Electronic Supplementary Material (ESI) for Inorganic Chemistry Frontiers.

Supplementary Material

Self-polymerized hollow Mo-dopamine complex-induced functional $MoSe_2$/N-doped carbon electrodes with enhanced lithium/sodium storage properties

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This file includes:

Figure S1 to S6:

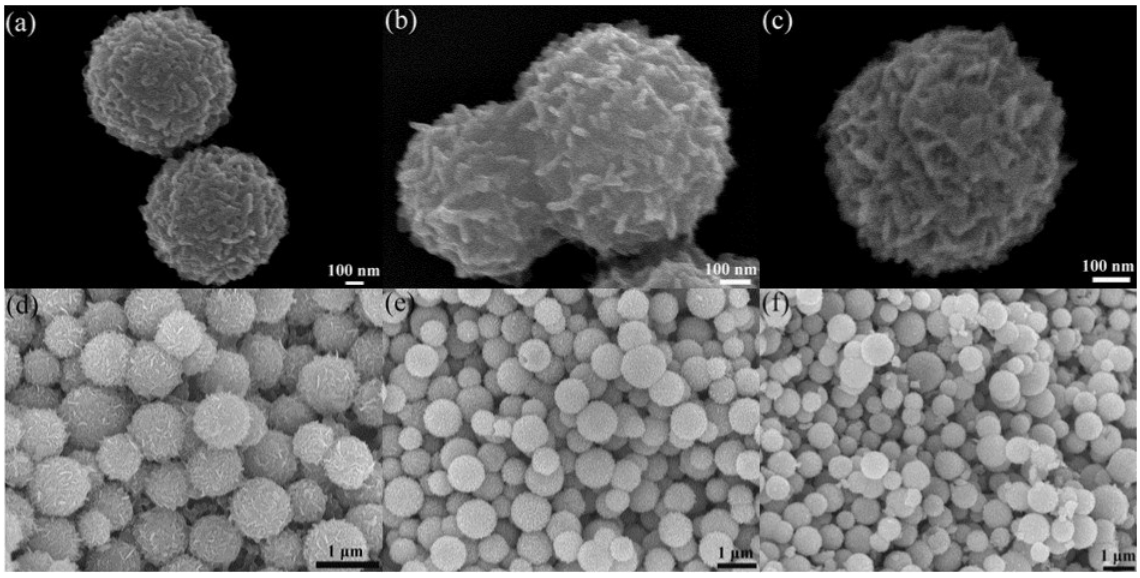

Figure S1 SEM of $MoSe_2$/C (a, d); $MoS_{1.8}Se_{0.2}$/C (b, e); MoS_2/C (c, f).

