Electronic Supplementary Material (ESI) for Journal of Materials Chemistry
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Facile Synthesis of Graphene/Molybdenum Dioxide and its Lithium Storage Properties

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Table S1. Ratio of the precursors of graphene/MoO_2 composite samples and the actual weight ratio from TGA analysis.

Sample	Precursor		TGA analysis	
	Graphene Oxide (g)	**Phosphomolybdic acid (g)**	**MoO2 (wt %)**	**graphene (wt%)**
GM13	1.00	3.00	78.13	21.87
GM11	1.00	1.00	60.13	39.87
GM31	3.00	1.00	35.81	64.19

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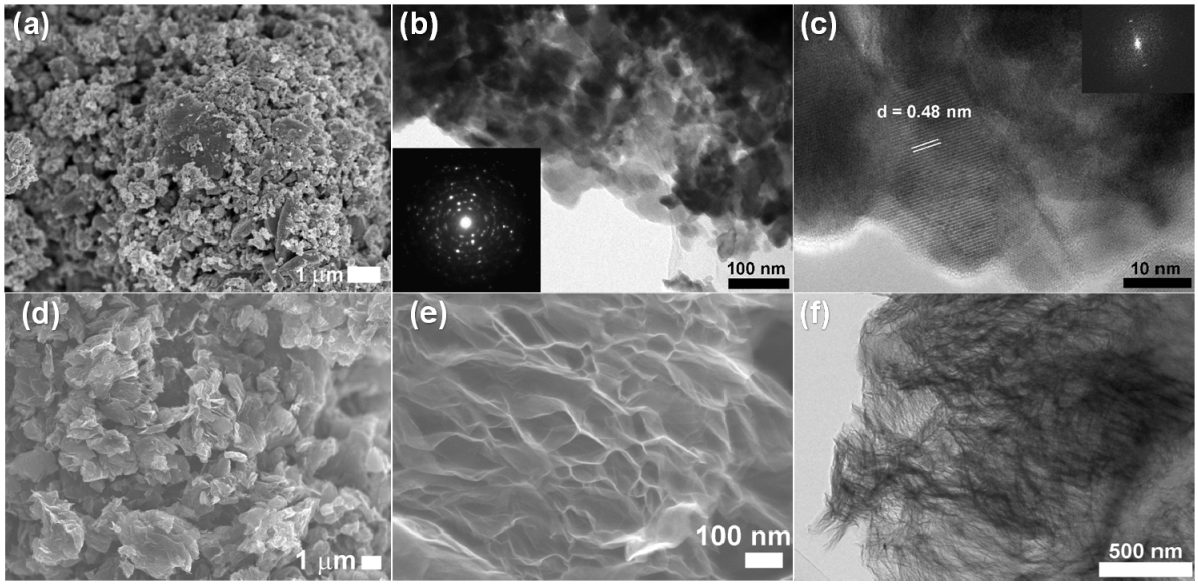

Fig. S1 (a) SEM image of the pure-MoO_2 sample; (b) TEM image of pure-MoO_2, with the inset showing the corresponding SAED pattern; (c) HRTEM image of the pure-MoO_2, with the marked lattice spacing indicating the *d*-spacing of the (-101) plane; (d) and (e) are SEM images of the pure-graphene sample; (f) TEM image of the pure-graphene sample.

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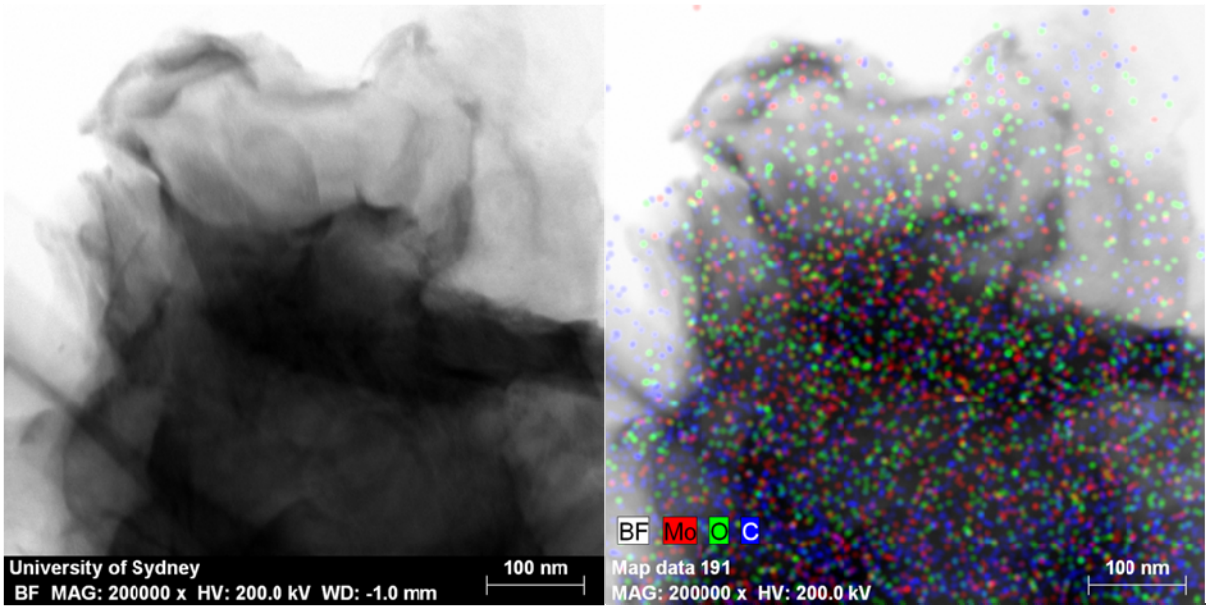

