



CuI nanoparticles catalyzed *N*-arylation of NH-containing heterocycles with aryl halides under ligand and additive free conditions

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Received on 10th April and finalized on 26th April 2013.

ABSTRACT

*CuI nanoparticles were employed for the *N*-arylation of indole and pyrrole with aryl halides using K_2CO_3 as base under ligand free conditions. This procedure merits simple handling, proceeds efficiently without any ligands and additives, affording the desired products in good to excellent yields. Easy recoverability, efficient recycling, high functional group tolerance, and stability of the catalyst render the protocol economic and sustainable.*

Keywords: *N*-arylation, *N*-arylindole, *N*-arylpyrrole, copper iodide nanoparticles, recyclable.
