixed-effects models, such as parameter estimation, random effects prediction, variable selection, and asymptotic theory, are introduced. Standard mixed-effects models used in small area estimation, known as the Fay-Herriot model and the nested error regression model, are then introduced. Both frequentist and Bayesian approaches are given to compute predictors of small area parameters of interest. For measuring uncertainty of the predictors, several methods to calculate mean squared errors and confidence

intervals are discussed. Various advanced approaches using mixed-effects models are introduced, from frequentist to Bayesian approaches. This book is helpful for researchers and graduate students in fields requiring data analysis skills as well as in mathematical statistics.

2. Record Nr.	UNINA9910346906103321
Autore	Kaiser Christoph
Titolo	High quality Nb/Al-AIOx/Nb Josephson junctions : technological development and macroscopic quantum experiments
Pubbl/distr/stampa	KIT Scientific Publishing, 2011
ISBN	1000022422
Descrizione fisica	1 online resource (XIX, 169 p. p.)
Collana	Karlsruher Schriftenreihe zur Supraleitung / Hrsg. Prof. Dr.-Ing. M. Noe, Prof. Dr. rer. nat. M. Siegel
Soggetti	Technology: general issues
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Diese Arbeit beschreibt die Entwicklung einer Technologie für die Herstellung hochqualitativer sub-µm Nb/Al-AIOx/Nb-Josephson-Kontakte. Mit den dadurch entstandenen Bauteilen wurden verschiedene experimentell zuvor noch nicht beobachtete makroskopische Quanteneffekte nachgewiesen. Weiterhin wurden Nb-basierte Phasen-Qubits entworfen, hergestellt und gemessen, die längere Kohärenzzeiten als vergleichbare Bauelemente aus der Literatur aufweisen.

3. Record Nr.	UNINA9911019463403321
Autore	Hertlein Bernhardt H
Titolo	Nondestructive testing of deep foundations // Bernard Hertlein and Allen Davis
Pubbl/distr/stampa	Chichester, England ; ; Hoboken, NJ, : J. Wiley, c2006
ISBN	9786610739790 9781280739798 1280739797 9780470034835 0470034831 9780470034828 0470034823
Descrizione fisica	1 online resource (292 p.)
Altri autori (Persone)	DavisAllen George
Disciplina	624.1/50287
Soggetti	Foundations - Testing Piling (Civil engineering) - Testing Nondestructive testing
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. [255]-265) and index.
Nota di contenuto	Nondestructive Testing of Deep Foundations; Contents; Foreword; Preface; About the Authors; Acknowledgements; Photography and IllustrationCredits; 1Introduction and a Brief History; 1.1 Introduction; 1.2 A Brief History of Deep Foundations and the Advent of NDT; 1.2.1 Caveat and Acknowledgement; 1.2.2 The History; 1.3 Deep Foundation Failures and NDT; 1.3.1 Esso Oil Tanks, Fawley, Hants, UK; 1.3.2 Neumaier Hall, Moorhead, MN, USA; 1.3.3 Tampa Crosstown Expressway, Tampa, FL, USA; 1.3.4 Yuen Chau Kok, Shatin Area 14B, Phase 2, Hong Kong; 1.4 Deficiencies in Existing Foundations 2 Deep Foundation Construction Methods2.1 Driven Piles - Timber, Steel and Concrete; 2.1.1 Drop-hammers; 2.1.2 Diesel Hammers; 2.1.3 Hydraulic Hammers; 2.1.4 Pile-driving Vibrators; 2.1.5 Direct-push Pile Installers; 2.1.6 Advantages and Limitations of Driven Piles; 2.2 Caissons and Drilled Shafts; 2.2.1 Advantages and Limitations of Drilled Shafts; 2.2.2 Advantages and Limitations of Slurry; 2.3 Diaphragm

Walls, Cut-off Walls and Barrettes; 2.4 Augered, Cast-in-Place Piles; 2.4.1 Advantages and Limitations of ACIP Piles; 2.5 Micropiles or Minipiles; 2.5.1 Applications 2.5.2 Drilled Micropile Type/Classification 2.5.3 Relationship between Micropile Application, Design Concept and Construction Type; 2.5.4 Design Aspects; 2.5.5 Nondestructive Testing; 2.5.6 Research and Development; 2.6 Stone Columns and other Soil Improvement Techniques; 2.6.1 Stone Columns; 2.6.2 Deep Mixing; 2.6.3 Permeation Grouting; 2.6.4 Dynamic Compaction; 3 How Soils Affect the Choice of Foundation; 4 Traditional, Visual and New Inspection Methods for Deep Foundation Construction; 4.1 Driven Piles; 4.2 Augered, Cast-in-Place Piles; 4.3 Drilled Shafts; 4.3.1 Dry Hole Construction 4.3.2 Wet Hole Construction 4.4 The Inspector's Role; 5 A Review of Full-scale Load-testing Techniques; 5.1 Static Load-Test Techniques - Axial Compression; 5.1.1 Reaction Systems; 5.1.2 Proof Testing; 5.1.3 Load-Transfer Tests; 5.1.4 Quick Load Test; 5.1.5 Constant Rate of Penetration Test; 5.1.6 Bi-directional Load Test (Osterberg Cell); 5.2 Static Load-Test Techniques - Axial Tension; 5.3 Static Load-Test Techniques - Lateral; 6 High-strain Testing for Capacity and/or Integrity; 6.1 High-Strain Dynamic (Drop-Weight) Testing of Driven Piles; 6.1.1 The Case Method; 6.1.2 The TNO Method 6.1.3 The Effect of Soil and Other Factors 6.2 High-Strain Testing of Drilled Shafts and Augered, Cast-in-Place Piles; 6.2.1 CEBTP Simbat; 6.2.2 SIMBAT Test Methodology; 6.3 Modification of Shaft Head for High-Strain Tests; 6.4 Practical Considerations for Drop-Weight Techniques; 6.4.1 Newton's Apple; 6.5 HSDT Alternatives; 6.5.1 The Static Method; 6.5.2 The Fundex Method; 6.6 Limitations of High-Strain Dynamic Testing; 7 Low-strain Surface Tests - Sonic Echo; 7.1 Sonic Echo (Impulse ECHO); 7.1.1 Test Principle; 7.1.2 Typical Test Procedure; 7.1.3 Data Processing and Display 7.1.4 Effect of Impedance Change

## Sommario/riassunto

Nondestructive Testing involves the use of methods such as wave propagation, electromagnetism, electrical conductivity, and thermal conductivity to test structural integrity and thereby allow nondestructive assessment of structures and the possibility of structural failures before they occur. Nondestructive Testing of Deep Foundations covers different techniques designed to provide information about the integrity and quality of the material that makes up a deep foundation. Nondestructive Testing methods are used at all stages of a structure's life - from new construction quality co