

## عنوان مقاله:

Nano-cerium Oxide/Aluminum Oxide: An Efficient and Useful Catalyst for the Synthesis of Tetrahydro[a]xanthenes-11-one Derivatives

## محل انتشار:

نشریه متدهای شیمیایی, دوره 5, شماره 2 (سال: 1400)

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### خلاصه مقاله:

Tetrahydro[a]xanthenes-11-one derivatives have been widely used industrially as agrochemicals, cosmetics and pigments are reported to exert broad spectrum biological and pharmacological activities. Herein, we reported an efficient and environmentally benign one-pot multi-component reaction for the synthesis of tetrahydro[a]xanthenes-11-one derivatives from the reaction of dimedone, aromatic aldehydes, and 2-naphthols in the presence of a catalytic amount of nano-nano-CeO2/Al2O3. The advantages of the effective method included good yields (91-98%), short reaction times, simple work-up and reusable catalyst. The catalyst could be recycled and reused for five times without .much loss in its activity

**کلمات کلیدی:** Xanthene, Derivatives, multi–component reaction, One-pot, nano-CeO2

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