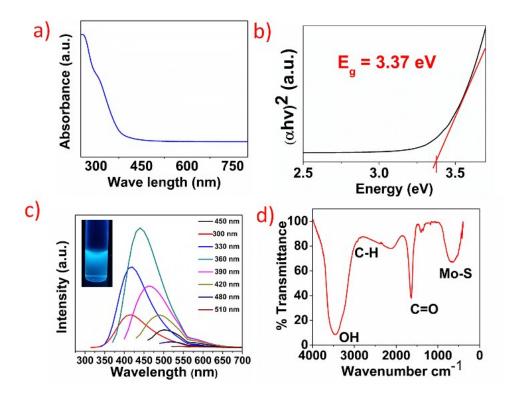
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## **Supporting Information**

## Water Dissolvable MoS<sub>2</sub> Quantum Dots/ PVA film as an Active Material for Destructible Memristor

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**Figure S1:** a) UV-Vis Absorption spectra of  $MoS_2 QDs$  b) Tauc plot of  $MoS_2 QDs$  c) Strong fluorescence exhibited by  $MoS_2 QDs$  under 365 nm UV light illumination and the Photoluminescence spectra of  $MoS_2$ QD with different excitation wavelength from 300-510 nm d) FTIR spectra of the surface functionalized  $MoS_2 QDs$ .