Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information

In situ formation of MoS_2/C nanocomposite as an anode for high-performance lithium-ion batteries

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Supporting materials include:

Part I. Supplementary figures

Figure S1. XPS spectra of the as-prepared samples. High-resolution spectra of Mo3d, S2p, and C1s peaks for MoS_2-only((a),(e),(i)), MoS_2/C-1((b),(f),(j)), MoS_2/C-3((c),(g),(k)), and MoS_2/C-5((d),(h),(l)).

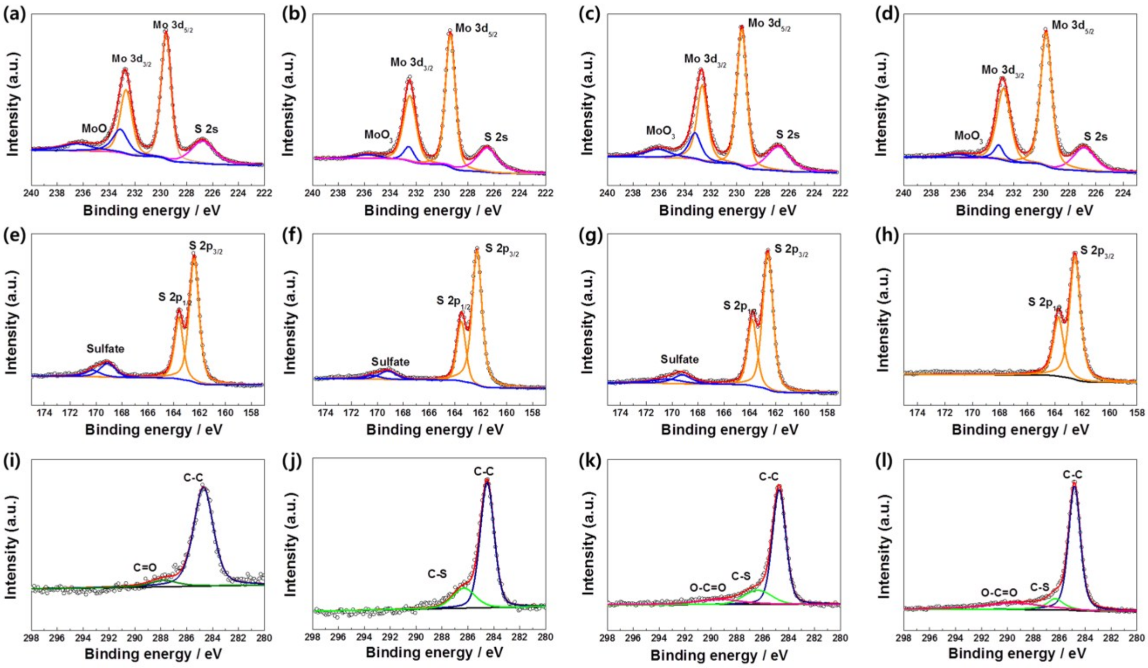

Figure S2. SEM and mapping images of (a) MoS_2-only, (b) MoS_2/C-1, (c) MoS_2/C-3, and (d) MoS_2/C-5.

