

Fluorite Catalysed Microwave Assisted Rapid Synthesis of Thiazolidinone Derivatives

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Abstract: *Microwave-assisted, fluorite-catalysed multicomponent reaction has been explored for the synthesis of thiazolidinone derivatives. The fluorite could efficiently influence the condensation and cyclisation through its surface properties, whereas microwave irradiation accelerates the process. The reaction proceeds rapidly to afford the desired products in excellent yields. The synthesized derivatives were characterized by ^1H NMR, and IR spectral analysis. This catalytic system could be reused up to eight times with negligible impact on overall loss in product yield.*

Keywords: Fluorite, microwave assisted synthesis, thiazolidinone, heterogeneous catalysis.