1. Record Nr. UNISALENTO991003218439707536

Autore	Wolf, John P.
Titolo	Foundation vibration analysis [e-book] : a strength-of-materials approach / John P. Wolf, Andrew J. Deeks
Pubbl/distr/stampa	Amsterdam ; Boston : Elsevier, 2004
ISBN	9780750661645 075066164X
Descrizione fisica	xiii, 218 p. : ill. ; 25 cm
Altri autori (Persone)	Deeks, Andrew J.
Disciplina	624.15
Soggetti	Foundations - Vibration Strength of materials Electronic books.
Lingua di pubblicazione	Inglese
Formato	Risorsa elettronica
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references (p. [209]-211) and index
Nota di contenuto	Introduction -- Concepts of the cone model -- Initial cone with outward wave propagation -- Wave reflection and refraction at a material discontinuity -- Foundation embedded in a layered half-space -- Evaluation of accuracy -- Engineering applications -- Concluding remarks -- Appendix A: Frequency-domain response analysis -- Appendix B: Dynamic soil-structure interaction -- Appendix C: Wave propagation in a semi-infinite prismatic bar -- Appendix D: Historical note -- Appendix E: Program CONAN (CONe ANalysis)--user's guide -- Appendix F: MATLAB procedures for cone analysis.
Sommario/riassunto	Structural analysis is usually carried out by a strength-of-materials approach that allows complex 3-D structures to be modelled adequately for design needs in a single dimension. However, this approach is not extensively used in geotechnical engineering, partly because 3-D media (soil, rock) are present, but more importantly because until recently the methods necessary to carry out this form of analysis did not exist. In the last ten years efforts at modelling practical problems in foundation analysis using a strength-of-materials approach have developed the concept of the conical bar or beam as a tool. Such cone models can be used to model a foundation in a dynamic soil-structure interaction analysis with a variation of the

	properties with depth. This book develops this new approach from scratch in a readable and accessible manner. A systematic evaluation for a wide range of actual sites demonstrates sufficient engineering accuracy. A short computer program written in MATLAB and a user-friendly executable program are provided, while practical examples ensure a clear understanding of the topic. *Simplifies complex 3-D analysis of soil-structure interaction. *Applies strength-of-materials approach to geotechnical engineering. *Illustrated with practical examples. *Executable program and MATLAB program for foundation vibration analysis

2.

Record Nr.	UNINA9910838274503321
Autore	Khosravy Mahdi
Titolo	Frontiers in Genetics Algorithm Theory and Applications / / edited by Mahdi Khosravy, Neeraj Gupta, Olaf Witkowski
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2024
ISBN	9789819981076 9819981077
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (293 pages)
Collana	Springer Tracts in Nature-Inspired Computing, , 2524-5538
Altri autori (Persone)	GuptaNeeraj WitkowskiOlaf
Disciplina	006.3
Soggetti	Computational intelligence Algorithms Mathematical optimization Building information modeling Computational Intelligence Optimization Building Information Modeling
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Evolutionary Computation: Perspectives on Past and Future -- Genetic Algorithms: A Technical Implementation of Natural Evolution -- Mating In Genetic Algorithm With Application In System Identification -- A

	Hybrid Biased Random-Key Genetic Algorithm for the Container Relocation Problem -- Genetic Algorithm and Its Applications in Power Systems.
Sommario/riassunto	This book reviews recent advances in theory and applications of genetic algorithm (GA). The book is composed of five parts; Part 1 of the book involves the chapters about the advances in GA theory. Part 2 concerns applications in health, society, and economy. Part 3 has an inclusive focus on application in power systems, and Part 4 concerns the applications of GA in electrical vehicle industries. Finally, Part 5 includes applications in signal and image processing.