



Iron-catalyzed chlorination of silanes.

Autorzy

Risto Savela

Wojciech Zawartka

Reko Leino

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Streszczenie

A simple and highly efficient iron-catalyzed method for the chlorination of silanes has been developed. By use of 0.5–2% of the Fe(III)-based catalyst FeCl_3 or $\text{Fe}(\text{acac})_3$ in the presence of 1–1.5 equiv of acetyl chloride as the chlorine donor, a large number of silanes, alkoxy silanes, and silanols were converted to the corresponding chlorosilanes in 50–93% yields. In contrast to earlier reported methods often suffering from expensive catalysts or use of stoichiometric metal salts, hazardous reagents, and reaction conditions, the presently described methodology allows benign reaction conditions and simple workup while using only catalytic amounts of a readily available and economically viable iron catalyst.

Adres publiczny

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Strona internetowa wydawcy

<https://www.acs.org/content/acs/en.html>