Y.-M. WEI, X.-D. MA, M.-F. WANG, X.-F. DUAN* (BEIJING NORMAL UNIVERSITY, P. R. OF CHINA)

Synergism of Fe/Ti Enabled Regioselective Arene Difunctionalization
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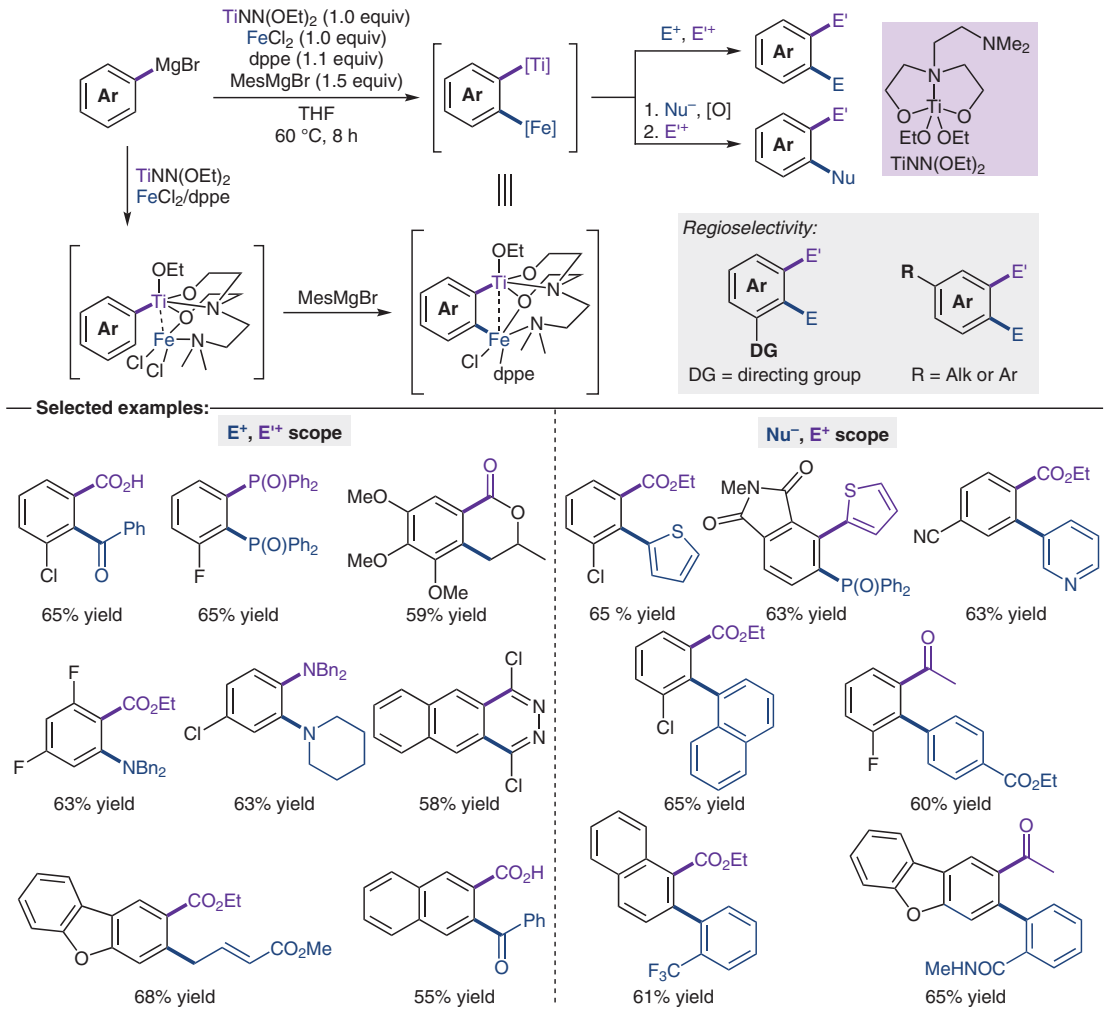
ortho Difunctionalization of Arenes by Iron/Titanium Synergistic Interaction



Significance: Duan and co-workers report an *ortho* difunctionalization of arenes through an unusual 1,2-aryl heterobimetallic Fe/Ti intermediate. This strategy allows facile access to *ortho*-difunctionalized arenes in a regioselective manner.

Comment: The ferration process can be formally regarded as a C–Ti bond-directed *ortho* metalation (DOM). The regioselectivity of the ferration was shown to be dependent either on steric effects or the presence of an iron-chelating atom acting as a directing group (see gray box).

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Metals in Synthesis

Key words
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Synfact of the Month