

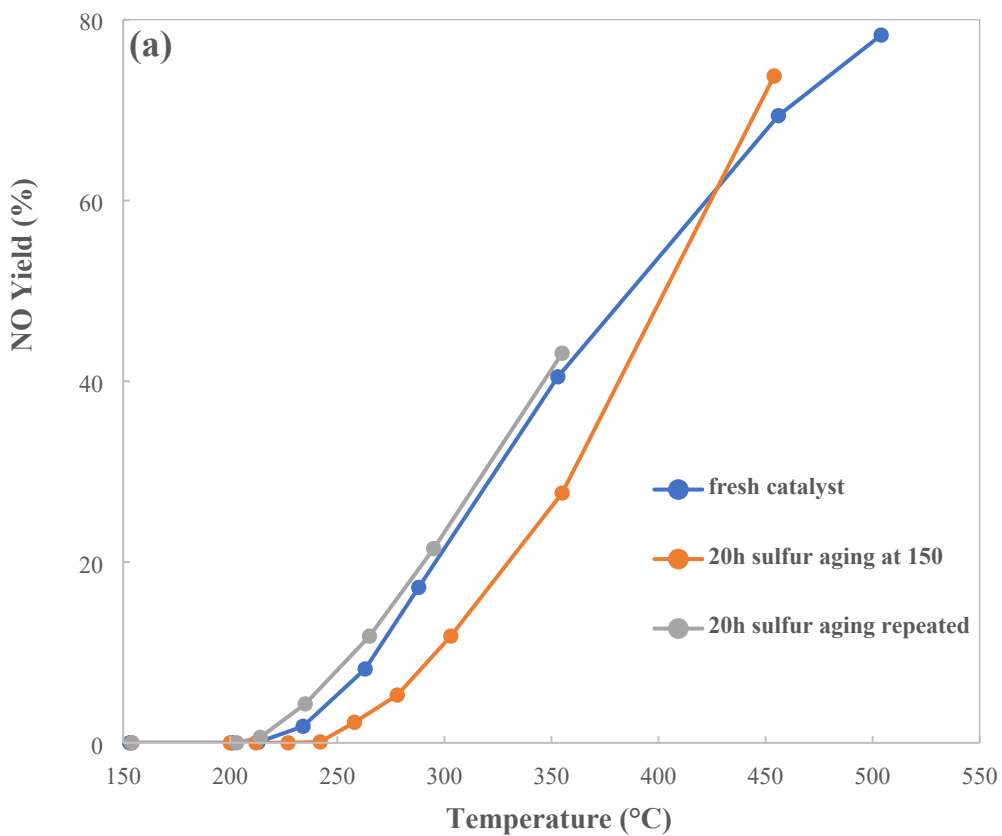
Supplementary Information

Sulfur Poisoning and NH₃ Regeneration of Pt/Al₂O₃: Oxidations of SO₂, NH₃, NO and C₃H₆ as Probe Reactions

