

No direct relationship was concluded between activity and reducibility of the catalysts. The higher activity of supported lanthanum manganite is attributed to the higher surface area of catalyst, small particles of LaMnO_3 and subsequently the 2-propanol molecules can easily access to active sites of catalyst and react with oxygen. LaMnO_3 -ZSM-5 showed higher activity, even than 1% $\text{Pt/Al}_2\text{O}_3$. The study revealed that the supporting of the perovskite-type catalyst on the zeolites improved the activity of the catalyst. LaMnO_3 -ZSM-5 exhibited the higher activity and stability than LaMnO_3 in catalytic combustion of 2-propanol revealing the superior role of ZSM-5 support in improving the activity of the catalyst. LaMnO_3 -ZSM-5 could be a promising catalyst in environmental control applications.

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