Fig. S2 SEM image (ledt) and corresponding EDS mapping (right) of sample GM31, showing Mo (red dots) distributed on the graphene sheets.

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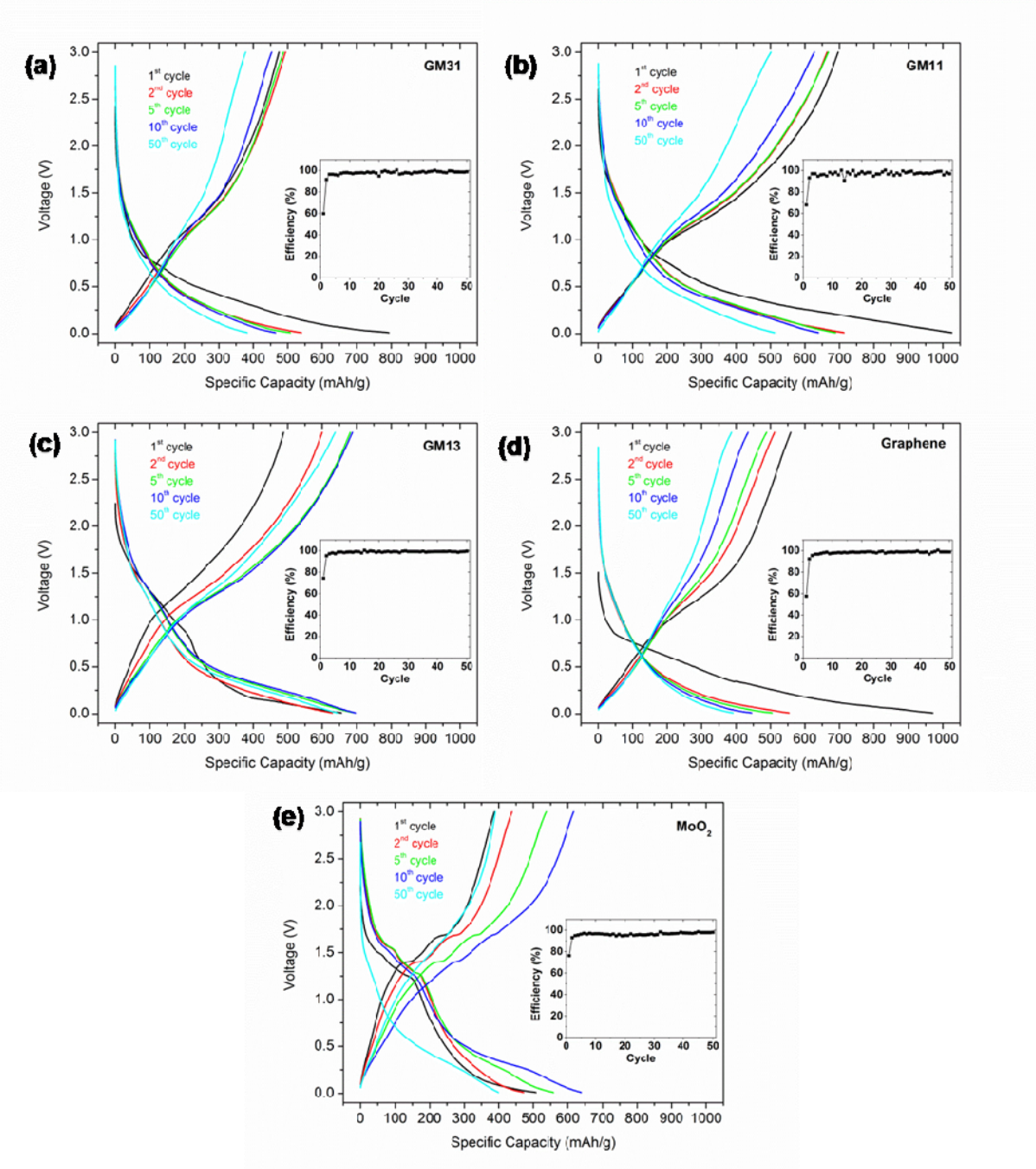

Fig. S3 Voltage profiles for selected cycles corresponding to cycling at 0.2 A/g for samples (a) GM31, (b) GM11, (c) GM13, (d) pure-graphene, and (e) pure-MoO_2; insets of the figures represent the corresponding coulombic efficiencies.