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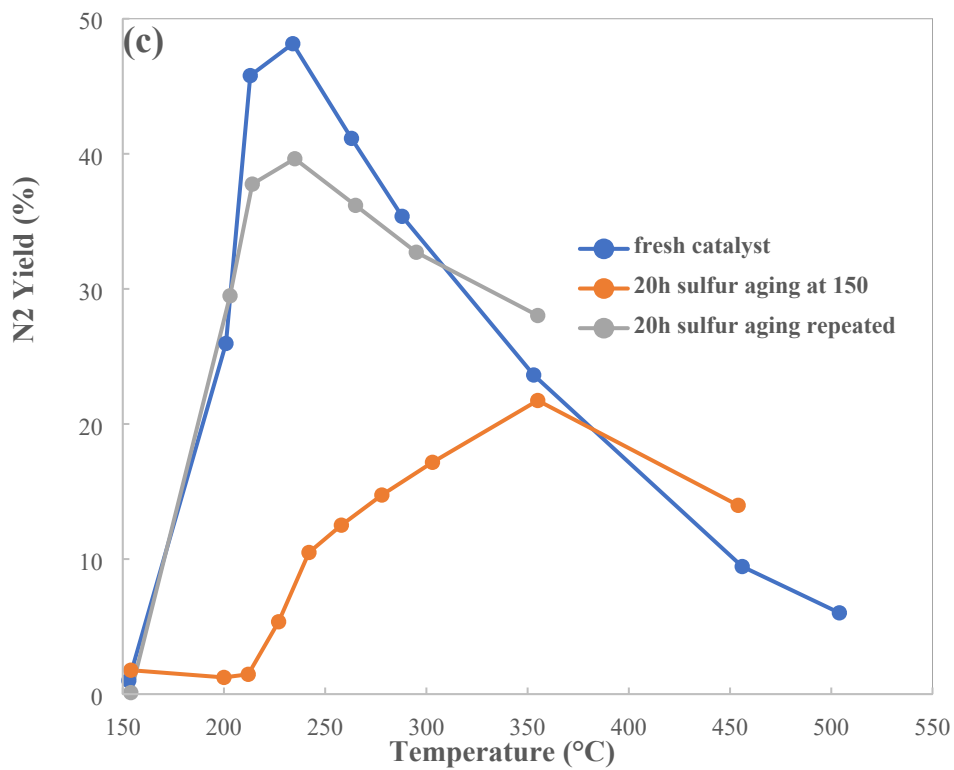
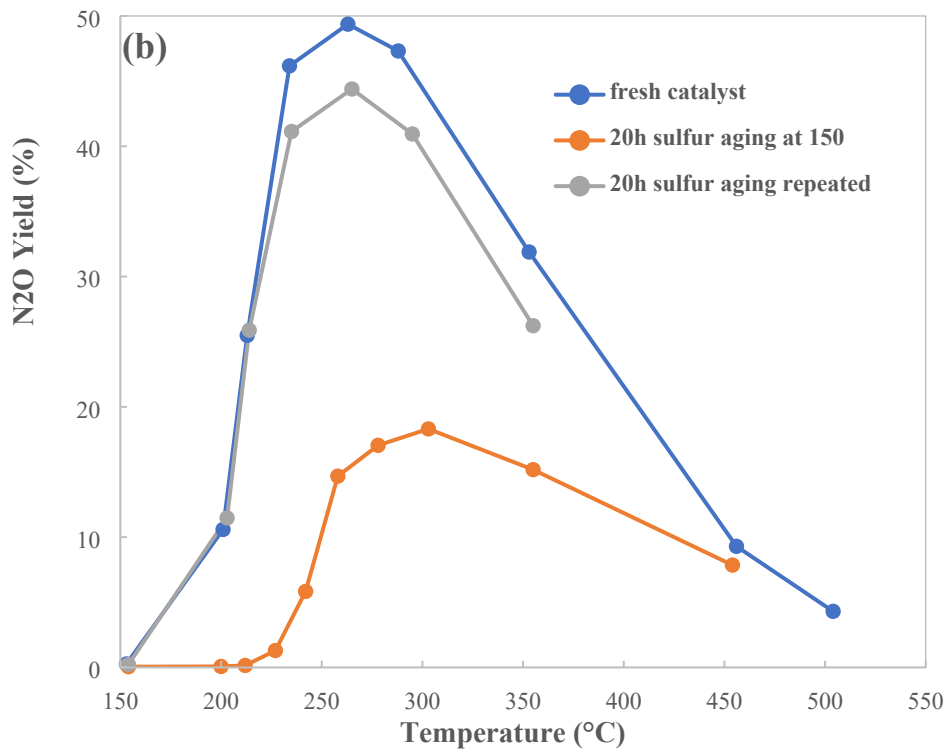


Fig. S1 Steady-state (a) NO yield, (b) N₂O yield, (c) N₂ yield over fresh and poisoned Pt/Al₂O₃ catalyst.

