Improvement of the Catalytic Performance of Pd/WO₃/ZrO₂ in the Selective NO–CH₄–O₂ Reaction by the Addition of Water Vapor

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The Pd/WO₃/ZrO₂ catalyst exhibited activity for the NO–CH₄–O₂ reaction in the presence of water vapor when WO₃ monolayer covered the ZrO₂ surface. The selectivity of methane conversion for NO reduction was considerably improved by the addition of 10% water vapor.