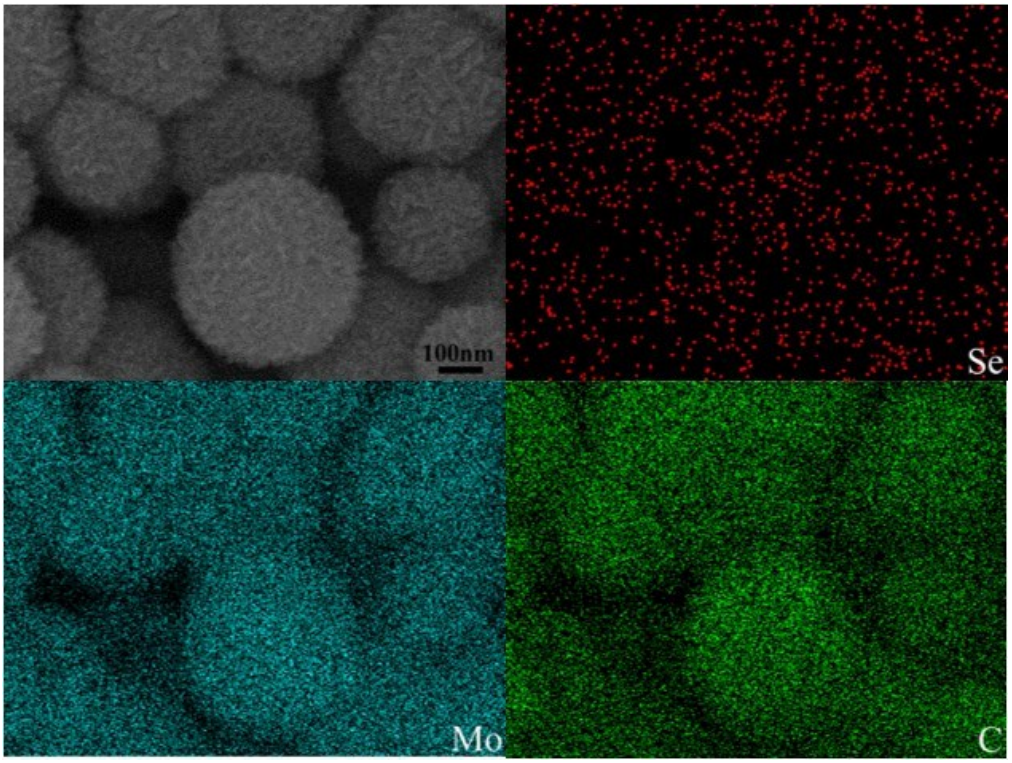

Figure S2 Elemental mapping disclose the co-existence of Se, Mo and C elements of $MoSe_2$/C, and further demonstrate their homogeneously distributions.

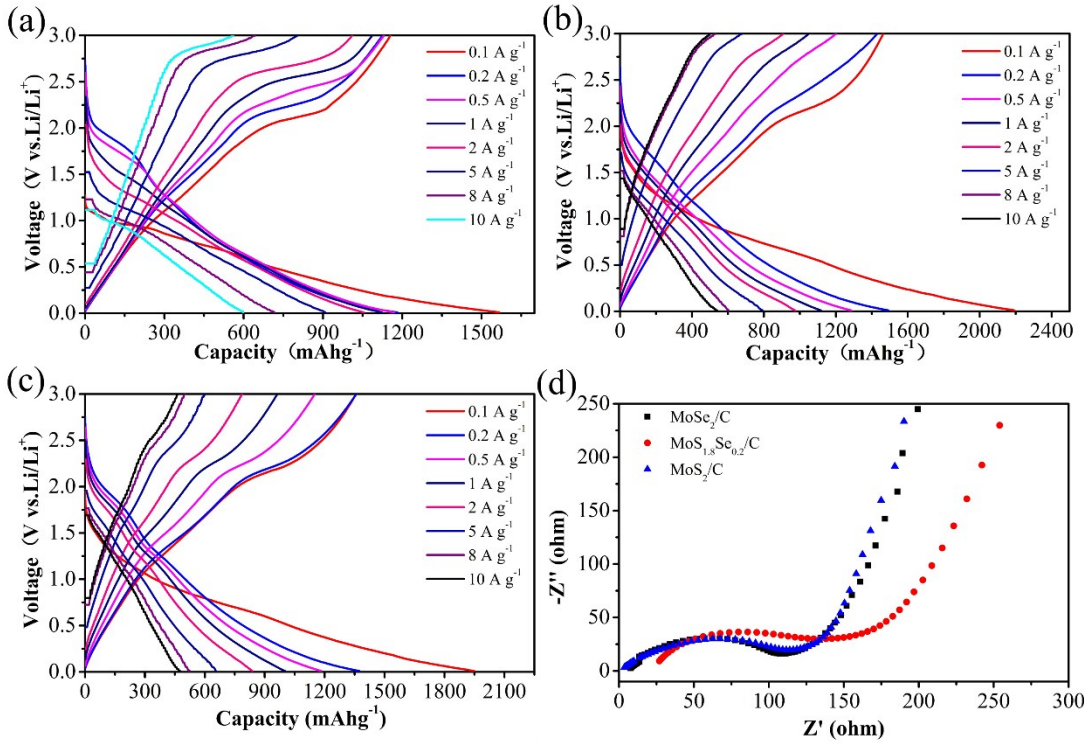

Figure S3 Galvanostatic charge-discharge profiles at current densities of 0.1 A g^{-1} and at various current densities of $MoSe_2$/C (a); $MoS_{1.8}Se_2$/C (b); MoS_2/C (c); EIS spectra the $MoSe_2$/C, $MoS_{1.8}Se_2$/C and MoS_2/C microspheres.

