Supplementary Information

Copper incorporated Cu$_x$Mo$_6$S$_8$ ($x \geq 1$) Chevrel phase cathode materials synthesized by chemical intercalation process for rechargeable magnesium batteries

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Fig. S1 EDS elemental mapping of product stored for 36 h at 80 °C: (a) SEM image, (b) Mo Lα1, (c) S Kα1, and (d) Cu Kα1.
Fig. S2 FESEM images and PSA results for (a) powder before leaching and (b) powder after being fully leached.
**Fig. S3** Voltage profiles of unleached powder (Cu$_2$Mo$_6$S$_8$) at a constant current of 6 mA g$^{-1}$ (0.05C) during first discharge/charge and subsequent discharge.