

1. Record Nr.	UNINA9910786445703321
Autore	Henderson Alan
Titolo	Bugs alive [[electronic resource]] : a guide to keeping Australian invertebrates // Alan Henderson, Deanna Henderson and Jessie Sinclair
Pubbl/distr/stampa	Melbourne, VIC, : Museum Victoria, 2012
ISBN	1-921833-20-3
Descrizione fisica	1 online resource (200 p.)
Altri autori (Persone)	HendersonDeanna SinclairJessie
Disciplina	595.0994
Soggetti	Invertebrates - Australia Animals - Australia
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	Contents; Amazing Australian bugs; Where do I get bugs?; What are bugs?; How to use this book; Care Guides; Ants; Beetles; Butterflies and moths; Cockroaches; Crickets and katydids; Grasshoppers; Mantids; Phasmids; True bugs; Wasps; Primitive spiders; Scorpions; Centipedes; Millipedes; Snails and slugs; Housing; Escape prevention; Temperature; Humidity; Lighting; Substrates; Enclosure fit-out; Food and water; Food; Water; Health; Why is my bug sick?; Quarantine; Diseases; Parasites; Physical injuries; Stress; Deficiencies in captivity; Emergency food; Effects of aging; Euthanasia Display your invertebrates Tips for creating good displays; Gypsum cement; Polystyrene and epoxyresin; Acknowledgements; Authors; Glossary; Index
Sommario/riassunto	This exciting new title is the first book on keeping Australian invertebrates; previously, only titles on European or American species were available. Bugs Alive contains detailed descriptions (life-cycle, breeding, feeding) of over 90 species, as well as detailed instructions for housing and caring for your bug. Stunning colour photographs and line-art are used extensively throughout the book to display and describe animals and their anatomy, as well as to depict construction of housing and environment.

2. Record Nr.	UNINA9910960571603321
Autore	Haghighi Aliakbar Montazer
Titolo	Advanced mathematics for engineers with applications in stochastic processes // Aliakbar Montazer Haghighi, Jian-ao Lian, and Dimitar P. Mishev
Pubbl/distr/stampa	New York, : Nova Science Publishers, Inc., 2011, c2010
ISBN	1-62417-681-X
Edizione	[Rev. ed.]
Descrizione fisica	1 online resource (568 p.)
Collana	Mathematics research developments
Altri autori (Persone)	LianJian-ao MishevD. P (Dimitar P.)
Disciplina	510
Soggetti	Functions of several complex variables Stochastic analysis
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. [535]-541) and index.
Nota di contenuto	Intro -- ADVANCED MATHEMATICS FOR ENGINEERS WITH APPLICATIONS IN STOCHASTIC PROCESSES -- ADVANCED MATHEMATICS FOR ENGINEERS WITH APPLICATIONS IN STOCHASTIC PROCESSES -- LIBRARY OF CONGRESS CATALOGING-IN-PUBLICATION DATA -- CONTENTS -- PREFACE -- Chapter 1: INTRODUCTION -- 1.1. FUNCTIONS OF SEVERAL VARIABLES -- Definition 1.1.1. -- Example 1.1.1. -- Definition 1.1.2. -- Definition 1.1.3. -- Definition 1.1.4. -- Definition 1.1.5. -- Example 1.1.2. -- Definition 1.1.6. -- Definition 1.1.7. -- 1.2. PARTIAL DERIVATIVES, GRADIENT, AND DIVERGENCE -- Definition 1.2.1. -- Theorem 1.2.1 (Clairaut's1 Theorem or Schwarz's2 Theorem) -- Example 1.2.1. -- Definition 1.2.2. -- Example 1.2.3. -- Definition 1.2.3. -- Definition 1.2.4. -- Definition 1.2.5. -- Example 1.2.4. -- Definition 1.2.6. -- Definition 1.2.7. -- Example 1.2.5. -- Definition 1.2.8. -- Theorem 1.2.2. -- Example 1.2.6. -- 1.3. FUNCTIONS OF A COMPLEX VARIABLE -- Definition 1.3.1. -- 1.4. POWER SERIES AND THEIR CONVERGENT BEHAVIOR -- Definition 1.4.1. -- Definition 1.4.2. -- 1.5. REAL-VALUED TAYLOR SERIES AND MACLAURIN SERIES -- Definition 1.5.1. -- Definition 1.5.2. -- 1.6. POWER SERIES REPRESENTATION OF ANALYTIC FUNCTIONS -- 1.6.1. Derivative and Analytic Functions -- Definition 1.6.1. -- Definition 1.6.2 -- Theorem 1.6.1 (Cauchy-Riemann10 Equations and Analytic

