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PII: S0926-3373(17)31179-7
DOI: https://doi.org/10.1016/j.apcatb.2017.12.030
Reference: APCATB 16265

To appear in: *Applied Catalysis B: Environmental*

Received date: 13-7-2017
Revised date: 11-12-2017
Accepted date: 12-12-2017

Please cite this article as: Guodong Zhang, Weiliang Han, Haijun Zhao, Luyao Zong, Zhicheng Tang, Solvothermal synthesis of well-designed ceria-tin-titanium catalysts with enhanced catalytic performance for wide temperature NH3-SCR reaction, Applied Catalysis B, Environmental https://doi.org/10.1016/j.apcatb.2017.12.030

Solvothermal synthesis of well-designed ceria-tin-titanium catalysts with enhanced catalytic performance for wide temperature NH_3-SCR reaction

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Graphical Abstract

In this paper, Sn modified ceria-titanium catalysts were prepared by solvent thermal synthesis method and optimized of the metal oxide structure, the strengthened synergistic effect of metal particles, following redox equilibrium: $2Ce^{4+} + Sn^{2+} \leftrightarrow 2Ce^{3+} + Sn^{4+}$, improving the SCR performance and H_2O/SO_2 durability.