



Science of Synthesis: Photocatalysis in Organic Synthesis

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Description

The use of light in organic synthesis, more specifically the use of visible light in photoredox catalysis, has developed rapidly over the last 15 years and it is now time to define its impact on the field.

Aimed at both newcomers to the field and experts alike, *Photocatalysis in Organic Synthesis* introduces the important basic concepts of photophysics and describes typical laboratory set-ups for photoredox catalysis, thus enabling instant and reliable application of these new synthetic tools. Key photocatalytic transformations are discussed in detail, including representative experimental procedures, followed by a collection of industrial case studies. Rather than aiming for a comprehensive coverage, solutions are presented for challenging transformations in synthesis that employ visible light and suitable dyes. To this end, the authors, a team of pioneers and leaders in the field, discuss both the practical and conceptual aspects of this rapidly growing area of synthetic chemistry. A primary objective is to present a collection of the most useful, practical, and reliable methods of photocatalysis to a wider audience.

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