

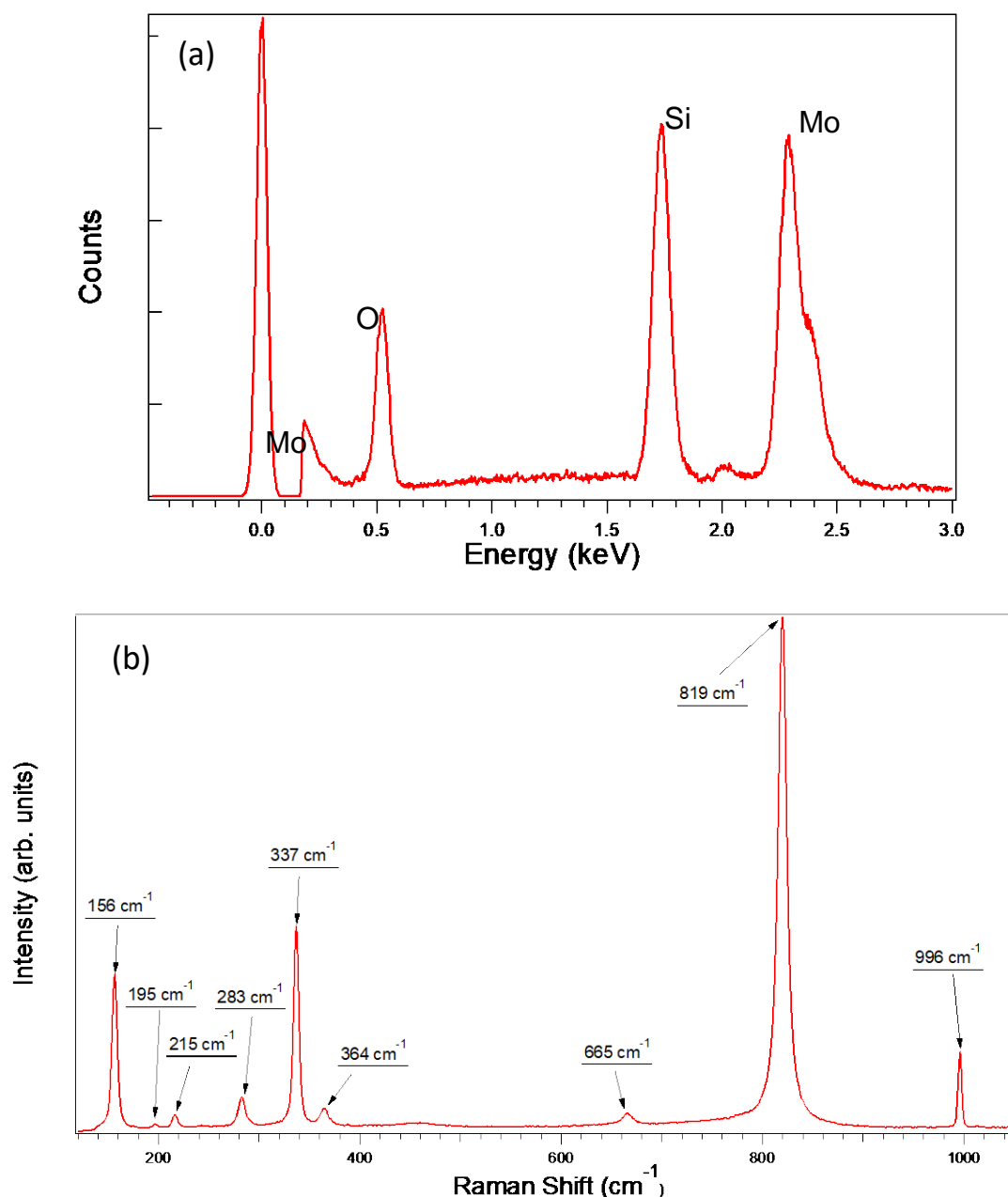
## Supporting Information

### Influence of an external electric field on the rapid synthesis of MoO<sub>3</sub> micro- and nanostructures by Joule heating of Mo wires

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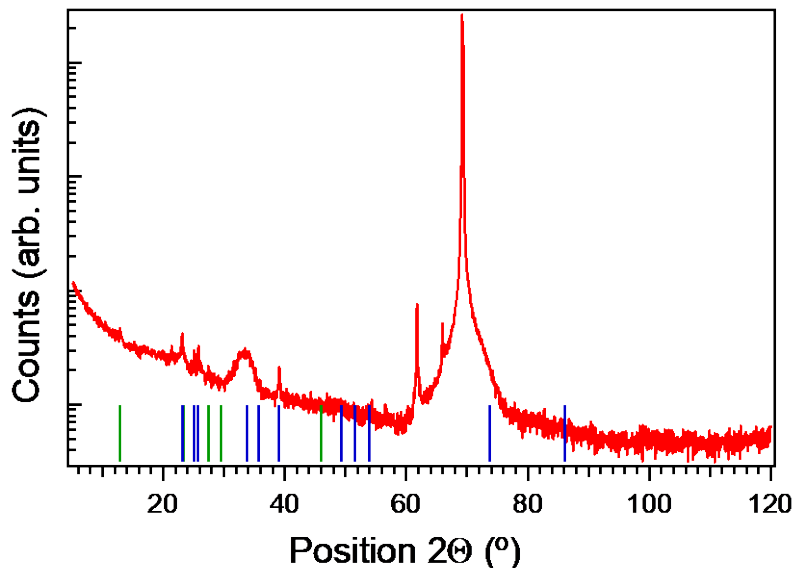
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**Figure ES1.** (a) Energy dispersive X-ray spectrum and (b) Raman spectrum of MoO<sub>3</sub> nanostructures grown on the Mo wire surface in presence of electric field. The Si peak in (a) is related to the substrate where nanostructures were deposited. The Raman peaks in (b) correspond to the characteristic  $\alpha$ -MoO<sub>3</sub> phase.



**ES2.** Video of the aligned MoO<sub>3</sub> nanostructures formed on the copper electrode when an electric field is applied.

**Figure ES3.** XRD spectrum from material deposited on the copper electrode. Green and blue lines correspond to maxima of  $\alpha$ - and  $\beta$ -MoO<sub>3</sub> phases, respectively. The most intense peak comes from the silicon substrate.



**Figure ES4.** Raman spectrum of MoO<sub>3</sub> nanostructures grown on the sharp pointed electrode. The peaks correspond to the  $\alpha$ - MoO<sub>3</sub> phase.

