

Supporting Information

Mo-V-O Based Electrocatalysts for Low Temperature Alcohol Oxidation

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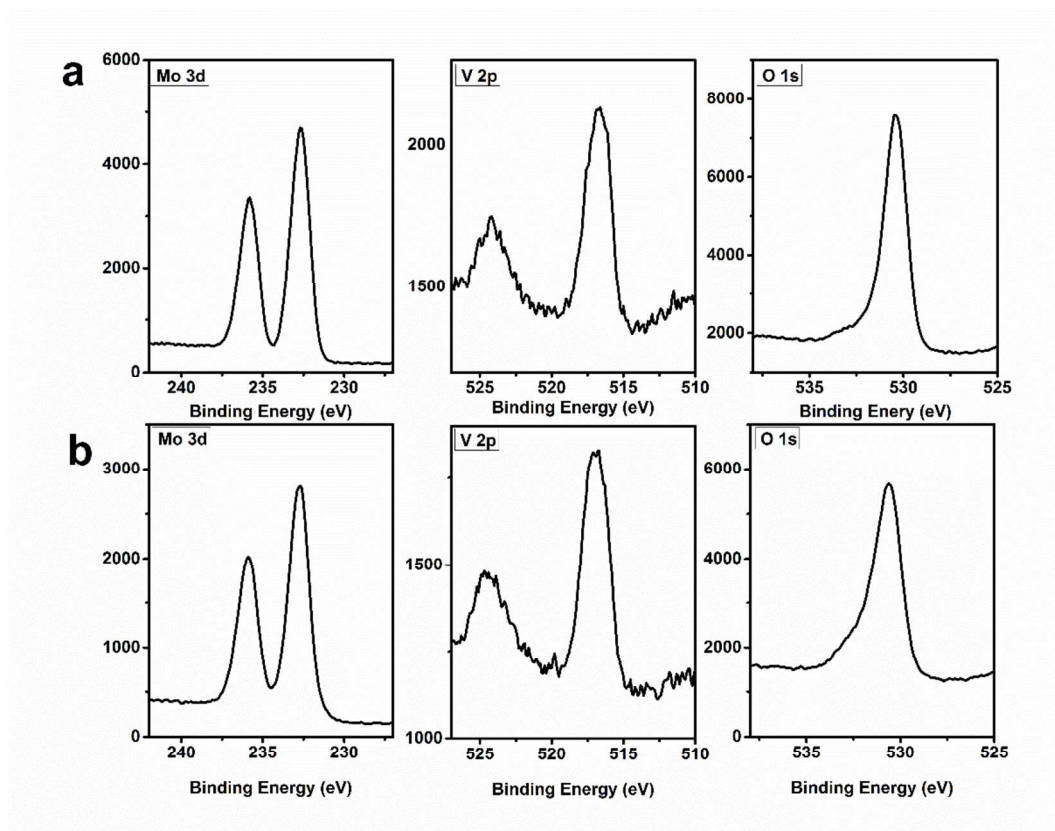


Figure S1. XPS (a) before calcination and (b) after calcination under nitrogen flow $\text{Mo}_{0.97}\text{V}_{0.95}\text{O}_5$ showing Mo3d, V2p and O1s photopeaks.

