## **Supplementary Information**

## Coating of gallium-based liquid metal particles with molybdenum oxide and oxysulfide for electronic band structure modulation

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**Fig. S1.** Size distribution histograms for EGaIn (top), EGaIn@MoOx (middle), and EGaIn@MoOxSy (bottom). The percentage for each size range is marked on the top of each column. The mean and standard deviation values for each material are in the top right corner.



 $\label{eq:Fig.S2} \textbf{Fig. S2.} \ Raman \ spectra \ of \ a) \ EGaIn(b) \ EGaIn(a) \ MoO_{x,} \ and \ c) \ EGaIn(a) \ MoO_x S_y \ microparticles.$