

Electronic Supplementary Information for

Preparation and Characterization of a Covalent Edge- Functionalized Lipoic Acid-MoS₂ Conjugate

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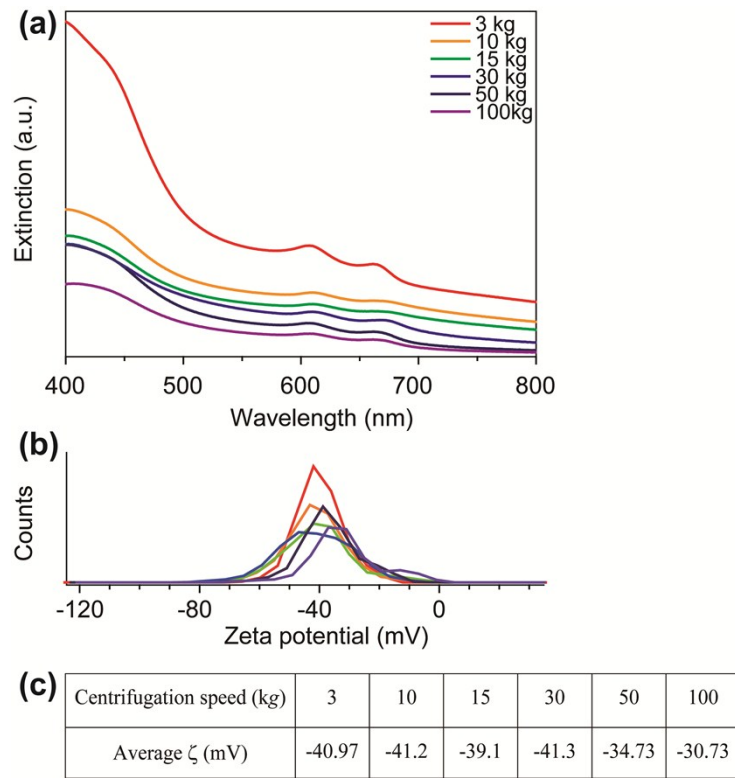


Figure S1. (a) UV-vis-NIR extinction spectra of LA-MoS₂ prepared by different centrifugal forces. (b) The corresponding zeta (ζ) potential distributions. (c) Average ζ of LA-MoS₂ samples.

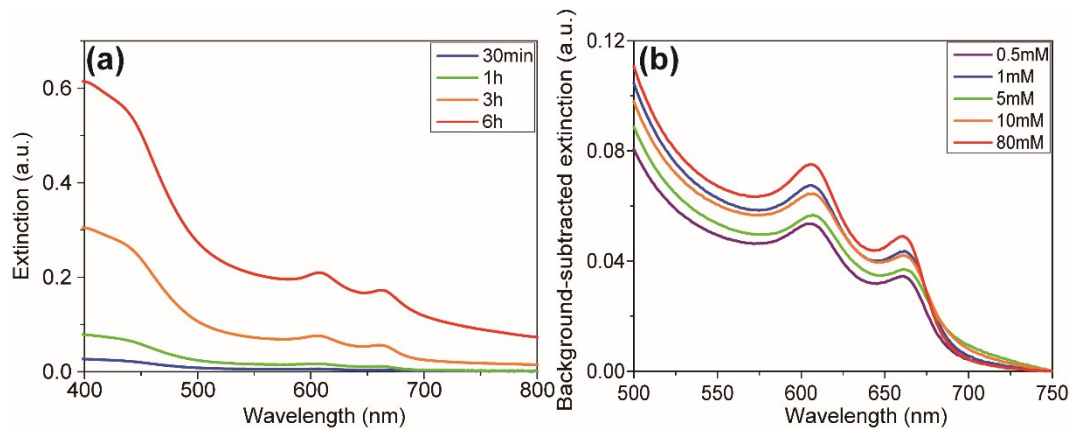


Figure S2. (a) UV-vis-NIR extinction spectra of 5 mM LA-MoS₂ prepared by different sonication time. (b) The corresponding zeta (ζ) potential distributions. (c) Average ζ of LA-MoS₂ samples.

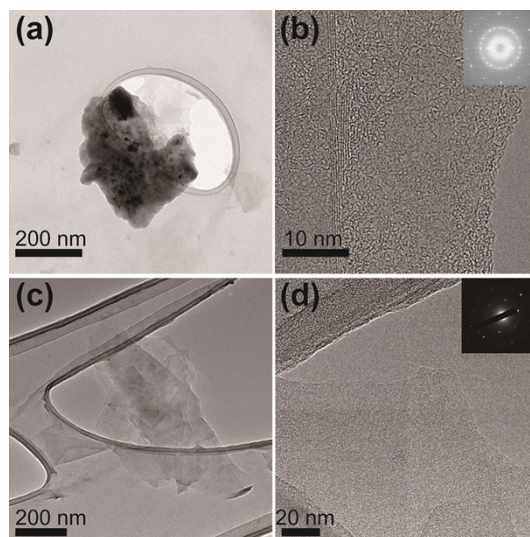


Figure S3. Additional TEM images (a-d).