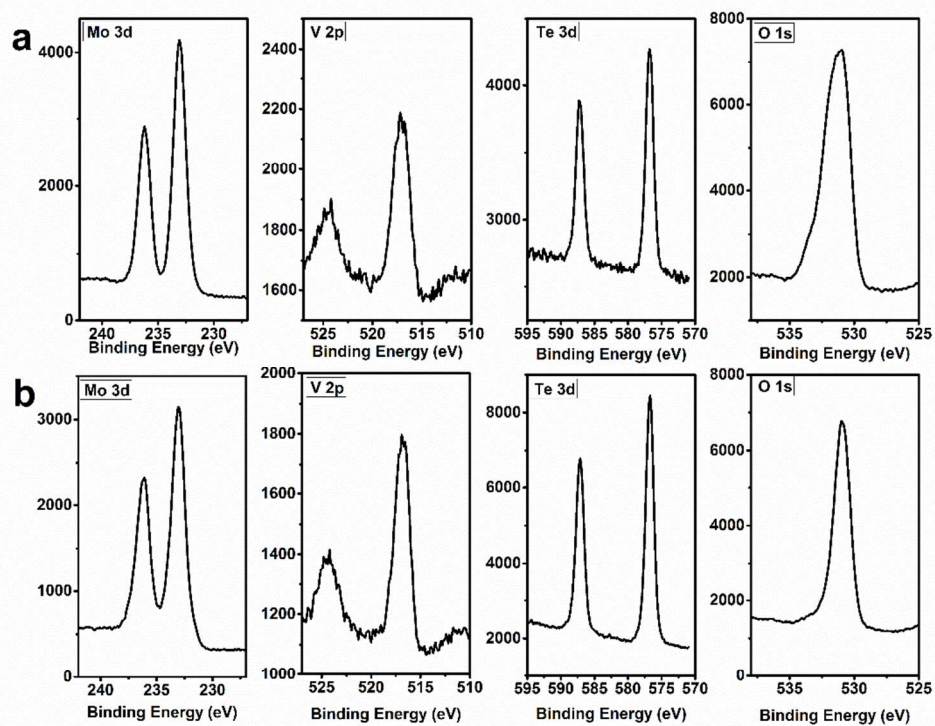


Figure S2. XPS (a) before calcination and (b) after calcination under nitrogen flow $\text{TeO}_{0.33}\text{Mo}_{0.75}\text{V}_{0.25}\text{O}_x$ (b) showing Mo3d, V2p, Te3d and O1s photopeaks.

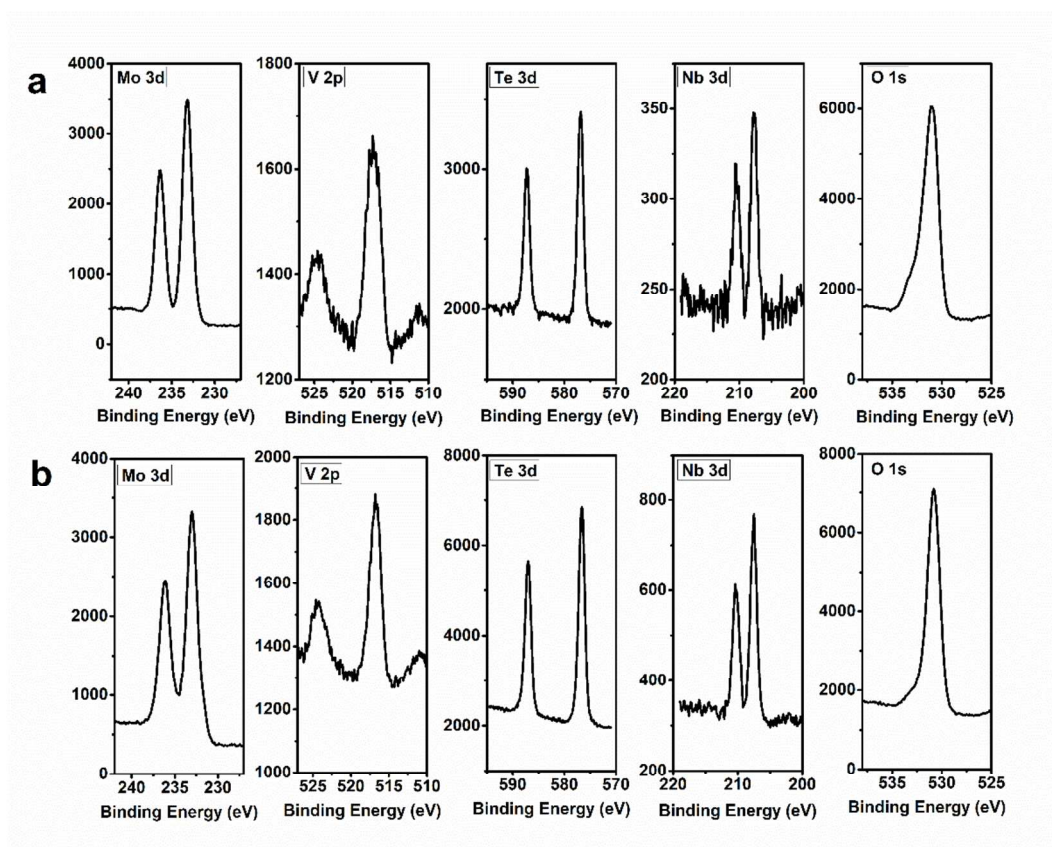


Figure S3. XPS (a) before calcination and after (b) calcination under nitrogen flow $(\text{TeO})_{0.39}(\text{Mo}_{3.52}\text{V}_{1.06}\text{Nb}_{0.42})\text{O}_{14}$ showing Mo3d, V2p, Te3d, Nb3d and O1s photopeaks.

