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Autore	Reilly J. Patrick
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Altri autori (Persone)	DiamantAlan M
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Nota di contenuto	pt. 1. Theory and applications -- pt. 2. User's guide.
Sommario/riassunto	Electrostimulation is defined as the action of electrical energy on nerve and muscle - the two classes of excitable tissue. This cutting-edge resource offers you broad coverage of the subject, expanding the scope of electrostimulation discussions to include accidental, aversive, and possibly harmful biological effects of electrical energy. The book enables you to develop standards for human exposure to electric currents having various waveforms, determine classes of nerve fibers brought to excitation within specified regions of the body due to certain types of exposure, and quantify how harmonic distortions influence the excitability of sinusoidal extrostimulation. This practical reference also offers guidance in using the SENN (Spatially Extended Nonlinear Node) computer model that stimulates the interaction of applied electric energy with myelinated neurons. Moreover, you learn how to compare efficacy and hazard potential of various stun weapons, assess unintended nerve stimulation from MRI exposure of patients with metallic implants, and compare the safety margins between electrostimulation thresholds of sensory and motor neurons relative to unintended cardiac excitation or painful sensory responses. Free nerve model download available at ArtechHouse.com -- Features source code

and executable code to help you solve real-world problems using the  
SENN computer model.

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