

## Supplementary Information

### Two-dimensional transition metal carbide ( $Ti_3C_2T_x$ ) as an efficient adsorbent to remove cesium ( $Cs^+$ )

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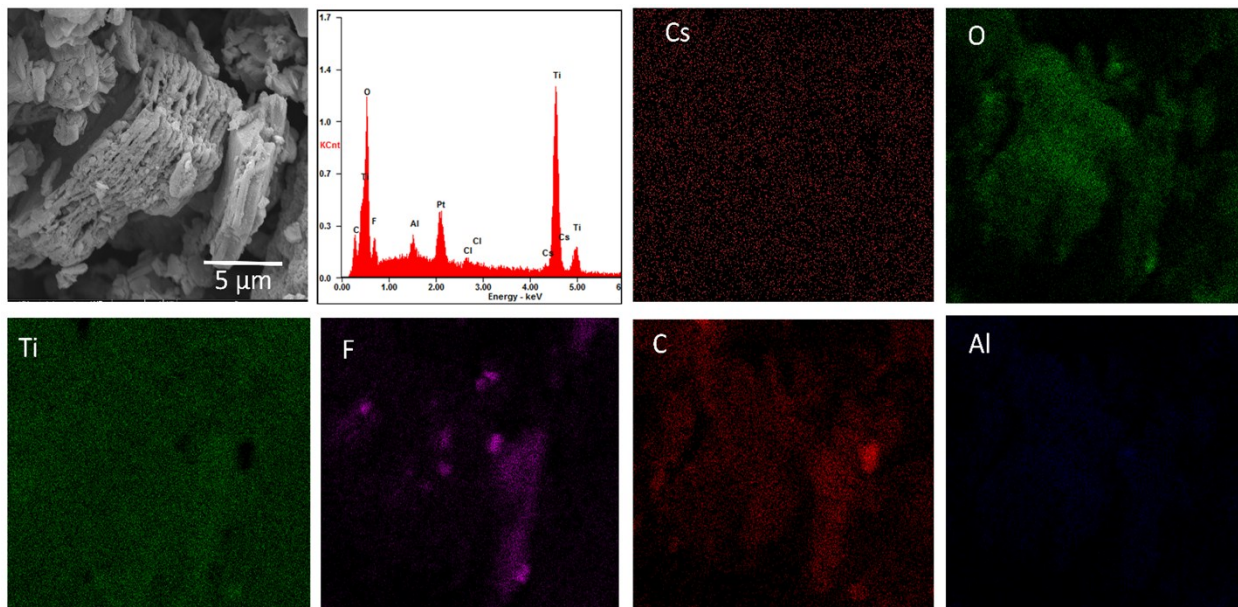
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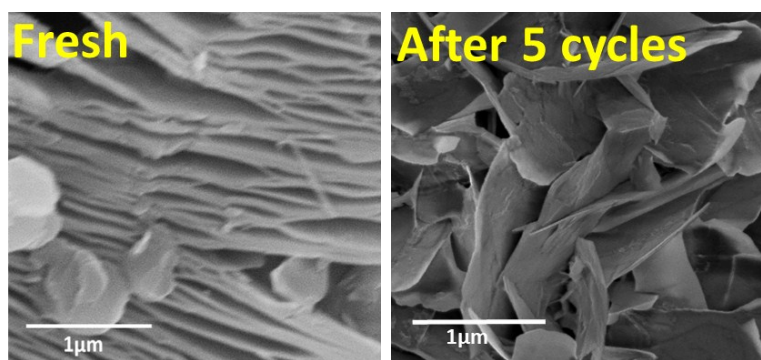
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**Fig. S1** SEM image, EDS spectra and corresponding elemental mapping images of Cs, O, Ti, F, C and Al, respectively from Cs Loaded MXene.



**Fig. S2** SEM images of unloaded MXene (Pristine) and Regenerated MXene after 5 cycles.