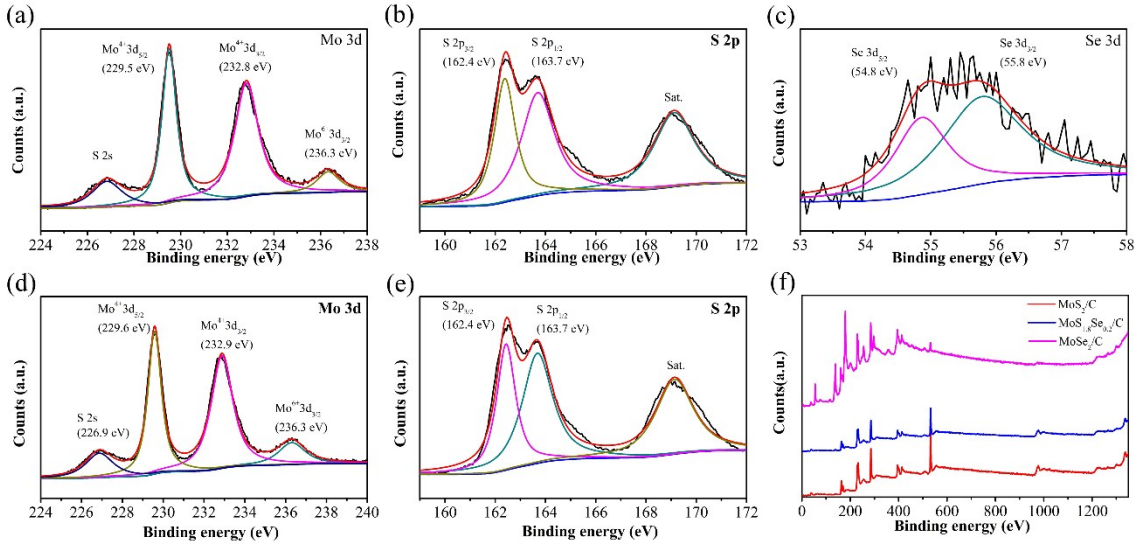

Figure S4 Wide survey XPS spectra of Mo 3d (a), S 2p (b) and Se 3d (c) of $MoS_{1.8}Se_2/C$; high-resolution XPS spectra of Mo 3d (d), S 2p (e) of MoS_2/C; and XPS survey of MoS_2/C , $MoS_{1.8}Se_2/C$ and $MoSe_2/C$ (f).

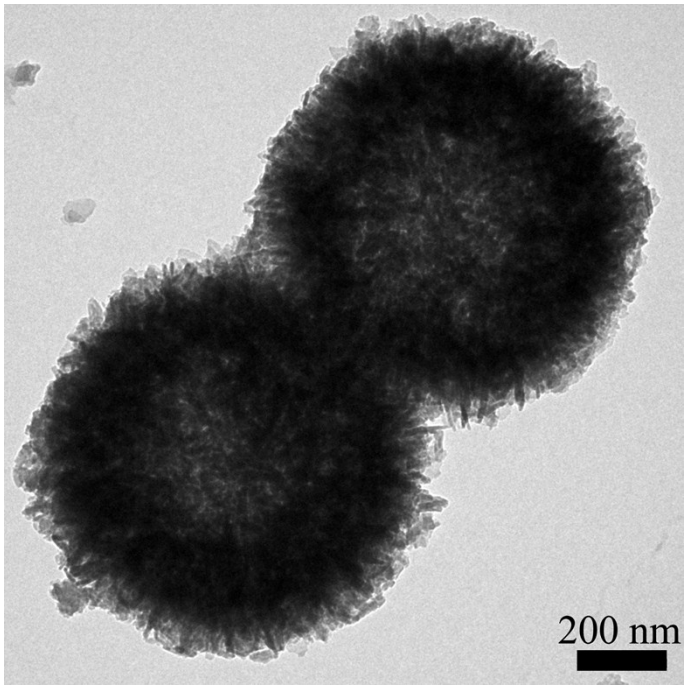

Figure S5 TEM images of Mo-dopamine precursors.

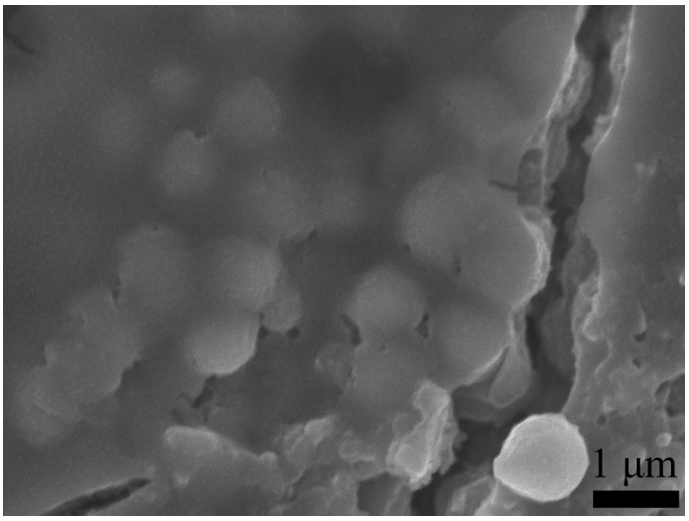

Figure S6 SEM morphology of $MoSe_2$/C microspheres after 5 cycles at 0.1 A g^{-1}.