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**Synthesis of Core-shell Covalent Organic Frameworks/Multi-walled
Carbon Nanotubes Nanocomposite and Application in Lithium-Sulfur
Batteries**

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Abstract: A novel core-shell covalent organic frameworks/multi-walled carbon nanotubes nanocomposite (TpPa-COF@MWCNTs) was prepared via growing the porous TpPa-COF on conductive multi-walled carbon nanotubes (MWCNTs) under a facile solvothermal condition. The resultant TpPa-COF@MWCNTs showed a high initial discharge capacity of 1242.2 mAh g⁻¹ at current density 0.05 C and an outstanding capacity retaining ability (an ultralow capacity fade rate of 0.099% per

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