Electronic Supplementary Material (ESI) for Inorganic Chemistry Frontiers.

Supporting information

Ternary Ag-TiO_2/Reduced Graphene Oxide Nanocomposite as Anode Material for Lithium Ion Battery

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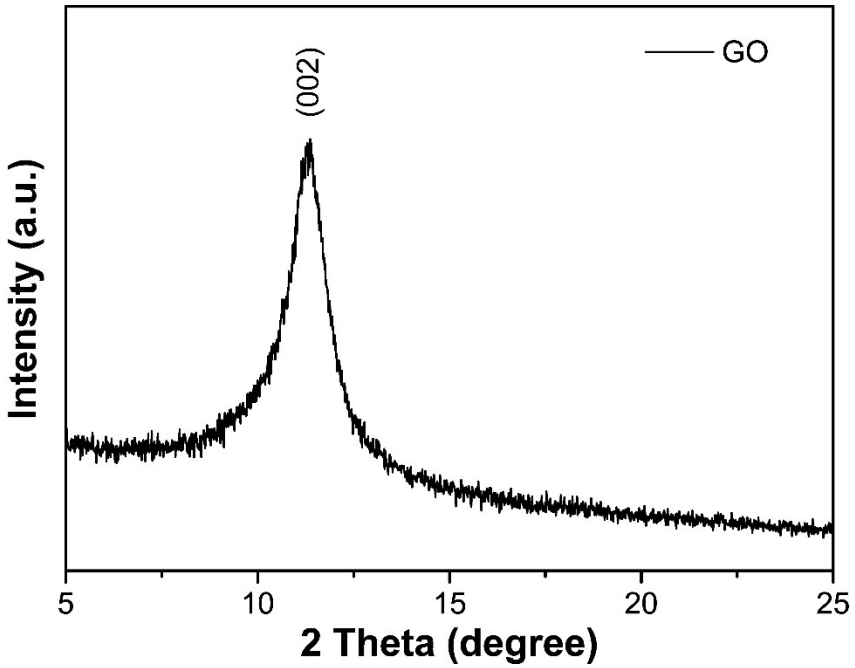

Figure S1. XRD pattern of GO.

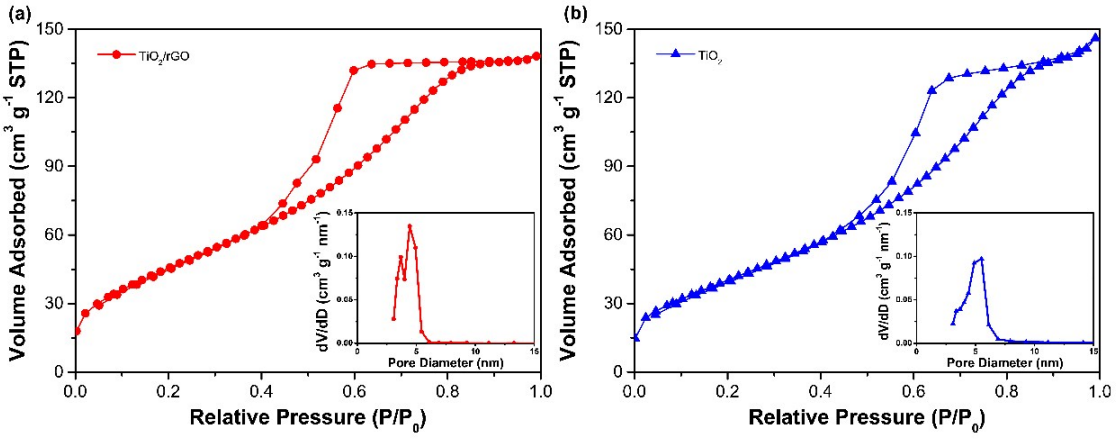

Figure S2. Nitrogen adsorption/desorption isotherms with corresponding pore size distribution (inset) of (a) TiO_2/rGO; and (b) TiO_2.

Table S1. Summary of desorption parameters of different samples.

