

1. Record Nr.	UNINA9910254317903321
Autore	Au Siu-Kui
Titolo	Operational Modal Analysis : Modeling, Bayesian Inference, Uncertainty Laws // by Siu-Kui Au
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2017
ISBN	981-10-4118-0
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XXIII, 542 p. 158 illus., 28 illus. in color.)
Disciplina	620.1
Soggetti	Mechanics Mechanics, Applied Geotechnical engineering Buildings—Design and construction Building Construction Engineering, Architectural Probabilities Solid Mechanics Geotechnical Engineering & Applied Earth Sciences Building Construction and Design Probability Theory and Stochastic Processes
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Spectral Analysis of Deterministic Process -- Structural Dynamics -- Spectral Analysis of Stationary Stochastic Process -- Stochastic Structural Dynamics -- Ambient Data Analysis and Simulation -- Bayesian Inference -- Classical Statistical Inference -- Bayesian OMA Framework -- Single Mode Problem -- Multi-Mode Problem -- Multi-Setup Problem -- Managing identification uncertainty -- Theory of Uncertainty Laws.
Sommario/riassunto	This book presents operational modal analysis (OMA), employing a coherent and comprehensive Bayesian framework for modal identification and covering stochastic modeling, theoretical formulations, computational algorithms, and practical applications.

Mathematical similarities and philosophical differences between Bayesian and classical statistical approaches to system identification are discussed, allowing their mathematical tools to be shared and their results correctly interpreted. Many chapters can be used as lecture notes for the general topic they cover beyond the OMA context. After an introductory chapter (1), Chapters 2–7 present the general theory of stochastic modeling and analysis of ambient vibrations. Readers are first introduced to the spectral analysis of deterministic time series (2) and structural dynamics (3), which do not require the use of probability concepts. The concepts and techniques in these chapters are subsequently extended to a probabilistic context in Chapter 4 (on stochastic processes) and in Chapter 5 (on stochastic structural dynamics). In turn, Chapter 6 introduces the basics of ambient vibration instrumentation and data characteristics, while Chapter 7 discusses the analysis and simulation of OMA data, covering different types of data encountered in practice. Bayesian and classical statistical approaches to system identification are introduced in a general context in Chapters 8 and 9, respectively. Chapter 10 provides an overview of different Bayesian OMA formulations, followed by a general discussion of computational issues in Chapter 11. Efficient algorithms for different contexts are discussed in Chapters 12–14 (single mode, multi-mode, and multi-setup). Intended for readers with a minimal background in mathematics, Chapter 15 presents the ‘uncertainty laws’ in OMA, one of the latest advances that establish the achievable precision limit of OMA and provide a scientific basis for planning ambient vibration tests. Lastly Chapter 16 discusses the mathematical theory behind the results in Chapter 15, addressing the needs of researchers interested in learning the techniques for further development. Three appendix chapters round out the coverage. This book is primarily intended for graduate/senior undergraduate students and researchers, although practitioners will also find the book a useful reference guide. It covers materials from introductory to advanced level, which are classified accordingly to ensure easy access. Readers with an undergraduate-level background in probability and statistics will find the book an invaluable resource, regardless of whether they are Bayesian or non-Bayesian.

