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# Synthesis of functionalized titanium-carboxylate molecular clusters and their catalytic activity

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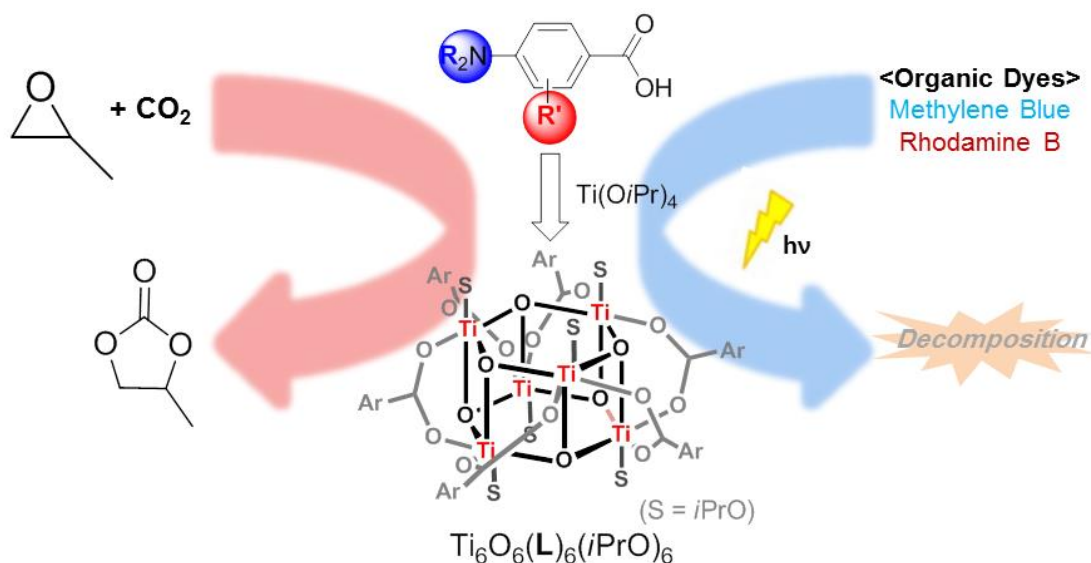
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## Graphical Abstract



Titanium-carboxylate molecular clusters with various organic functionalities were successfully synthesized, and utilized to carbon dioxide cycloaddition and photocatalytic degradation.

## Abstract

Various organic functionalities were successfully introduced into titanium-carboxylate molecular clusters, and functional group tolerances of cluster, along with their catalytic activities have been investigated. Amino groups were installed in the *para*-position relative to the carboxylate, and the secondary functionality was placed at the *ortho*- position. The molecular structure of the obtained titanium clusters were confirmed by single X-ray

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