Category

Peptide Chemistry

Key words

α,α-disubstituted amino acids copper catalysis radical process tertiary alkyl halides sulfoximines

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Copper-Catalyzed Enantioconvergent Radical C(sp³)–N Cross-Coupling: Access to α,α-Disubstituted Amino Acids *Angew. Chem. Int. Ed.* **2023**, *62*, e202302983 DOI: 10.1002/anie.202302983.

Copper-Catalyzed Synthesis of α , α -Disubstituted Amino Acid Derivatives

Significance: α,α -Disubstituted amino acids can be widely found in bioactive compounds. The authors have developed a copper-catalyzed radical-mediated method to synthesize α,α -disubstituted amino acid derivatives from tertiary alkyl halides and sulfoximines.

98% yield, 90% ee

Comment: Various examples of α , α -disubstituted amino acid derivatives are prepared by using a copper-catalytic system. The yields of the products are moderate to excellent and the enatioseletivities are controlled well by the chiral ligand.

90% yield, >99% ee

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