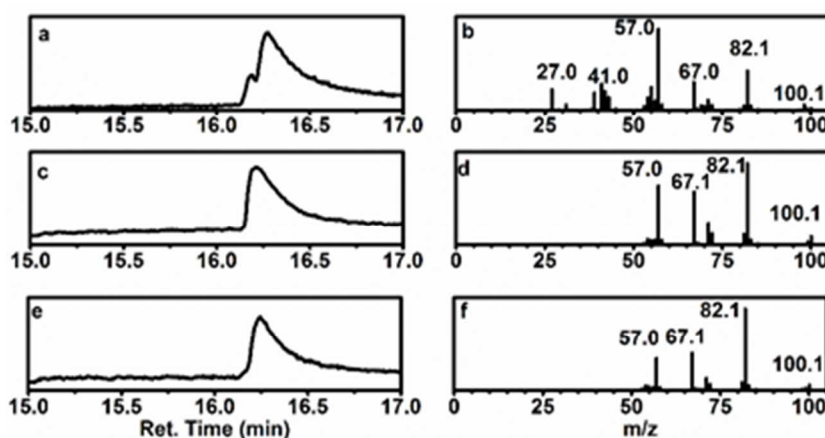


Figure S4. GCMS analysis of 0.5 M H_2SO_4 /0.15 M $\text{C}_6\text{H}_{11}\text{OH}$ blank (a,b) and solutions after cyclic voltammetry studies in 0.5 M H_2SO_4 /0.15 M $\text{C}_6\text{H}_{11}\text{OH}$ for Vulcan XC-72 at 25 °C (c,d), 40 °C and 60 °C (e,f) showing cyclohexanol with 100 m/z.

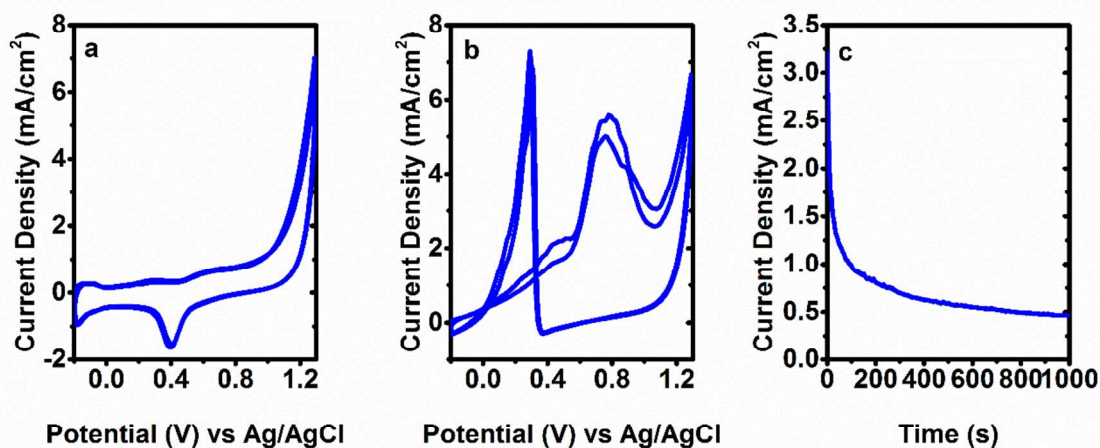


Figure S5. Cyclic voltammetry curves of ETEK-Pt in (a) 0.5 M H₂SO₄ and (b) 0.5 M H₂SO₄/0.15 M C₆H₁₁OH at 60 °C. Scan rate 10 mVs⁻¹. (c) Chronoamperometric curve of ETEK-Pt at 0.7 V in 0.5 M H₂SO₄/0.15 M C₆H₁₁OH.