



## FeCl<sub>3</sub> Catalyzed Synthesis of 2, 5-Disubstituted 1, 3, 4-Oxadiazoles

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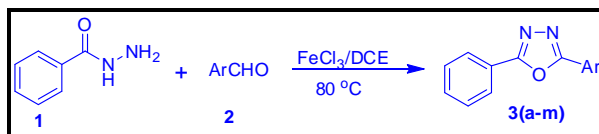
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### ABSTRACT

An efficient development for the one-pot synthesis of 2, 5-disubstituted 1, 3, 4-oxadiazoles have been developed using FeCl<sub>3</sub> as catalyst. The reaction was successful with a broad range of substrates such as aldehyde and aryl hydrazides to afford the corresponding unsymmetrical 2, 5-disubstituted 1, 3, 4-oxadiazoles. This is easy going reaction conditions, cost-effective reagents and short reaction time are advantages of this method.

### Graphical Abstract



Oxidative Cyclization of N-arylhydrazones.

**Keywords:** FeCl<sub>3</sub>, Aldehyde, 1, 3,4-Oxadiazoles, Oxidative Cyclization.