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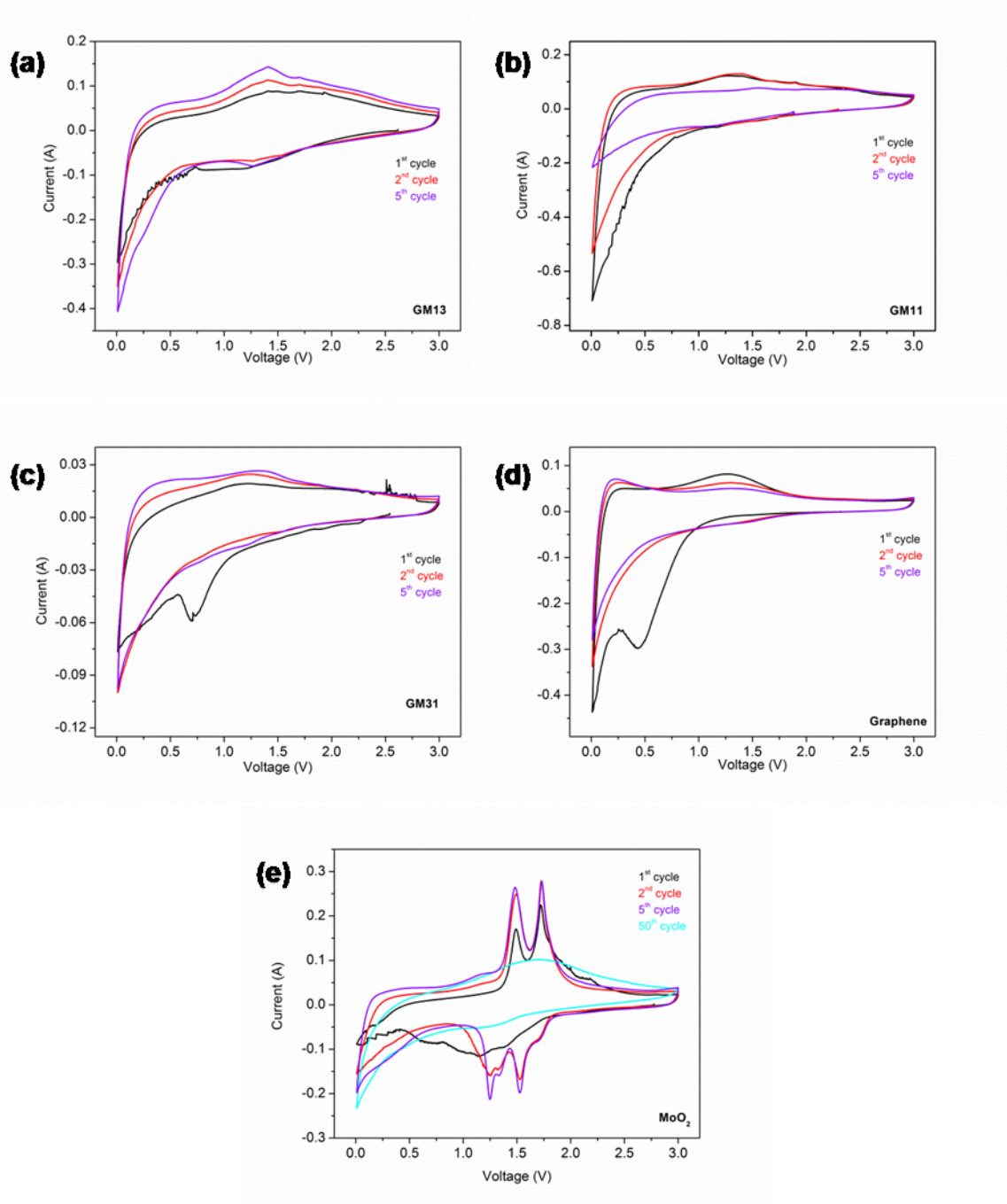

Fig. S4 Cyclic voltammograms for selected cycles at 0.1 mV/s of (a) GM13, (b) GM11, (c) GM31, (d) pure-graphene, and (e) pure-MoO_2.