



Plant leaves collectively represent the largest above-ground surface area of plant material in virtually all environments. Their optical properties determine where and how energy and gas exchange occurs, which in turn drives the energy budget of the planet, and defines its ecology and habitability. This book reviews the state-of-the-art research on leaf optics. Topics covered include leaf traits, the anatomy and structure of leaves, leaf color, biophysics and spectroscopy, radiometry, radiative transfer models, and remote and proximal sensing. A physical approach is emphasized throughout, providing the necessary foundations in physics, chemistry, and biology to make the context accessible to readers from various subject backgrounds. It is a valuable resource for advanced students, researchers, and government agency practitioners in remote sensing, plant physiology, ecology, resource management, and conservation.



Online Resources

www.cambridge.org/leafopticalproperties

▣ Bibliographical database of articles, book sections and reports

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