

Catalytic effect of nano copper ferrite on the synthesis of 6-(anthracen-9-yl)-4-(benzofuran-2-yl)pyrimidin-2-(1H)-one

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Abstract. The nano copper ferrite (CuFe₂O₄) catalyst was employed for the synthesis of 6-(anthracen-9-yl)-4-(benzofuran-2-yl)pyrimidin-2-(1H)-one by condensation and cyclization of 2-acetyl benzofuran, 9-anthracenaldehyde and urea under conventional heating reaction. The synthesized pyrimidinone was confirmed by physical constants, spectral (FT-IR, ¹H & ¹³C NMR) and elemental analysis. In this synthetic method, the authors investigated the effect of catalyst on the reaction by obtained yields.

Keywords: copper ferrite; pyrimidine; eco-friendly synthesis; spectral studies.

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