

Supporting Information

Pt core silica shell nanostructure: A robust catalyst for highly corrosive sulfuric acid decomposition reaction in SI cycle to produce hydrogen

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1. Stability test of Pt/Al₂O₃ and Pt/TiO₂ catalyst at GHSV: 76000 mL.g_{cat}⁻¹.h⁻¹ for 100 h.

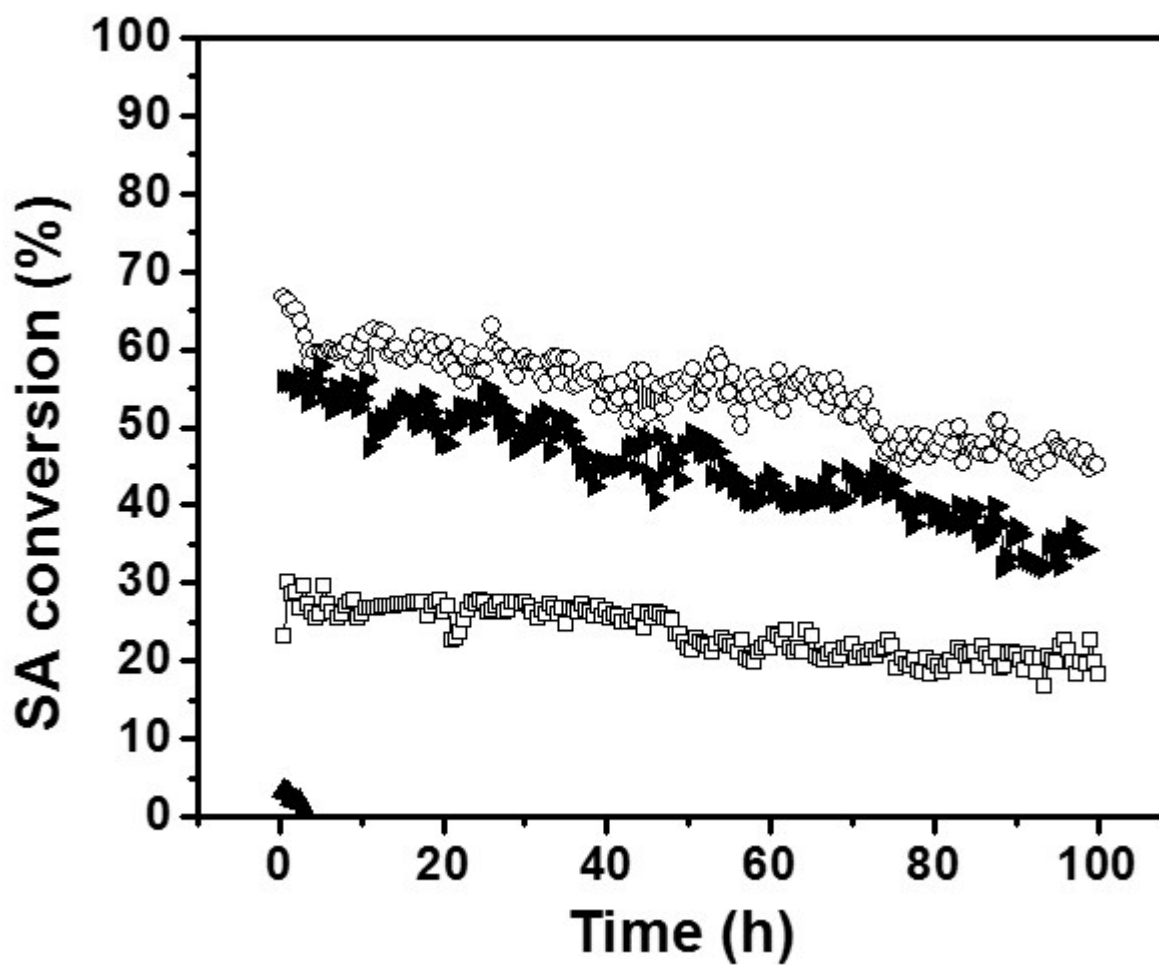


Figure S1. Longer-term stability test over : (□) 650 °C (○), 850 °C for Pt/TiO₂ and (▲) 650 and (▶) Pt/Al₂O₃ at 850 °C. GHSV: 76,000 mL.g_{cat}⁻¹.h⁻¹

