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Nota di contenuto	The Photosynthetic Membrane: Molecular Mechanisms and Biophysics of Light Harvesting; Copyright; Contents; Preface; Acknowledgements; 1 Life, Energy and Light; 1.1 The Definition of Life; 1.2 The Energy of Matter; 1.2.1 The Source of Life's Energy; 1.3 Energy for the Future; 1.4 Photosynthesis by Life; 1.4.1 Photon Energy Transformations; Reference; Bibliography; 2 The Space of the Cell; 2.1 The Cell Concept: Fundamental Nature of Life; 2.2 Compartmentalization: The Cult of the Membrane; 2.3 Membrane Components: Fundamentals of Proteins; 2.4 Functional Classification of Membrane Proteins ReferenceBibliography; 3 The Photosynthetic Membrane: Outlook; 3.1 Knowledge of the Pre-Atomic Structure Era: Organization of the

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6.4.1 Key Biochemical and Spectroscopic Advances that Aided the Emergence of the Current Atomic LHCIIb Structure

Sommario/riassunto

The proteins that gather light for plant photosynthesis are embedded within cell membranes in a site called the thylakoid membrane (or the ""photosynthetic membrane""). These proteins form the light harvesting antenna that feeds with energy a number of vital photosynthetic processes such as water oxidation and oxygen evolution, the pumping of protons across the thylakoid membranes coupled with the electron transport chain of the photosystems and cytochrome b6f complex, and ATP synthesis by ATP synthase utilizing the generated proton gradient. The Photosynthetic Membrane: Molecular M
