

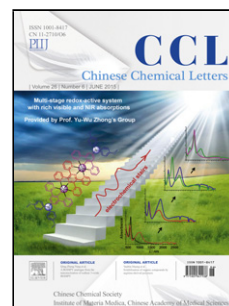
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Review

Photosensitive peptide hydrogels as smart materials for applications

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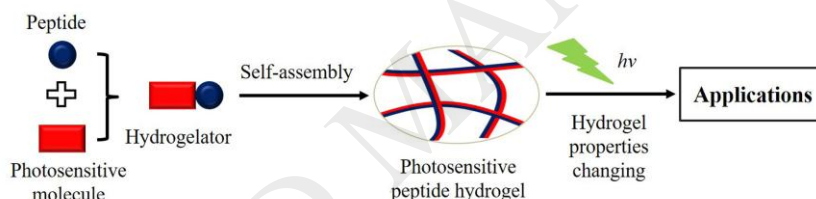
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## Graphical Abstract



Photosensitive supramolecular peptide hydrogels with the gelators forming by the integration of photosensitive moieties and peptides have been briefly summarized the hydrogelation capabilities, the expressing manner serving as smart materials, and practical applications.

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## ABSTRACT

Photosensitive peptide hydrogels (PPHs) which allow photo-modulation on the self-assembly of peptides were broadly developed over the recent decades. The real-time and spatial modulation of hydrogel properties upon non-contact light illumination, allow the PPHs serving as super 'smart' soft materials. Herein, we briefly summarized the PPHs preparing from the integration of diverse photosensitive moieties with peptides through gelation abilities, 'smart' manner and applications. Moreover, a novel type of PPHs based on intramolecular biorthogonal photo-click reaction developed by our group has been demonstrated with relative mechanism and applications.

## 1. Introduction

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