

## Supporting information for:

# Flux method growth of bulk MoS<sub>2</sub> single crystals and application as a saturable absorber

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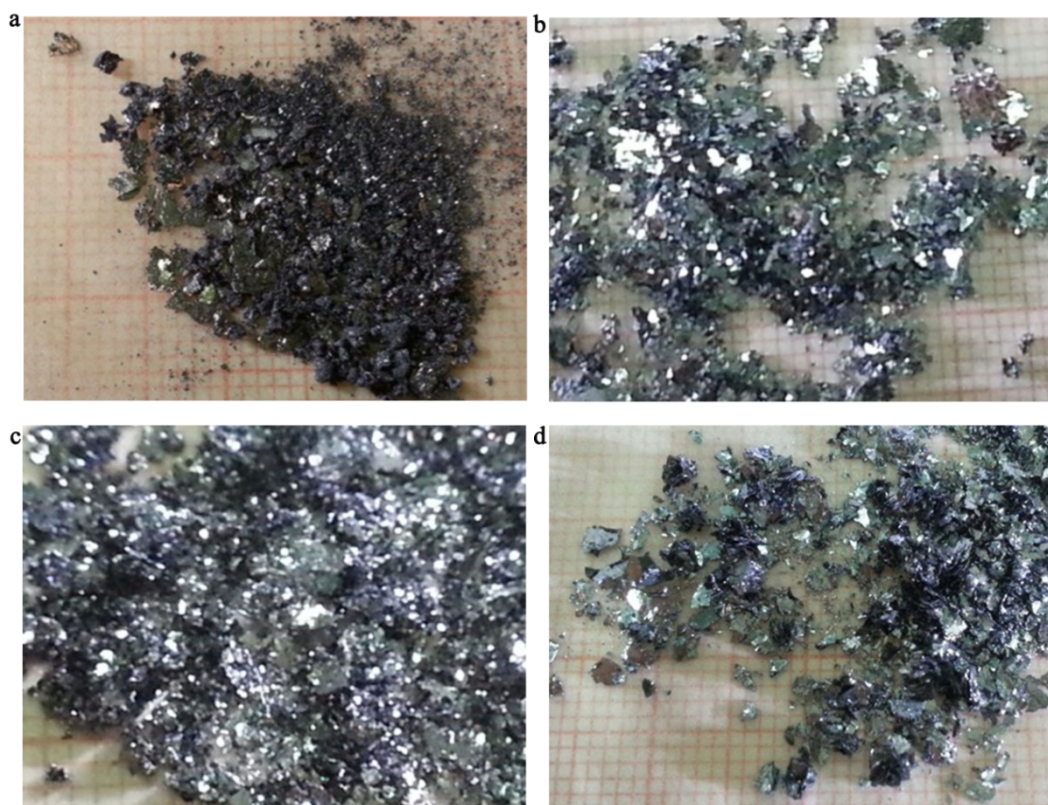
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### The captions for the supporting information:

Figure S1 the crystal grown at the ratio of starting materials;

Figure S2 the EDS images of MoS<sub>2</sub> crystal;

Figure S3 (a) the photos of ultrathin MoS<sub>2</sub> exfoliated by the liquid-phase exfoliation method in ethyl alcohol, (b) the supernatant of the centrifuge tube in (a) after centrifugation.



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Figure S1 the crystal grown at the ratio of starting materials (a) Mo:S:Sn=1:2:5, (b) Mo:S:Sn=1:2:10, (c) Mo:S:Sn=1:2:15, (d) Mo:S:Sn=1:2:20

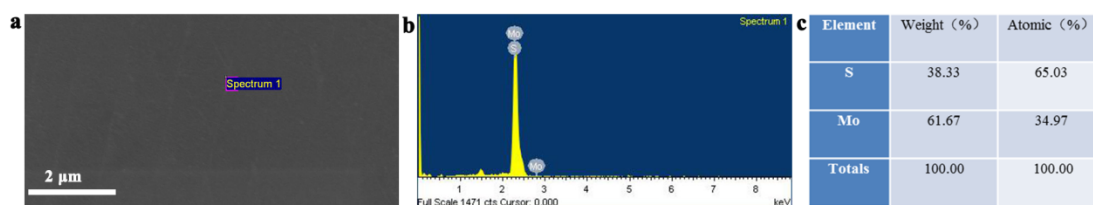


Figure S2 the EDS images of MoS<sub>2</sub> crystal

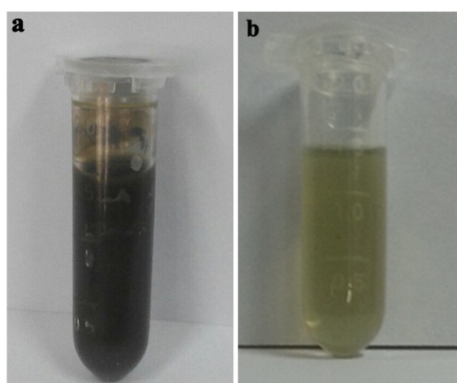


Figure S3 (a) the photo of ultrathin MoS<sub>2</sub> exfoliated by the liquid-phase exfoliation method in ethyl alcohol, (b) the supernatant of the centrifuge tube in (a) after centrifugation.