Sample	BET surface area (m^2 g^{-1})	Pore volume (cm^3 g^{-1})	Pore size (nm)
Ag-TiO_2/rGO	160.50	0.2070	4.50
TiO_2/rGO	168.75	0.2211	4.28
TiO_2	149.20	0.2327	5.18

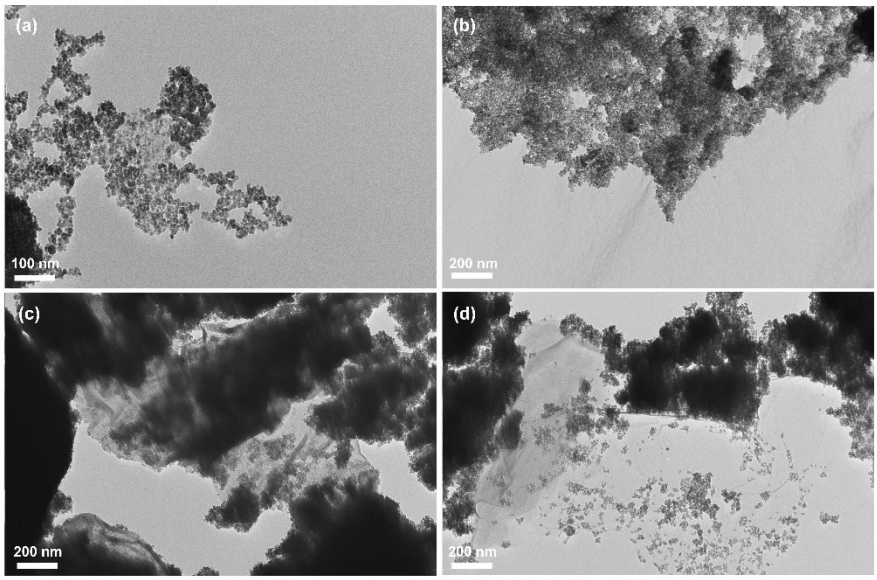

Figure S3. TEM images of (a) Ag-TiO_2/5_rGO; (b) Ag-1_TiO_2/rGO; (c) M_Ag-TiO_2/rGO; and (d) M_Ag-TiO_2-rGO.

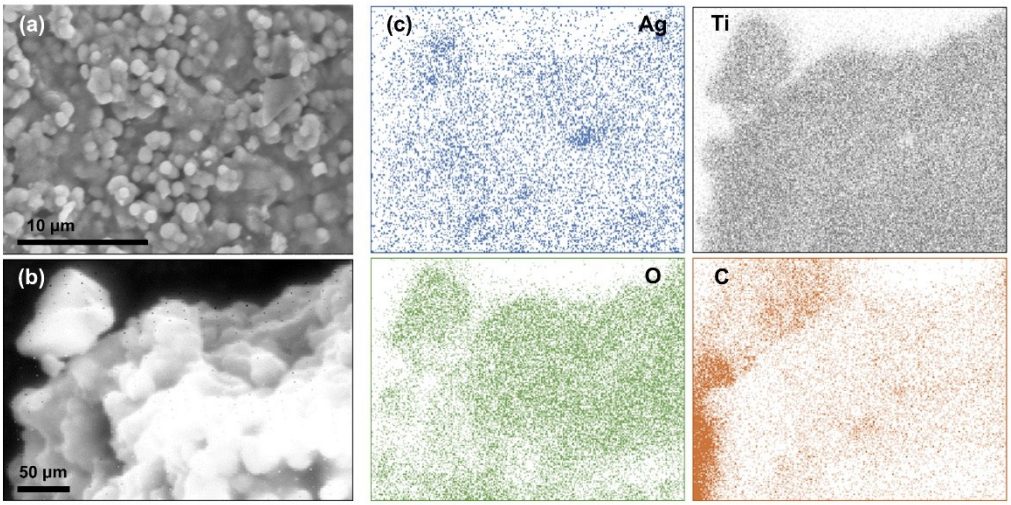

Figure S4. (a) SEM image of Ag-TiO_2/rGO; (b, c) EDX mappings of Ag-TiO_2/rGO.

