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The synergistic catalytic effect between graphene oxide and three-dimensional ordered mesoporous Co_3O_4 nanoparticles for low-temperature CO oxidation

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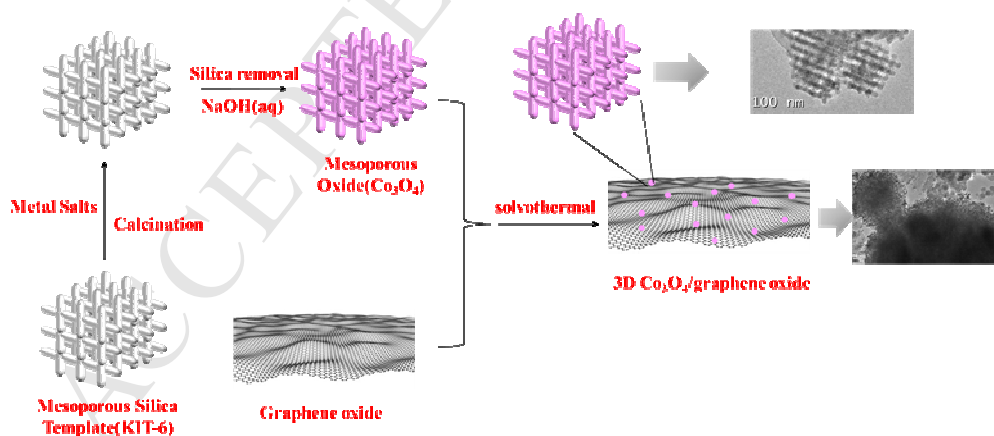
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Graphical Abstract

The Synergistic Catalytic Effect between Graphene Oxide and Three-Dimensional Ordered Mesoporous Co_3O_4 Nanoparticles for low-temperature CO Oxidation

In this paper, the 3D $\text{Co}_3\text{O}_4/\text{GO}$ catalyst showed fine 3D ordered mesoporous structures. The synergistic effect of graphene oxide and Co_3O_4 made the 3D $\text{Co}_3\text{O}_4/\text{GO}$ catalyst with the ethanol as solvent showed excellent catalytic activity and the cycle stability. The solvent influenced catalytic activity by changed the ratio of Co^{3+} and numbers of contained-oxygen groups. Based on this, the 3D $\text{Co}_3\text{O}_4/\text{GO}(\text{ET})$ catalyst presented superior catalytic activity and cycle stability.



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