

## عنوان مقاله:

Photocatalytic removal of CO gas using magnetite perovskite nanocatalysts

## محل انتشار:

دومین کنفرانس بین المللی یافته های نوین پژوهشی در شیمی و مهندسی شیمی (سال: 1395)

تعداد صفحات اصل مقاله: 6

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## خلاصه مقاله:

In this paper, LaMnO<sub>3</sub> and LaMn<sub>0.7</sub>Cu<sub>0.3</sub>O<sub>3</sub> perovskites were synthesized by sol-gel auto combustion method and characterized by X-ray diffraction and scanning electron microscope. Activity of synthesized catalysts were evaluated in catalytic oxidation of CO by photocatalytic process. XRD results show that the studied perovskites were synthesized in single phase perovskite structure. SEM result shows that the morphology of LaMnO<sub>3</sub> and LaMn<sub>0.7</sub>Cu<sub>0.3</sub>O<sub>3</sub> are as irregular shaped grains. Perovskite catalysts show a good activity in catalytic removal of CO. The conversion of CO by LaMnO<sub>3</sub> and LaMn<sub>0.7</sub>Cu<sub>0.3</sub>O<sub>3</sub> was 65% and 82% respectively in 24h at room temperature .by photocatalytic process. LaMn<sub>0.7</sub>Cu<sub>0.3</sub>O<sub>3</sub> was the optimum catalyst in catalytic oxidation of CO

## کلمات کلیدی:

Perovskite, CO, LaMn<sub>0.7</sub>B<sub>0.3</sub>O<sub>3</sub>, sol-gel

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/477857>

