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Enantio- and Diastereoselective De Novo Synthesis of 3-Substituted Proline Derivatives via Cooperative Photoredox/Brønsted Acid Catalysis and Epimerization

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## **Ir-Catalyzed Enantio- and Diastereoselective Synthesis** of 3-Substituted Proline Derivatives

## Selected examples:

<sup>a</sup> 2 mmol of amino acid was used.

Β̈́r

Вr

 $^{\rm b}$  After irridation, the reaction mixture was stirred at room temperature for additional 10 h.

was used instead of  $\alpha$ -bromo  $\gamma$ -chloro ketone.

**Significance:** Peptides, including proline, are ubiquitous in biologically active molecules due to their unique structure. The Authors have developed a synthesis of diastereo- and enantioselective proline derivatives.

**Comment:** The synthesis of proline derivatives was undergone by the help of iridium catalysis to afford various types of 3-substituted prolines in high to excellent yields with great diastereo- and enantioselectivity.

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**Peptide Chemistry** 

## Key words

iridium catalysis enantioselectivity diastereoselectivity 3-substituted prolines photoredox reaction

