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The Concept of Photochemical Enzyme Models – State of the Art

Günther Knör

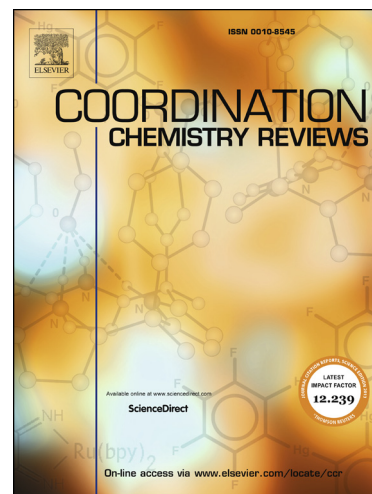
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Review

## The Concept of Photochemical Enzyme Models – State of the Art

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### ABSTRACT

Synthetic low-molecular-weight catalyst systems with an enzyme-like reactivity can be successfully created from suitable light-responsive building blocks with rationally designed excited-state properties. This unique approach of mimicking natural processes with bio-inspired catalysts based on coordination compounds and photoreactive materials offers several important benefits compared to conventional biomimetic strategies. Such advantages include the convenient triggering and regulation of enzyme-like activity by light-intensity variations, efficient substrate conversion even under very

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