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4.4 The stoichiometry of proton uptake by the ATP synthase4.5 Proton current and respiratory control; 4.6 Proton conductance; 4.7 Mitochondria1 respiration rate and metabolic control analysis; 4.8 Overall parameters of energy transduction; 4.9 Reversed electron transfer and the proton circuit driven by ATP hydrolysis; 4.10 ATP synthesis driven by an artificial protonmotive force; 4.11 Kinetic competence of p in the proton circuit; 4.12 Light-dependent ATP synthesis by bovine heart ATP synthase; CHAPTER 5. RESPIRATORY CHAINS; 5.1 Introduction
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6.4 The electron-transfer and light-capture pathway in green plants and algae

Sommario/riassunto

This new edition of Bioenergetics presents a clear and up-to-date explanation of the chemiosmotic theory and covers mitochondria, bacteria, and chloroplasts. It takes account of the many newly determined structures, such as ATP synthase and the two photosystems of photosynthesis, that provide molecular insight into chemiosmotic energy transduction. This edition includes additional color figures of protein structures and many newly drawn illustrations designed to enable the reader to grasp the fundamental insights that are derived from knowing the structure. Every chapter has been extens