Palladium Cross-Couplings with a Silicon-Based Transfer Agent

Significance: The authors present a reusable, bench-stable, silicon-based transfer agent for effective room-temperature palladium-catalyzed cross-couplings of aryl chlorides with aryl lithium reagents.

Comment: DFT calculations outline the importance of the CF₃ groups of the transfer agent and support a σ-bond-metathesis mechanism during transmetalation.