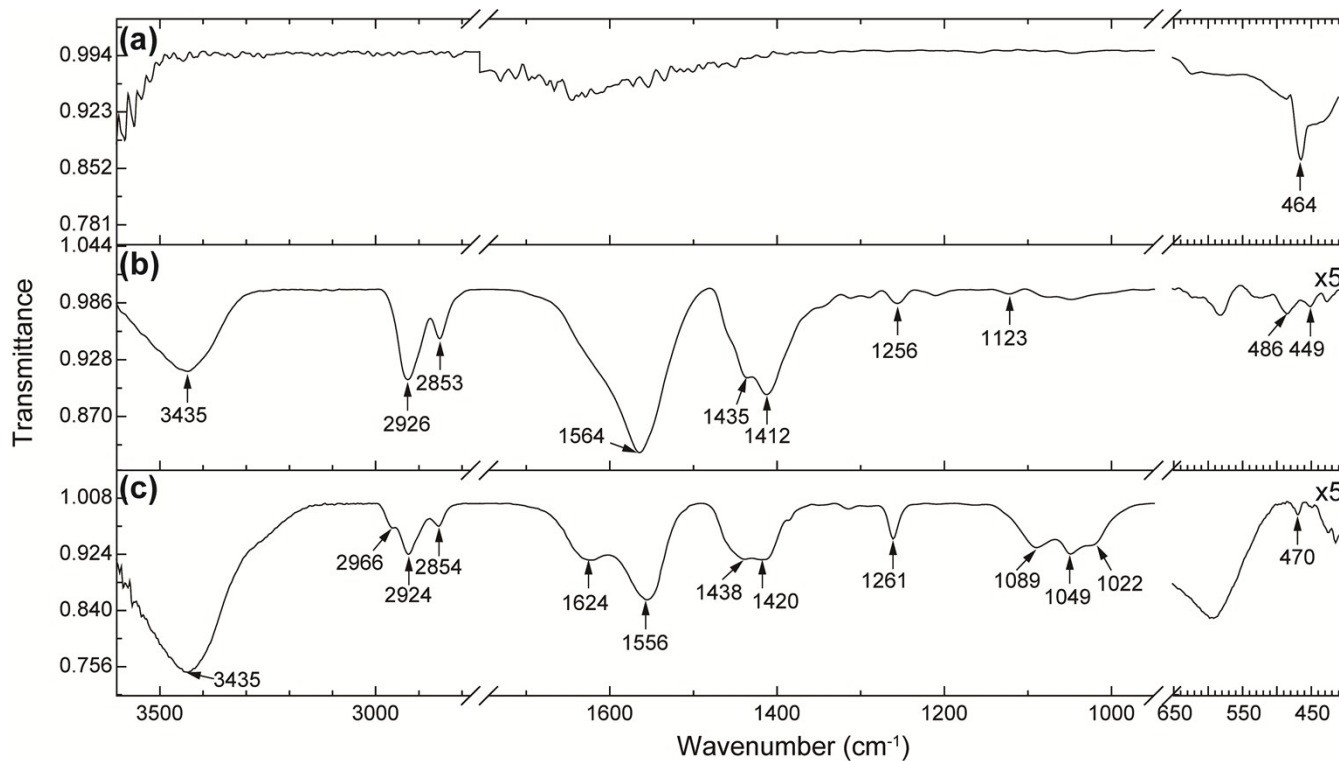


Figure S4. FT-IR spectra of (a) as-MoS₂, (b) LA salt, and (c) LA-MoS₂ conjugate.

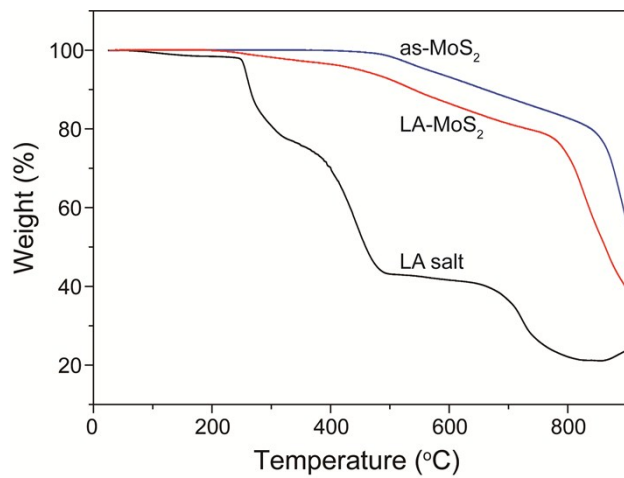


Figure S5. TGA traces of LA salt (black), as-MoS₂ (blue), and LA-MoS₂ conjugate (red).

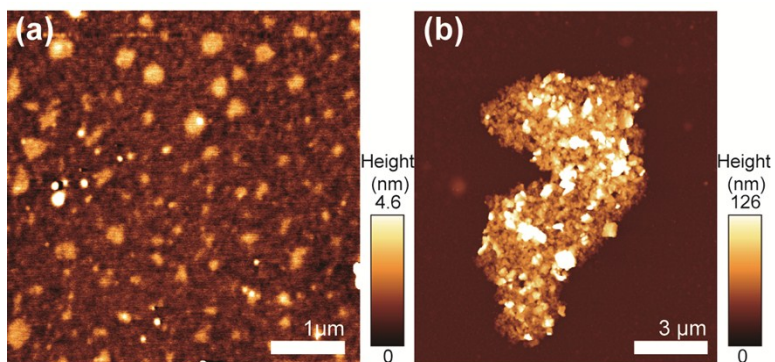


Figure S6. Additional AFM height images of (a) individual LA-MoS₂ conjugate and (b) their aggregates.