

C(sp³)–Si CROSS-COUPLING

Oestreich, M.

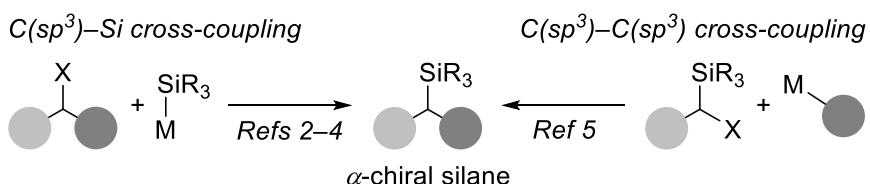
Institut für Chemie, Straße des 17. Juni 115, 10623 Berlin

Technische Universität Berlin

Germany

martin.oestreich@tu-berlin.de

The combination of silicon (pro)nucleophiles and alkyl electrophiles is an obvious approach toward the formation of C(sp³)–Si bonds.¹ Regioselectivity issues are avoided as the locus of bond formation is set in the prefunctionalized alkyl coupling partner. However, synthetically useful protocols only evolved in recent years, closing an important gap in silicon chemistry. We present here our efforts for the construction of C(sp³)–Si bonds by radical cross-couplings,² enantiospecific nucleophilic substitution,³ and cross-electrophile coupling reactions.⁴ An alternative way to access such α -chiral silanes enantioselectively is by radical C(sp³)–C(sp³) cross coupling.⁵



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