عنوان مقاله:

Surface Modification of LaMnO3/Al2O3 under N2 and Ar Non-Thermal Glow Discharge plasma and Application in Simultaneous NO and CO Reduction

محل انتشار:

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نویسندگان:

Hamid Reza Khaledian - *Department of Chemical Engineering, Faculty of Chemical Engineering & Petroleum, Tabriz University, Tabriz, Iran*

Pezhman Zolfaghari - *Department of Chemical Engineering, Faculty of Chemical Engineering & Petroleum, Tabriz University, Tabriz, Iran*

Aligholi Niaei - *Department of Chemical Engineering, Faculty of Chemical Engineering & Petroleum, Tabriz University, Tabriz, Iran*

Sirous Khorram - *Research Institute for Applied Physics and Astronomy, Tabriz University, Tabriz, Iran*

خلاصه مقاله:

In this paper, N2 and Ar non-thermal glow discharge plasma as an innovative method for surface modification of LaMnO3/Al2O3 was applied and prepared catalysts were examined in the catalytic process of NO and CO reduction. Structural characterization, morphology and crystallite size examinations were performed by X-ray diffraction (XRD) and scanning electron microscopy (SEM) analysis. The XRD analysis shown that treated samples have lower intensity and crystallite sizes. It observed from the SEM analysis that plasma hit thesurface and created various crystallite plates for treated catalysts under N2 and Ar Plasma. Conversion and selectivity of treated catalysts were higher than the conventionally catalyst prepared, which shown the effect of plasma surface modification on catalytic performance

کلمات کلیدی:

Non-thermal glow discharge plasma, Perovskite, NO, CO, Reduction, Alumina