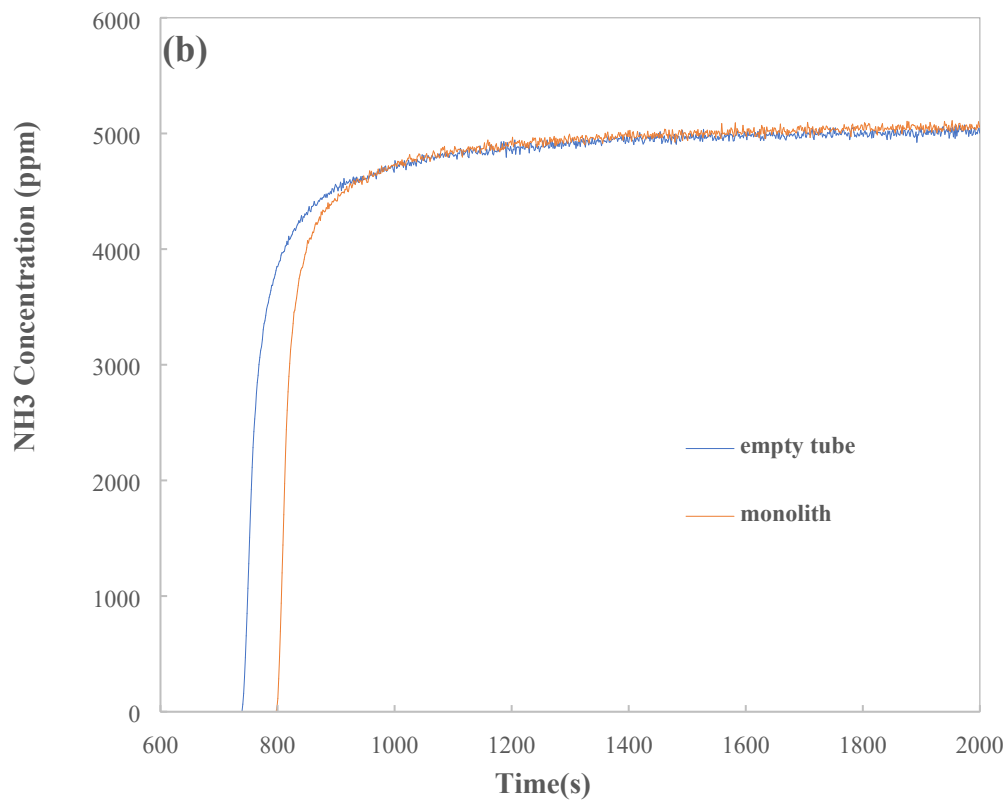
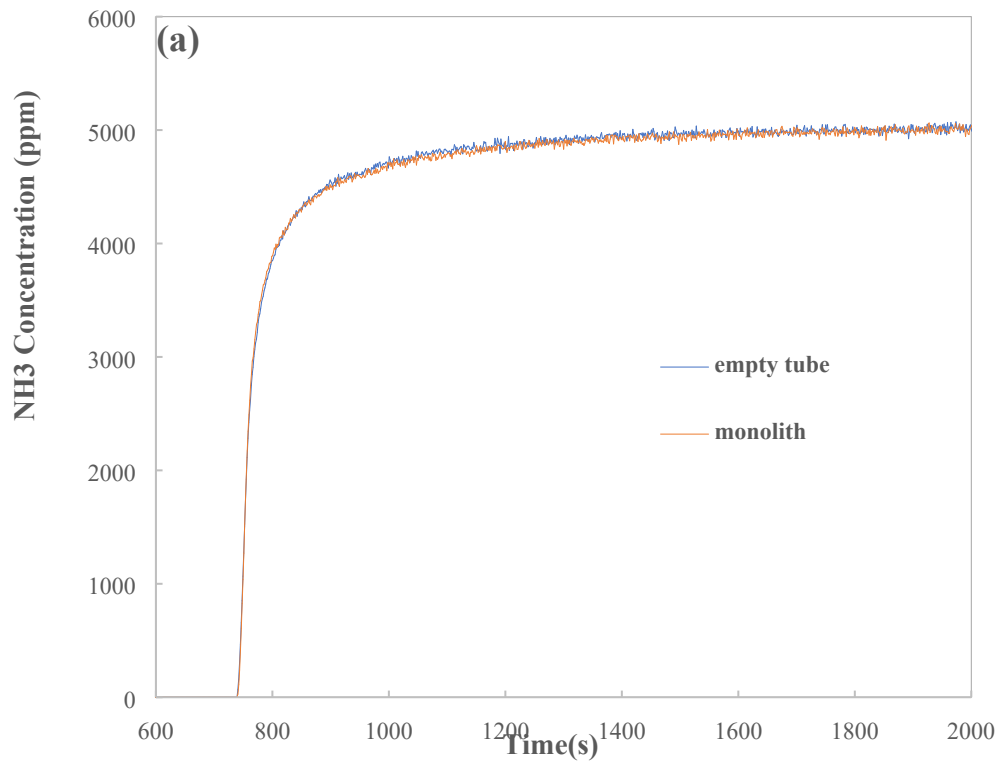


Fig. S2 NH₃ adsorption profiles collected for NH₃-TPD (a) and SO_x + NH₃ sequential TPD (b).