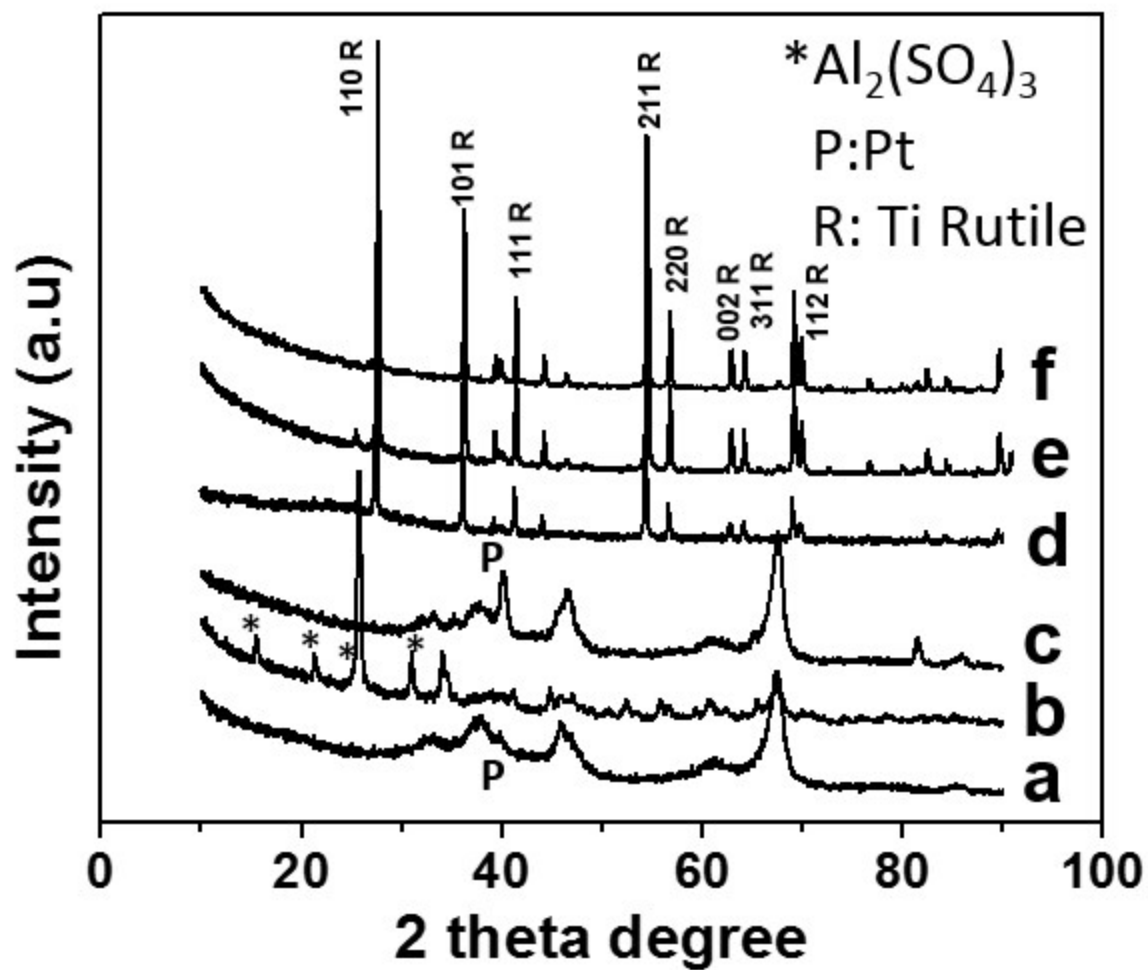


Figure S2. XRD analysis of Pt/Al₂O₃ and Pt/TiO₂ pristine and spent catalyst at 850 and 650 °C for 100 h at 76000 mL.g_{cat}⁻¹.h⁻¹