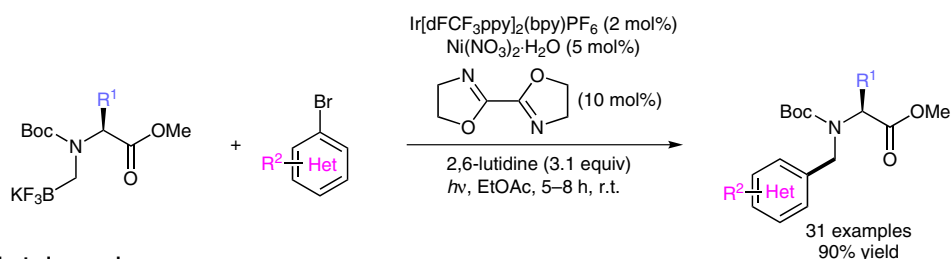


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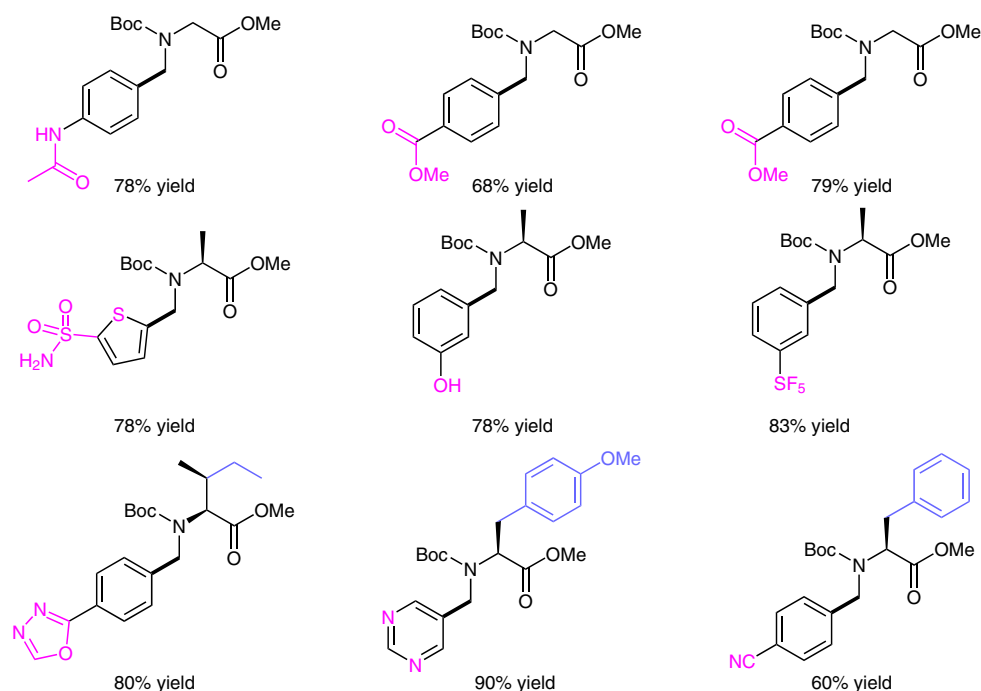
α -Arylation/Heteroarylation of Chiral α -Aminomethyltrifluoroborates by Synergistic Iridium Photoredox/Nickel Cross-Coupling Catalysis

Angew. Chem. Int. Ed. **2016**, *55*, 254–258.

Photoredox-Generated α -Amino Radicals Used in (Hetero)Arylation



Selected examples:



Significance: Molander and co-workers report the arylation of chiral α -aminomethyltrifluoroborates by a synergistic dual catalysis strategy using iridium photoredox and nickel cross-coupling. α -Amino radical generation from the chiral N-trifluoroboratomethyl salt, followed by arylation, leads to enantiopure benzylic amines in high yields.

Comment: This new Csp³–Csp³ bond-formation process uses abundant and inexpensive amino acids, and also has the advantage of the stability and storability of its reagents. Moreover, the reactions proceed at room temperature, under mild conditions.

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