

An Efficient Green Catalyst for Chemo-Selectiveoxidative Coupling of Thiols

Authors : E. Kolvari, N. Koukabi, A. Sabet, A. Fakhraee, M. Ramezanpour

Abstract : A green and efficient method for oxidation of thiols to the corresponding disulfides is reported using free nano-iron oxide in the H₂O₂ and methanol as solvent at room temperature. H₂O₂ is an oxidant for S-S coupling variety aromatic thiols to corresponding disulfide in the presence of supported iron oxide as recoverable catalyst. This reaction is clean, fast, mild and easy work-up with no side reaction.

Keywords : thiol, disulfide, free nano-iron oxide, H₂O₂, oxidation, coupling

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