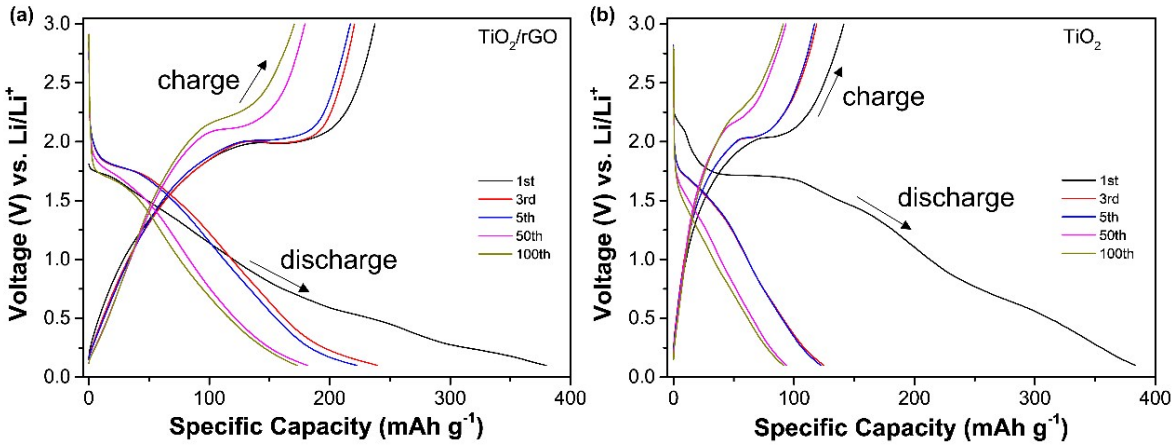

Figure S5. Galvanostatic discharge/charge voltage profiles of (a) TiO_2/rGO; and (b) TiO_2 for the 1st, 3rd, 5th, 50th, 100th cycle at a current density of 1 C (1 C=168 mA g^{-1}).

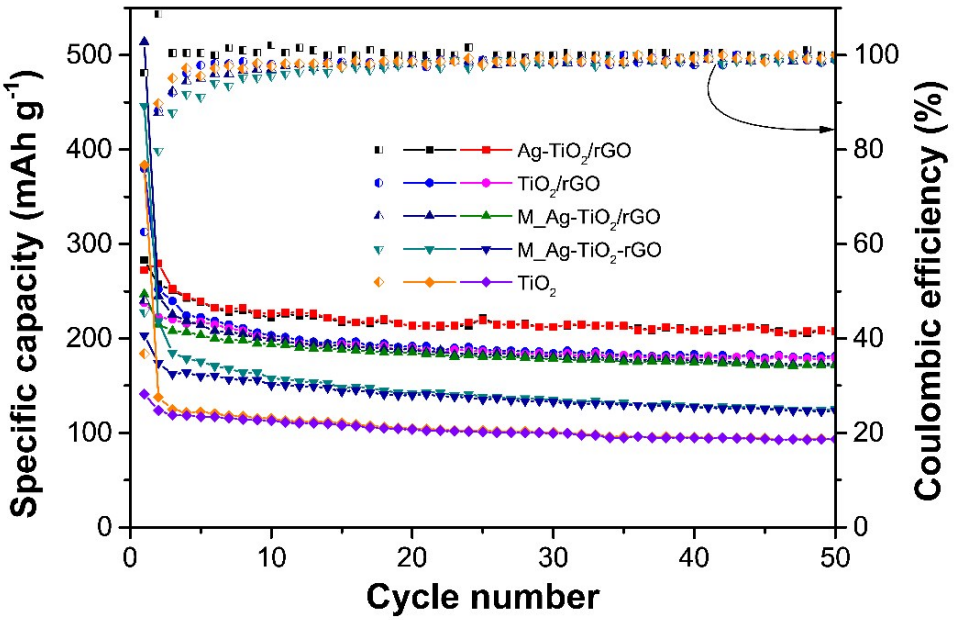

Figure S6. Cycling performances of Ag-TiO_2/rGO, TiO_2/rGO, M_Ag-TiO_2/rGO, M_Ag-TiO_2-rGO and TiO_2 at a current density of 1 C and corresponding Coulombic efficiencies.