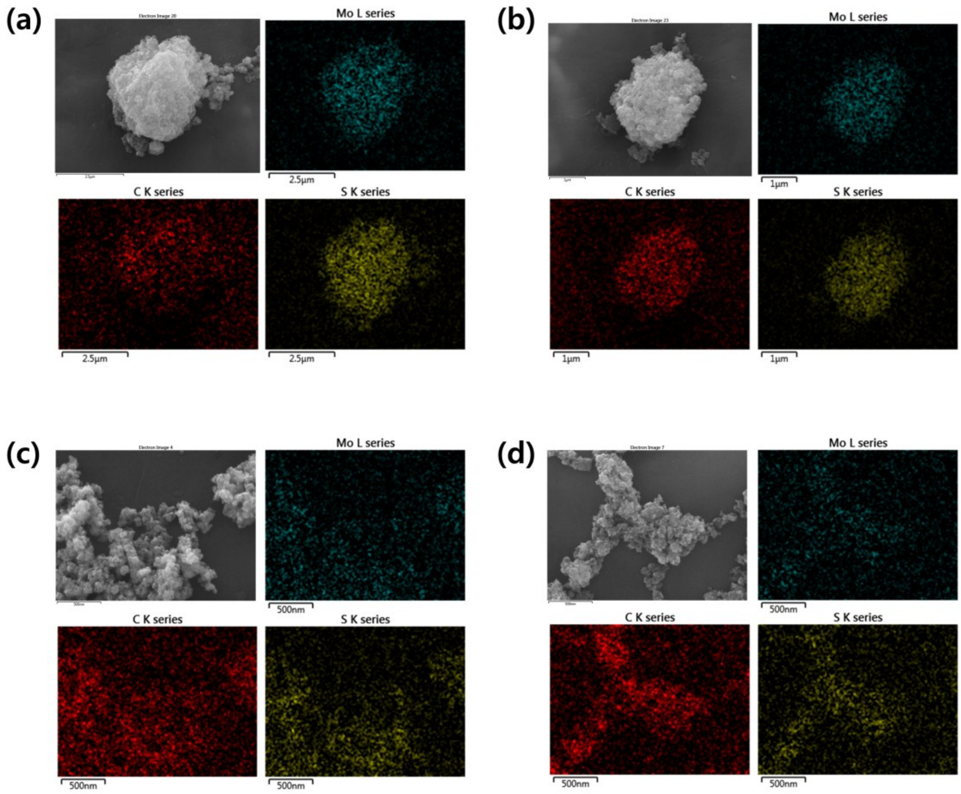

Figure S3. Nitrogen adsorption/desorption isotherms and pore size distributions of (a),(b) MoS_2-only, (c),(d) MoS_2/C-1, (e),(f) MoS_2/C-3, and (g),(h) MoS_2/C-5.

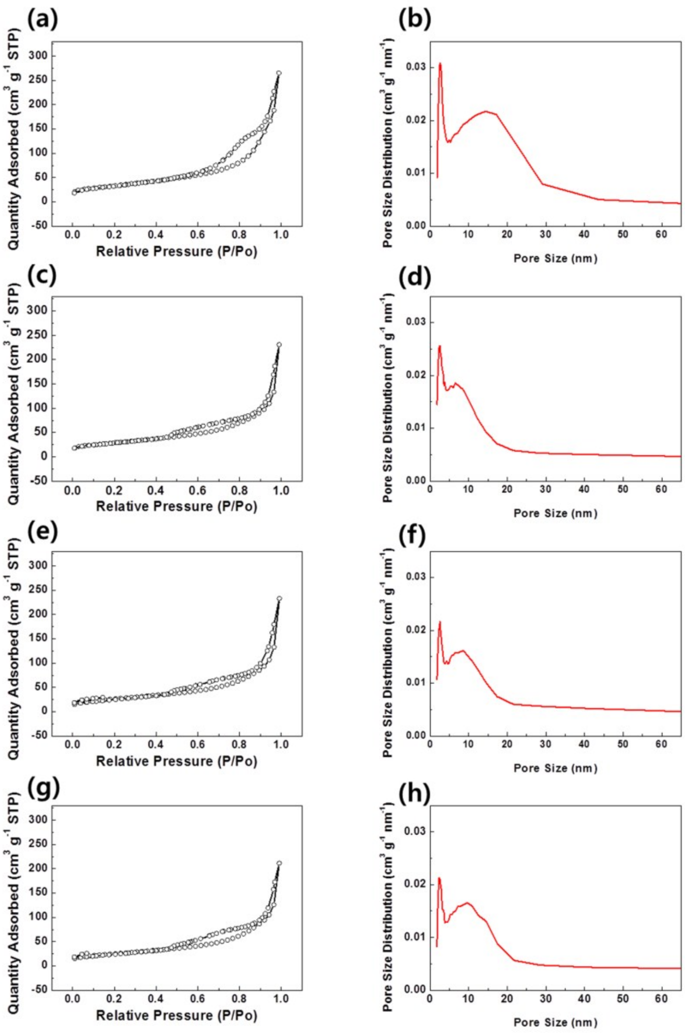

Figure S4. TGA curves of (a) MoS_2-only, (b) MoS_2/C-1, (c) MoS_2/C-3, and (d) MoS_2/C-5.

