

Iron-catalyzed arylation of aromatic ketones and aldehydes mediated by organosilanes.

Autorzy

Risto Savela

Marcin A. Majewski

Reko Leino

Rok wydania

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Streszczenie

A simple and efficient iron-catalyzed method for arylation of aromatic carbonyl compounds is reported. The use of 4 % FeCl_3 or $\text{Fe}(\text{acac})_3$ as the catalyst, in combination with a slight excess of chlorotrimethylsilane and triethylsilane, chlorination of benzylic ketones and aldehydes with subsequent Friedel–Crafts alkylation of arenes is achieved. Although the method is limited by the general constraints associated with Friedel–Crafts alkylation reactions, robust applications for the synthesis of pharmaceutical intermediates and so on can be envisioned.

Słowa kluczowe

synthetic methods, homogeneous catalysis, Iron, silanes

Adres publiczny

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