Functions) -- 1.6.2. Line Integral in the Complex Plane -- Definition 1.6.3. -- Definition 1.6.4. -- Definition 1.6.5. -- Theorem 1.6.2. -- 1.6.3. Cauchy's Integral Theorem for Simply Connected Domains -- Theorem 1.6.3 (Cauchy's Integral Theorem) -- 1.6.4. Cauchy's Integral Theorem for Multiple Connected Domains -- Theorem 1.6.4. (Cauchy's Integral Theorem for Multiple Connected Domains) -- 1.6.5. Cauchy's Integral Formula -- Theorem 1.6.5. (Cauchy's Integral Formula) -- 1.6.6. Cauchy's Integral Formula for Derivatives. Theorem 1.6.6. (Cauchy's Integral Formula for Derivatives) -- 1.6.7. Taylor and Maclaurin Series of Complex-Valued Functions -- Definition 1.6.6. -- Definition 1.6.7. -- Theorem 1.6.7. (Taylor Theorem) -- Definition 1.6.8. -- 1.6.8. Taylor Polynomials and their Applications -- Definition 1.6.9. -- EXERCISES -- 1.1. Functions of Several Variables -- 1.2. Partial Derivatives, Gradient, and Divergence -- 1.3. Functions of a Complex Variable -- 1.4. Power Series and their Convergent Behavior -- 1.5. Real-Valued Taylor Series and Maclaurin Series -- 1.6. Power Series Representation of Analytic Functions -- Chapter 2: FOURIER AND WAVELET ANALYSIS -- 2.1. VECTOR SPACES AND ORTHOGONALITY -- Definition 2.1.1. -- Definition 2.1.2. -- Definition 2.1.3. -- Definition 2.1.4. -- Definition 2.1.5. -- Definition 2.1.6. -- Definition 2.1.7. -- Definition 2.1.8. -- Definition 2.1.9. -- Definition 2.1.10. -- Definition 2.1.11. -- 2.2. FOURIER SERIES AND ITS CONVERGENT BEHAVIOR -- Definition 2.2.1. -- Definition 2.2.2. -- Definition 2.2.3. -- Theorem 2.2.1. (Uniform Convergence) -- Theorem 2.2.2. (Fourier Series of Piecewise Smooth Functions) -- 2.3. FOURIER COSINE AND SINE SERIES AND HALF-RANGE EXPANSIONS -- Definition 2.3.1. -- Definition 2.3.2. -- 2.4. FOURIER SERIES AND PDES -- Definition 2.4.1. -- 2.5. FOURIER TRANSFORM AND INVERSE FOURIER TRANSFORM -- Definition 2.5.1. -- Definition 2.5.2. -- 2.6. PROPERTIES OF FOURIER TRANSFORM AND CONVOLUTION THEOREM -- Definition 2.6.1. -- 2.7. DISCRETE FOURIER TRANSFORM AND FAST FOURIER TRANSFORM -- Definition 2.7.1. -- Definition 2.7.2. -- Definition 2.7.3. -- Definition 2.7.4. -- 2.8. CLASSICAL HAAR SCALING FUNCTION AND HAAR WAVELETS -- Definition 2.8.1. -- 2.9. DAUBECHIES ORTHONORMAL SCALING FUNCTIONS AND WAVELETS -- Definition 2.9.1. -- Definition 2.9.2. -- 2.10. MULTIREOLUTION ANALYSIS IN GENERAL -- Definition 2.10.1. 2.11. WAVELET TRANSFORM AND INVERSE WAVELET TRANSFORM -- Definition 2.11.1. -- Definition 2.11.2. -- 2.12. OTHER WAVELETS -- 2.12.1. Compactly Supported Spline Wavelets -- Definition 2.12.1. -- Definition 2.12.2. -- 2.12.2. Morlet Wavelets -- 2.12.3. Gaussian Wavelets -- 2.12.4. Biorthogonal Wavelets -- 2.12.5. CDF 5/3 Wavelets -- 2.12.6. CDF 9/7 Wavelets -- EXERCISES -- 2.1. Vector Spaces and Orthogonality -- 2.2. Fourier Series and its Convergent Behavior -- 2.3. Fourier Cosine and Sine Series and Half-Range Expansions -- 2.4. Fourier Series and PDEs -- 2.5. Fourier Transform and Inverse Fourier Transform -- 2.6. Properties of Fourier Transform and Convolution Theorem -- 2.8. Classical Haar Scaling Function and Haar Wavelets -- 2.9. Daubechies Orthonormal Scaling Functions and Wavelets -- 2.12. Other Wavelets -- Chapter 3: LAPLACE TRANSFORM -- 3.1. DEFINITIONS OF LAPLACE TRANSFORM AND INVERSE LAPLACE TRANSFORM -- Definition 3.1.1. -- Theorem 3.1.1. (Existence of Laplace Transform) -- 3.2. FIRST SHIFTING THEOREM -- Theorem 3.2.1. (First Shifting or s-Shifting Theorem) -- 3.3. LAPLACE TRANSFORM OF DERIVATIVES -- Theorem 3.3.1. (Laplace Transform of First Order Derivative) . -- Theorem 3.3.2. (Laplace Transform of High Order Derivatives) -- 3.4. SOLVING INITIAL-VALUE PROBLEMS BY LAPLACE TRANSFORM -- 3.5. HEAVISIDE FUNCTION AND SECOND

