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5. NUTRIENT LIMITATIONS; 6. SENSING CELLULAR ENERGY IMBALANCE AND REGULATION OF LIGHT HARVESTING;  
ACKNOWLEDGEMENTS; From Biological to Synthetic Light-Harvesting Materials - The Elementary Steps; 1. INTRODUCTION; 2. PHOTOSYNTHETIC LIGHT-HARVESTING - ENERGY TRANSFER AND TRAPPING; 3. ORGANIC CONDUCTING POLYMERS: LIGHT HARVESTING AND GENERATION; 4. DYE-SENSITIZED NANOSTRUCTURED SEMI-CONDUCTORS - ENERGY CONVERSION BY ULTRAFAST ELECTRON TRANSFER; 5. TRANSITION METAL SUPRAMOLECULAR COMPLEXES - ENERGY TRANSFER IN ARTIFICIAL ANTENNAS  
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5. METAL MEDIATED MOTIFS

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### Sommario/riassunto

The science of energy harvesting materials is experiencing phenomenal growth and attracting huge interest. Exploiting recently acquired insights into the fundamental mechanisms and principles of photosynthesis, it is now possible to forge entirely new and distinctive molecular materials and devise artificial photosystems and applications far remote from conventional solar cell technology. In this comprehensive treatment of energy harvesting, a team of internationally acclaimed scientists at the forefront of the subject paint a state-of-the-art picture of modern energy harvesting materials science

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