1. Record Nr. UNINA9910298436303321

Titolo	Ecological Networks in the Tropics : An Integrative Overview of Species Interactions from Some of the Most Species-Rich Habitats on Earth / / edited by Wesley Dáttilo, Victor Rico-Gray
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-319-68228-8
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (207 pages) : illustrations (some color)
Disciplina	333.950913
Soggetti	Biotic communities Conservation biology Ecology Biodiversity Community & Population Ecology Conservation Biology/Ecology Ecosystems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	1. The history of ecological networks -- 2. Tropical biodiversity: The importance of biotic interactions for its origin, maintenance, function and conservation -- 3. The structure of ecological networks -- 4. Ecology and evolution of species-rich interaction networks -- 5.The complex ant-plant relationship within tropical ecological networks -- 6. Plant-pollinator networks in the tropics: a review -- 7. Tropical seed dispersal networks: emerging patterns, biases and keystone species traits -- 8. Plant-herbivore networks in the tropics -- 9. Host-parasite networks: an integrative overview with tropical examples -- 10. Interaction networks in tropical reefs -- 11. Ecological networks in changing tropics -- 12. The future of ecological networks in the Tropics.
Sommario/riassunto	Based on graph theory studies this book seeks to understand how tropical species interact with each other and how these interactions are

	affected by perturbations in some of the most species-rich habitats on earth. Due to the great diversity of species and interactions in the tropics, this book addresses a wide range of current and future issues with empirical examples and complete revisions on different types of ecological networks: from mutualisms to antagonisms. The goal of this publication is not to be only for researchers but also for undergraduates in different areas of knowledge, and also to serve as a reference text for graduate-level courses mainly in the life sciences.

2.

Record Nr.	UNINA9910960943403321
Autore	Bretschneider Franklin <1947->
Titolo	Introduction to electrophysiological methods and instrumentation / / Franklin Bretschneider, Jan R. de Weille
Pubbl/distr/stampa	Amsterdam, : Elsevier/ Academic Press, c2006
ISBN	1-280-64144-4 9786610641444 0-08-046224-3
Edizione	[1st ed.]
Descrizione fisica	1 online resource (267 p.)
Altri autori (Persone)	De WeilleJan R
Disciplina	612.01427 612.813 616.807547
Soggetti	Electrophysiology - Equipment and supplies Electronics
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	Front cover; Title page; Copyright page; Table of contents; Preface; 1 Electricity; Electrical Quantities; Electric Charge, Current and Potential; Resistance; Capacitance; Magnetism; Self-Inductance; Direct and Alternating Current; Frequency; Reactance; Current and Voltage Sources; Components, Unwanted Properties; Unwanted Properties, Impedance; Cables; Circuits, Schematics, Kirchoff's Laws; Composition of Similar Components: Attenuators; Practical Voltage Sources and Current Sources; Voltage and Current Measurement; Composition of

Unequal Components: Filters; Integration and Differentiation
LC Filters2 Electronics; Active Elements; Vacuum Tubes and Semiconductors; Semiconductor Devices; Diodes and Transistors; Other Semiconductor Types; Amplifiers, Gain, Decibels and Saturation; Gain; Bandwidth; Input and Output Impedances; Maximum Signal Strength, Distortion; Noise, Hum Interference and Grounding; Differential Amplifiers, Block Diagrams; Operational Amplifiers, Feedback; Electronic Filters; Electrophysiological Preamplifiers; Amplifier for Extracellular Recording; Amplifier for Intracellular Recording; Patch-Clamp Amplifier; Two-Electrode Voltage-Clamp Amplifier
Measurement of Membrane Capacitance in Voltage-ClampRecording of Secretory Events; Power Supplies and Signal Sources; Electronic Voltmeters; Electrometers; The Cathode Ray Oscilloscope; LCD Screen Oscilloscopes; Important Properties of Oscilloscopes; Digital Electronics, Logic; A/D and D/A Conversions; Computers; 3 Electrochemistry; Introduction, Properties of Electrolytes; Electrolytes; The Metal/Electrolyte Interface; Capacitance of Polarized Electrodes; Faradaic Processes; Practical Electrodes; Electrochemical Cells, Measuring Electrodes; The Silver/Silver Chloride Electrode
Non-Faradaic ProcessesElectrokinetic Processes; Liquid Junction Potentials; Membrane Potentials; Derivation of the Equilibrium Potential; The Reversal Potential; Ion Selectivity; Electrodes Sensitive to pH and Other Ions; Electrodes: Practical Aspects; The Glass Micropipette; Patch Electrodes; The Semi-Permeable Patch; Ground Electrodes; Volume Conduction: Electric Fields in Electrolyte Solutions; Homogeneous Electric Field; Monopole Field; Dipole Field; 4 Signal Analysis; Introduction; Analysis of Analogue Potentials; Systems Analysis; Convolution; The Laplace Transform
The Fourier TransformOdd and Even Functions; Linearity; Analogue-to-Digital and Digital-to-Analogue Conversions; Signal Windowing; Digital Signal Processing; Signal Averaging; Autocorrelation; Crosscorrelation; The Discrete Fourier Transform; The Detection of Signals of Known Shape; Digital Filters; Fourier Filters and Non-Causal Filters; Non-Linear Systems Analysis; The Formal Method: Wiener Kernel Analysis; The Informal Method: Output Shape Analysis; The Importance of Non-Linearity; Analysis of Action Potential Signals; Population Spike and Gross Activity; Recording from the Skin Surface
The Electrocardiogram

Sommario/riassunto

Introduction to Electrophysiological Methods and Instrumentation covers all topics of interest to electrophysiologists, neuroscientists and neurophysiologists, from the reliable penetration of cells, the behaviour and function of the equipment, to the mathematical tools available for analysing data. It discusses the pros and cons of techniques and methods used in electrophysiology and how to avoid their pitfalls. Particularly in an era where high quality off-the-shelf solutions are readily available, it is important for the electrophysiologist to understand how his or her equipme