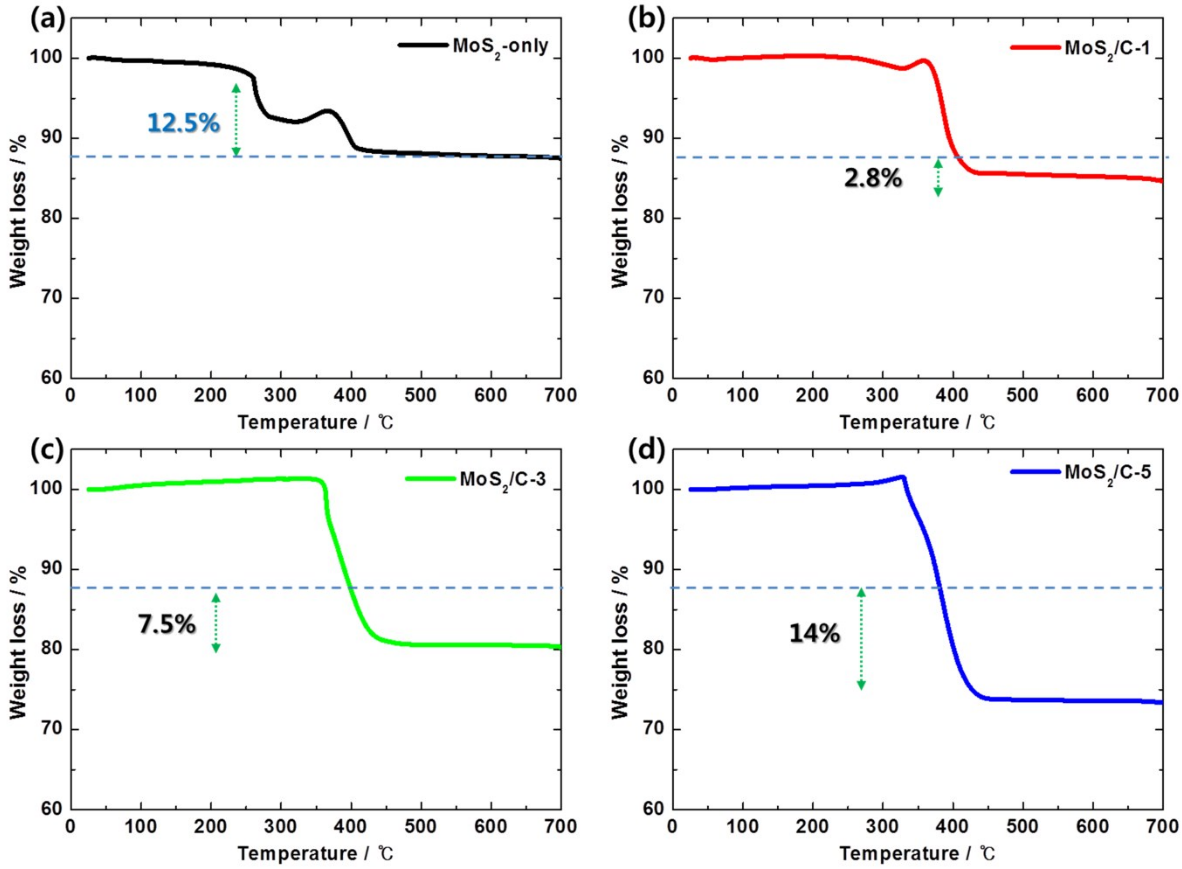

Figure S5. Comparison of electrical conductivity of the as-prepared samples.

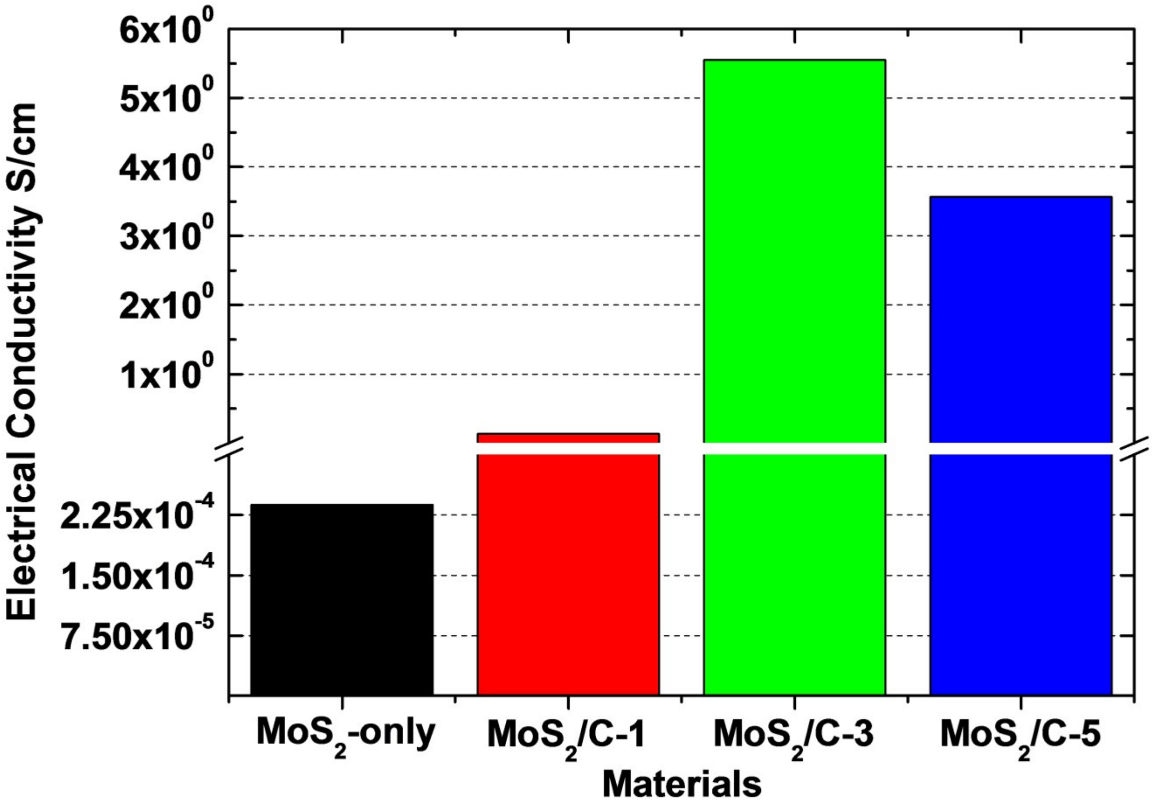

Figure S6. SEM images of (a) MoS_2-only, (c) MoS_2/C-1, (e) MoS_2/C-3, and (g) MoS_2/C-5 before the cycling process. (b) MoS_2-only, (d) MoS_2/C-1, (f) MoS_2/C-3, and (h) MoS_2/C-5 after 100 cycles at a current density of 500 mA g^{-1}.