

**Supporting Information**

**Networked Mixed Metal Oxide ( $V^{+4}$  and  $Ti^{+4}$ ) Nanostructures as  
Potential Material for Trimethylamine Detection**

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S1: XPS magnified survey spectra

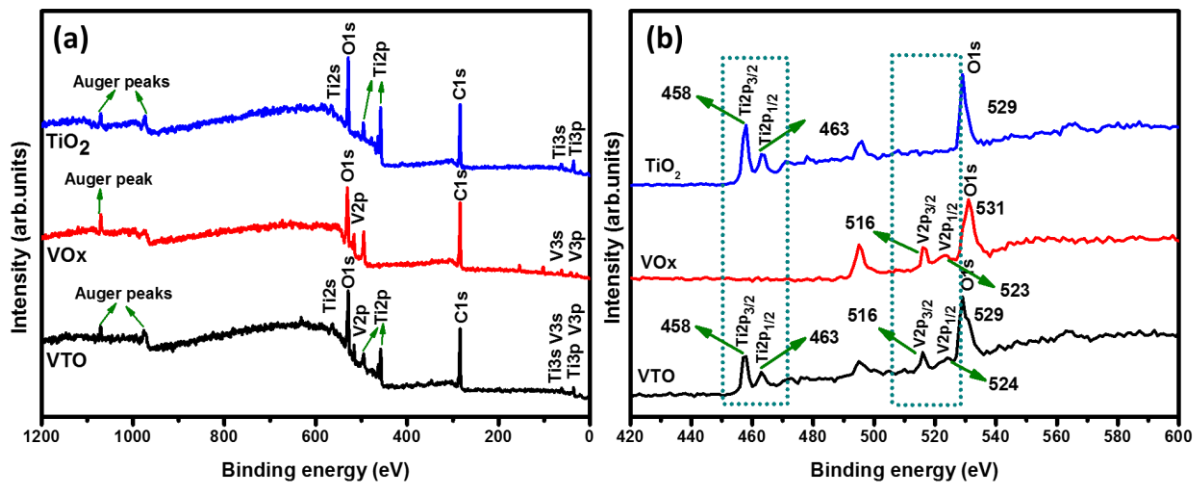


Fig:1 XPS (a) surface survey scan spectra and its (b) magnified spectra, corresponding to TiO<sub>2</sub>, VO<sub>2</sub> and VTO thin films

