

## Supporting Information

### MoS<sub>2</sub> spheres covered with few layers of MXene as a high-performance anode for sodium-ion batteries

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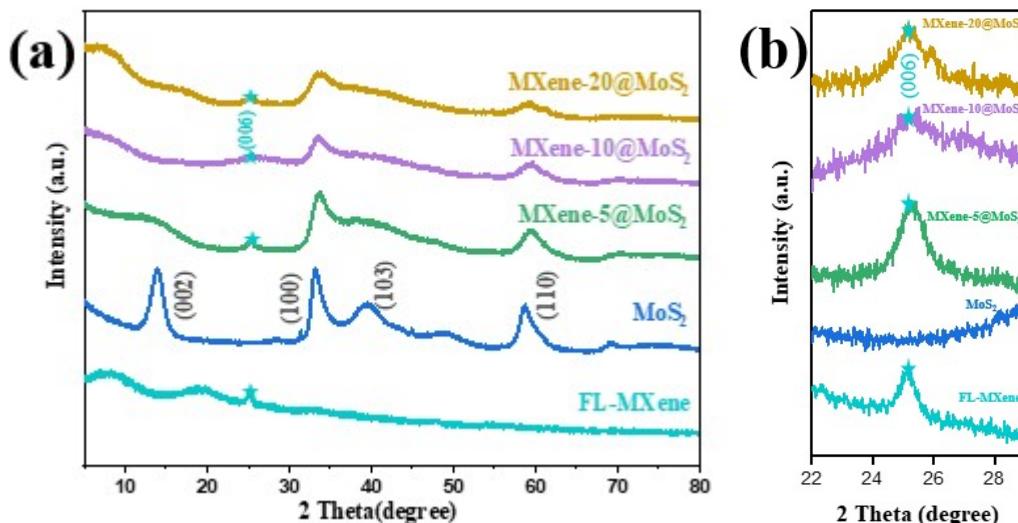


Fig. S1 (a) XRD diffraction patterns of FL-MXene, MoS<sub>2</sub> and MXene@MoS<sub>2</sub> composites, (b) Magnified XRD patterns of FL-MXene, MoS<sub>2</sub> and MXene@MoS<sub>2</sub> composites at the 2θ range of 22-29°

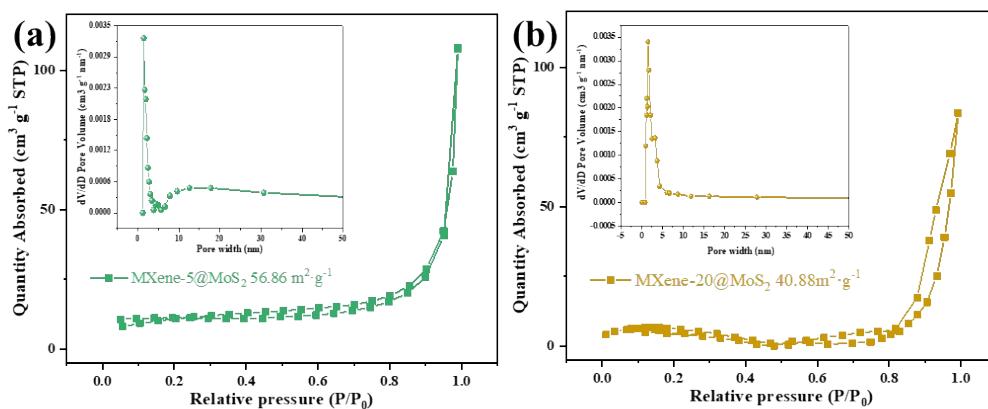


Fig. S2 N<sub>2</sub> adsorption/desorption isotherms of (a) MXene-5@MoS<sub>2</sub> and (b) MXene-20@MoS<sub>2</sub>.

Table S1 The contents of Mo and Ti in MXene@MoS<sub>2</sub> composite s detected by ICP analysis.

Samples	Mo (Wt.%)		Ti (Wt.%)	
	theory	reality	theory	reality
MoS <sub>2</sub>	59.94	60.03	0	0
MXene-5@MoS <sub>2</sub>	56.81	58.34	4.48	2.53
MXene-10@MoS <sub>2</sub>	53.70	55.78	8.90	5.98
MXene-20@MoS <sub>2</sub>	47.51	50.26	17.77	12.90