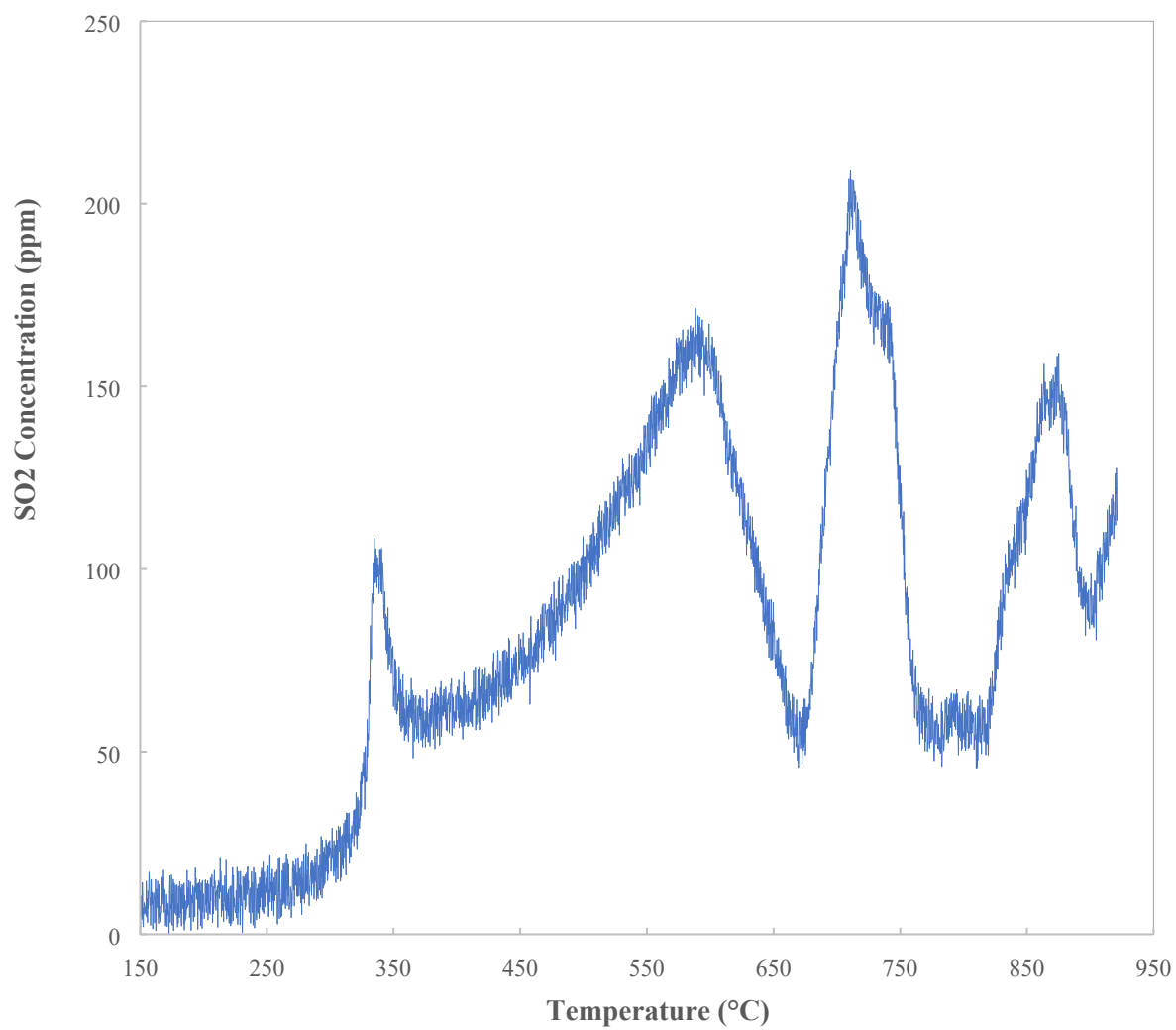


Fig. S3 SO₂ TPD profiles collected after exposing a SO_x saturated Pt/Al₂O₃ sample to 5000ppm NH₃ + 10% O₂ at the ramping rate of 10°C/min in NH₃ + Ar.

Table S1 Amount of NH₃ and SO₂ released during SO_x + NH₃ sequential TPD in Ar

Experiment	NH₃ desorbed (μmoles)	SO₂ desorbed at lower temperature (μmoles)	SO₂ desorbed at higher temperature (μmoles)
SO_x + NH₃ sequential TPD	3.0	1.7	15.3