SHIFTING THEOREM -- Definition 3.5.1. -- Theorem 3.5.1. (The Second Shifting or t-Shifting Theorem) -- 3.6. SOLVING INITIAL-VALUE PROBLEMS WITH DISCONTINUOUS INPUTS -- 3.7. SHORT IMPULSE AND DIRAC'S DELTA FUNCTIONS -- 3.8. SOLVING INITIAL-VALUE PROBLEMS WITH IMPULSE INPUTS -- 3.9. APPLICATION OF LAPLACE TRANSFORM TO ELECTRIC CIRCUITS -- 3.10. TABLE OF LAPLACE TRANSFORMS -- EXERCISES -- 3.1. Definitions of Laplace Transform and Inverse Laplace Transform -- 3.2. First Shifting Theorem -- 3.3. Laplace Transform of Derivatives.

3.4. Solving Initial-Value Problems by Laplace Transform -- 3.5. Heaviside Function and Second Shifting Theorem -- 3.6. Solving Initial-Value Problems with Discontinuous Inputs -- 3.8. Solving Initial-Value Problems with Impulse Inputs -- 3.9. Application of Laplace Transform to Electric Circuits -- Chapter 4: PROBABILITY -- 4.1. INTRODUCTION -- Definition 4.1.1. -- Definition 4.1.2. -- Definition 4.1.3. -- Definition 4.1.4. -- Definition 4.1.5. -- Definition 4.1.6. -- Definition 4.1.7. -- Definition 4.1.8. -- Definition 4.1.9. -- 4.2. COUNTING TECHNIQUES -- Definition 4.2.1. -- Rule 4.2.1. The Fundamental Principle of Counting -- Definition 4.2.2. -- Theorem 4.2.1. -- Definition 4.2.3. -- Definition 4.2.4. -- Theorem 4.2.3. -- 4.3. TREE DIAGRAMS -- 4.4. CONDITIONAL PROBABILITY AND INDEPENDENCE -- Definition 4.4.1. -- Definition 4.4.2. -- Theorem 4.4.1. -- Definition 4.4.3. -- 4.5. THE LAW OF TOTAL PROBABILITY -- Theorem 4.5.1. (The Multiplicative Law) -- Theorem 4.5.2. (The Multiplicative Law) Let 1 -- Theorem 4.5.3. (The Law of Total Probability) -- Theorem 4.5.4. (Bayes' Formula) -- 4.6. DISCRETE RANDOM VARIABLES -- Definition 4.6.1. -- Definition 4.6.2. -- Definition 4.6.3. -- 4.7. DISCRETE PROBABILITY DISTRIBUTIONS -- Definition 4.7.1. -- Definition 4.7.2. -- Definition 4.7.3. -- Definition 4.7.4. -- Definition 4.7.5. -- Definition 4.7.6. -- Definition 4.7.7. -- Definition 4.7.8. -- Definition 4.7.9. -- Theorem 4.7.2. -- 4.8. RANDOM VECTORS -- Definition 4.8.1. -- Definition 4.8.2. -- Definition 4.8.3. -- Theorem 4.8.1. Multinomial Theorem -- Definition 4.8.4. -- 4.9. CONDITIONAL DISTRIBUTION AND INDEPENDENCE -- Theorem 4.9.1. (The Law of Total Probability) -- Definition 4.9.1. -- Definition 4.9.2. -- Definition 