2. Record Nr.	UNINA9910966833803321
Autore	Lee Yung-Li
Titolo	Metal fatigue analysis handbook : practical problem-solving techniques for computer-aided engineering / / Yung-Li Lee, Mark E. Barkey, Hong-Tae Kang
Pubbl/distr/stampa	Waltham, Mass., : Butterworth-Heinemann, 2012
ISBN	9786613196040 9781283196048 1283196042 9780123852052 0123852056
Edizione	[1st ed.]
Descrizione fisica	1 online resource (633 p.)
Altri autori (Persone)	BarkeyMark E KangHong-Tae
Disciplina	620.1/66 620.166
Soggetti	Metals - Fatigue Computer-aided engineering
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 and index.
Nota di contenuto	Machine generated contents note: Road Load Analysis Techniques in Automotive Engineering - Xiaobo Yang & Peijun Xu Pseudo Stress Analysis Techniques - Yung-Li Lee & Mingchao Guo Rainflow Cycle Counting Techniques - Yung-Li Lee & Tana Tjhung Stress-Based Uniaxial Fatigue Analysis - Yung-Li Lee & Mark E. Barkey Stress-Based Multiaxial Fatigue Analysis - Yung-Li Lee & Mark E. Barkey Strain-Based Uniaxial Fatigue Analysis - Yung-Li Lee & Mark E. Barkey Fundamentals of Cyclic Plasticity Theories - Yung-Li Lee & Mark E. Barkey Strain-Based Multiaxial Fatigue Analysis -Mark E. Barkey & Yung-Li Lee Vibration Fatigue Testing and Analysis - Yung-Li Lee & Hong-Tae Kang Fatigue of Seam Welded Joints - Hong-Tae Kang & Yung-Li Lee Fatigue Life Prediction Methods of Resistance Spot Welded Joints - Hong-Tae Kang & Yung-Li Lee Design and Analysis of Metric Bolted Joints (VDI Guideline and Finite Element Analysis) - Yung-Li Lee & Hsin-Chung Ho.

Sommario/riassunto	Understand why fatigue happens and how to model, simulate, design and test for it with this practical, industry-focused reference Written to bridge the technology gap between academia and industry, the Metal Fatigue Analysis Handbook presents state-of-the-art fatigue theories and technologies alongside more commonly used practices, with working examples included to provide an informative, practical, complete toolkit of fatigue analysis. Prepared by an expert team with extensive industrial, research and professorial experience, the book will help you to understand
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3. Record Nr.	UNINA9910954533303321
Autore	Benwell Bethan
Titolo	Discourse and identity / / Bethan Benwell and Elizabeth Stokoe
Pubbl/distr/stampa	Edinburgh, : Edinburgh University Press, 2006
ISBN	9786610643196 9781280643194 1280643196 9780748626533 0748626530
Edizione	[1st ed.]
Descrizione fisica	1 online resource (xii, 314 pages) : digital, PDF file(s)
Classificazione	17.63
Altri autori (Persone)	StokoeElizabeth
Disciplina	401.41
Soggetti	Discourse analysis Identity (Psychology)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from publisher's bibliographic system (viewed on 02 Oct 2015).
Nota di bibliografia	Includes bibliographical references (p. [280]-303) and index.
Nota di contenuto	COVER; COPYRIGHT; Contents; Acknowledgements; Data: Transcription, Ethics and Anonymisation; List of Figures and Tables; Introduction; CHAPTER 1 Theorising Discourse and Identity; CHAPTER 2 Conversational Identities; CHAPTER 3 Institutional Identities; CHAPTER 4 Narrative Identities; CHAPTER 5 Commodified Identities; CHAPTER 6 Spatial Identities; CHAPTER 7 Virtual Identities; References; Index;
Sommario/riassunto	'Identity' is a central organizing feature of our social world. Across the social sciences and humanities, it is increasingly treated as something

that is actively and publicly accomplished in discourse. This book defines identity in its broadest sense, in terms of how people display who they are to each other. Each chapter examines a different discursive environment in which people do 'identity work': everyday conversation, institutional settings, narrative and stories, commodified contexts, spatial locations, and virtual environments. The authors describe and demonstrate a range of discourse and interaction analytic methods as they are put to use in the study of identity, including 'performative' analyses, conversation analysis, membership categorization analysis, critical discourse analysis, narrative analysis, positioning theory, discursive psychology and politeness theory. The book aims to give readers a clear sense of the coherence (or otherwise) of these different approaches, the practical steps taken in analysis, and their situation within broader critical debates. Through the use of detailed and original 'identity' case studies in a variety of spoken and written texts in order, the book offers a practical and accessible insight into what the discursive accomplishment of identity actually looks like, and how to go about analyzing it. Features: *Accessible introduction to the study of discourse and identity across a variety of contexts. *Interdisciplinary in scope, the book is relevant to a wide range of courses such as English language and linguistics, psychology, media, cultural studies, gender studies and sociology. *Each chapter includes a critical overview of work in the area, original case studies, practical instruction for analyses, points for further discussion and suggested reading.
