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35: Human mitochondrial defects and disease 36: Integration of chloroplast and cytoplasm; 37: Alternative uses of the proton gradient: 1 Heat generation; 38: Alternative uses of the proton gradient: 2 Transport systems; 39: Alternative uses of the proton gradient: 3 Bacterial motion; 40: Alternative methods of gradient generation: 1 Bacteriorhodopsin; 41: Alternative methods of gradient generation: 2 Primary sodium pumps; 42: ATP-driven ion pumps: an overview; 43: P-type ATPases: 1 Structural aspects; 44: P-type ATPases: 2 Energetic aspects; 45: Evolution of bioenergetic systems; Reading list
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Sommario/riassunto

Bioenergetics is the study of the way biological systems, usually at the molecular level, utilize and convert energy in order to drive the biochemical reactions that constitute life. However, because of its often quantitative basis and the amount of technical jargon, the subject tends to alienate and intimidate students. This beautifully illustrated text has a lucid and logical approach to the subject. The text uses the modern perspective throughout so that the student is given an easily assimilable, logical introduction to the important concepts of the subject, particulary the core concept, t