4.9.3. -- Theorem 4.9.2. -- Theorem 4.9.3 -- Theorem 4.9.4. -- 4.10. DISCRETE MOMENTS -- Definition 4.10.1. -- Definition 4.10.2. Theorem 4.10.1. -- Theorem 4.10.2. -- Theorem 4.10.3. -- Definition 4.10.3. -- Definition 4.10.4. -- Definition 4.10.5. -- Theorem 4.10.4. -- Definition 4.10.6. -- Theorem 4.10.5. -- Definition 4.10.7. -- Theorem 4.10.6. -- Theorem 4.10.7. -- Theorem 4.10.8. -- Theorem 4.10.9. -- Theorem 4.10.10. -- Theorem 4.10.11. -- Definition 4.10.8. -- Definition 4.10.8. -- 4.11. CONTINUOUS RANDOM VARIABLES AND DISTRIBUTIONS -- Definition 4.11.1. -- Definition 4.11.2. -- Definition 4.11.3. -- Definition 4.11.4. -- Definition 4.11.5. -- Definition 4.11.6. -- Definition 4.11.7 -- Definition 4.11.8 -- Definition 4.11.9. -- Definition 4.11.10 -- Definition 4.11.11. -- Definition 4.11.12. -- Definition 4.11.13. -- Definition 4.11.14 -- Definition 4.11.15. -- Definition 4.11.16 -- Remark 4.11.1. -- 4.12. CONTINUOUS RANDOM VECTOR -- Definition 4.12.1. -- Definition 4.12.2 -- 4.13. FUNCTIONS OF A RANDOM VARIABLE -- Definition 4.13.1. -- Definition 4.13.2. -- Theorem 4.13.1. -- Definition 4.13.3. -- Theorem 4.13.2. -- Definition 4.13.4. -- Theorem 4.13.3. Central Limit Theorem -- EXERCISES -- 4.1. Introduction -- 4.2. Counting Techniques -- 4.3. Tree Diagrams -- 4.4. Conditional Probability and Independence -- 4.5. The Law of Total Probability -- 4.6. Discrete Random Variables -- 4.7. Discrete Probability Distributions -- 4.8. Random Vectors -- 4.9. Conditional Distribution and Independence -- 4.10. Discrete Moments -- 4.11.

Continuous Random Variables and Distributions -- 4.12. Continuous Random Vector -- 4.13. Functions of a Random Variable -- Chapter 5: STATISTICS -- PART ONE: DESCRIPTIVE STATISTICS -- 5.1. BASIC STATISTICAL CONCEPTS -- Definition 5.1.1. -- Definition 5.1.2. -- 5.1.1. Measures of Central Tendency -- Definition 5.1.3. -- Definition 5.1.4. -- Definition 5.1.5. -- Definition 5.1.6. -- 5.1.2. Organization of Data -- Definition 5.1.7. -- Definition 5.1.8. Definition 5.1.9.

Sommario/riassunto

The contents of this work cover Fourier and wavelet analysis, Laplace transform, probability, statistics, difference and differential-difference equations, stochastic processes and their applications, and much more.