S2: XPS Depth Profile studies of TiO<sub>2</sub> and VO<sub>2</sub>

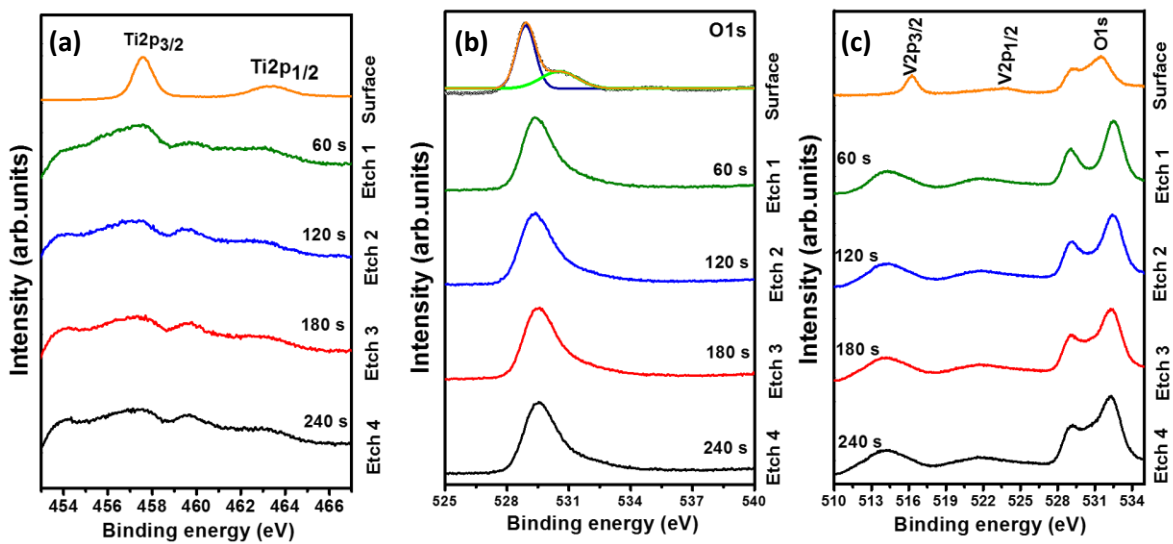


Fig: 2 XPS depth profiling plot - narrow scan spectra corresponding to (a) Ti2p & (b) O1s of TiO<sub>2</sub> and (c) V2p & O1s of VO<sub>2</sub> thin films

### S3: EDS Mapping

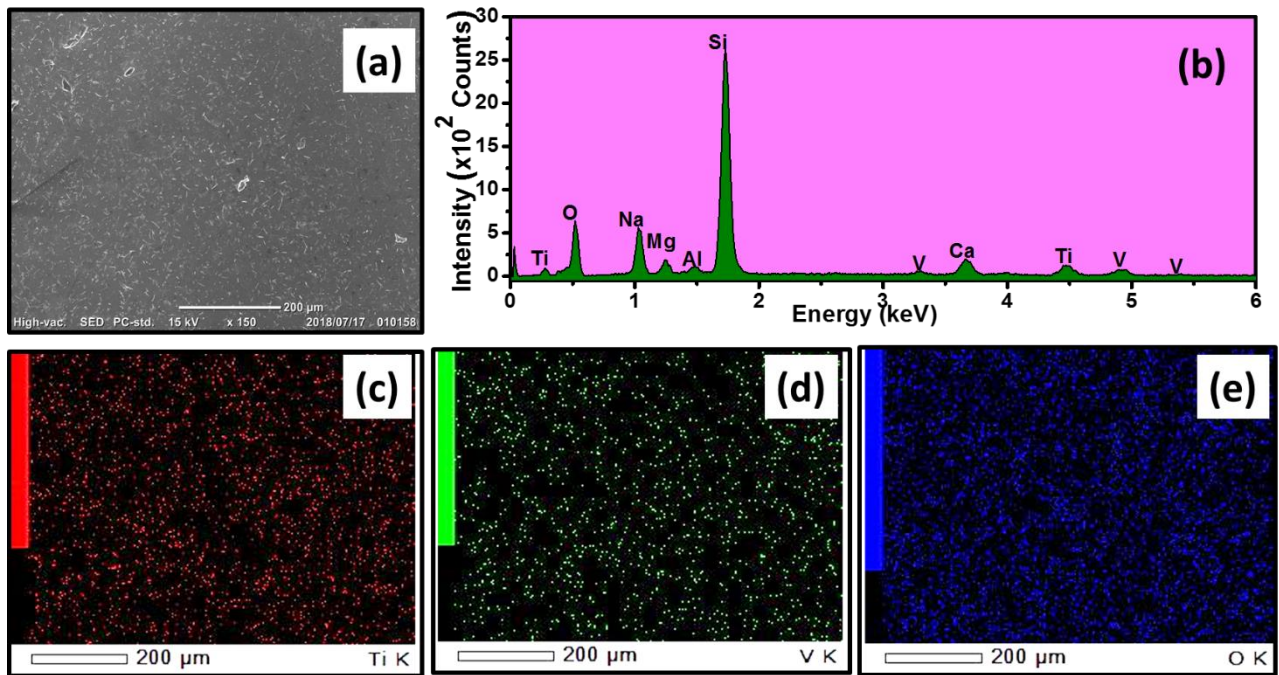


Fig. 3 (a) SEM micrograph (b) EDS spectra, mappings of (c) Ti (d) V and (e) O, of VTO thin film