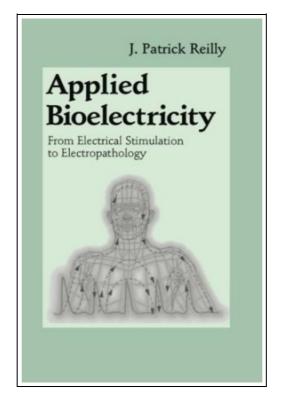
Applied Bioelectricity



Filesize: 8.4 MB

Reviews

A must buy book if you need to adding benefit. It is really simplified but shocks in the 50 percent of the pdf. I found out this pdf from my i and dad recommended this publication to learn.

(Zetta Armstrong III)

APPLIED BIOELECTRICITY



To get **Applied Bioelectricity** PDF, remember to click the button beneath and save the ebook or have accessibility to additional information which might be related to APPLIED BIOELECTRICITY book.

Condition: New. Publisher/Verlag: Springer, Berlin | From Electrical Stimulation to Electropathology | Electric currents and electromagnetic fields have been applied to biological systems, particularly humans, with both therapeutic and pathological results. This text discusses biological responses to electric currents and electromagnetic fields, including medical applications and shock hazards. It covers fundamental physical and engineering principles of responses to short-term electrical exposure and emphasises human reactions, although animal responses are considered as well, and the treatment covers reactions from the just-detectable to the clearly detrimental. An important new chapter discusses standards for human exposure to electromagnetic fields and electric current and demonstrates how these standards have been developed using the principles treated in earlier chapters. | 1 Introduction.- 1.1 General Perspective.- 1.2 Electrical Exposure.- Electrical Fatalities.- Typical Electrical Exposures.- 1.3 Scales of Short-Term Reactions to Contact Current.- Sensory Reactions.- Muscle Reactions.- Cardiac Reactions.- Thermal Reactions.-Electroporation.- 1.4 Reactions to Electric and Magnetic Field Stimulation.- 1.5 Variables Affecting Thresholds.- 2 Impedance and Current Distribution. - 2.1 Dielectric Properties of Biological Materials. - Conductivity and Permittivity. - Cellular Membranes. - Skin Depth. - 2.2 Skin Impedance. Detailed Structure of Skin.- Equivalent Circuit Models.- Area Proportionality of Skin Admittance.- Skin Capacitance.- Time-Variant and Nonlinear Aspects of Skin Impedance.- 2.3 Total Body Impedance: Low-Frequency and DC.- Distribution of Current and Impedance Within the Body.- Current Through the Heart.- Applicability of Measurements on Corpses.- Statistical Distribution of Impedance.- 2.4 Impedance at Higher Frequencies.- 2.5 Impedance Through Foot Contact.- 2.6 High-Voltage and Transient Properties.- Spark and Contact Components.- Plateau Voltage.- Spark Discharges and Corneal Degradation.- Discharge Impedance.- Variation with Stimulus Location.- Polarity Effects.- Stimulus Time Constants.-Minimum Impedance with Spark Discharge.- Internal Body Impedance.- 2.7 Impedance of Domestic Animals.- 3 Electrical Principles of Nerve and Muscle Function.- 3.1 Introduction.- 3.2 Cellular Membranes.- The Nernst Equation.- 3.3 The Excitable Nerve Membrane.- The Hodgkin-Huxley...



Other PDFs



[PDF] Is It Ok Not to Believe in God?: For Children 5-11

Click the link listed below to download "Is It Ok Not to Believe in God?: For Children 5-11" PDF file.

Save Document x



[PDF] Klara the Cow Who Knows How to Bow (Fun Rhyming Picture Book/Bedtime Story with Farm Animals about Friendships, Being Special and Loved. Ages 2-8) (Friendship Series Book 1)

Click the link listed below to download "Klara the Cow Who Knows How to Bow (Fun Rhyming Picture Book/Bedtime Story with Farm Animals about Friendships, Being Special and Loved. Ages 2-8) (Friendship Series Book 1)" PDF file.

Save Document »



[PDF] TJ new concept of the Preschool Quality Education Engineering: new happy learning young children (3-5 years old) daily learning book Intermediate (2)(Chinese Edition)

Click the link listed below to download "TJ new concept of the Preschool Quality Education Engineering: new happy learning young children (3-5 years old) daily learning book Intermediate (2)(Chinese Edition)" PDF file.

Save Document »



[PDF] TJ new concept of the Preschool Quality Education Engineering the daily learning book of: new happy learning young children (2-4 years old) in small classes (3)(Chinese Edition)

Click the link listed below to download "TJ new concept of the Preschool Quality Education Engineering the daily learning book of: new happy learning young children (2-4 years old) in small classes (3)(Chinese Edition)" PDF file.

Save Document »



[PDF] Applied Undergraduate Business English family planning materials: business knowledge REVIEW (English) (Chinese Edition)

Click the link listed below to download "Applied Undergraduate Business English family planning materials: business knowledge REVIEW (English) (Chinese Edition)" PDF file.

Save Document »



[PDF] DK Readers Animal Hospital Level 2 Beginning to Read Alone

Click the link listed below to download "DK Readers Animal Hospital Level 2 Beginning to Read Alone" PDF file.

Save Document »



[PDF] Dog Poems For Kids Rhyming Books For Children Dog Unicorn Jerks 2 in 1 Compilation Of Volume 1 3 Just Really Big Jerks Series

Follow the hyperlink under to get "Dog Poems For Kids Rhyming Books For Children Dog Unicorn Jerks 2 in 1 Compilation Of Volume 13 Just Really Big Jerks Series" PDF file.

Download Document »



[PDF] Dom's Dragon - Read it Yourself with Ladybird: Level 2

 $Follow the \, hyperlink \, under \, to \, get \, "Dom's \, Dragon - Read \, it \, Yourself \, with \, Ladybird: \, Level \, 2" \, PDF \, file.$

Download Document »



[PDF] Read Write Inc. Phonics: Grey Set 7 Storybook 2 the Lion s Paw

Follow the hyperlink under to get "Read Write Inc. Phonics: Grey Set 7 Storybook 2 the Lion s Paw" PDF file.

Download Document »



[PDF] Superhero Max- Read it Yourself with Ladybird: Level 2

 $Follow the \, hyperlink \, under \, to \, get \, "Superhero \, Max-Read \, it \, Yourself \, with \, Ladybird: \, Level \, 2" \, PDF \, file.$

Download Document »



[PDF] Words and Rhymes for Kids: A Fun Teaching Tool for High Frequency Words and Word Families

Follow the hyperlink under to get "Words and Rhymes for Kids: A Fun Teaching Tool for High Frequency Words and Word Families" PDF file.

Download Document »



[PDF] Learn at Home:Learn to Read at Home with Bug Club: Pink Pack Featuring Trucktown (Pack of 6 Reading Books with 4 Fiction and 2 Non-fiction)

Follow the hyperlink under to get "Learn at Home:Learn to Read at Home with Bug Club: Pink Pack Featuring Trucktown (Pack of 6 Reading Books with 4 Fiction and 2 Non-fiction)" PDF file.

Download Document »