Synthesis of Polyethylene/Exfoliated MoS2 Nanocomposites by In Situ Exfoliation Polymerization Using Ziegler-Natta catalyst intercalated MoS2

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Figure S1. SEM image of (a) $MoS_2-MgCl/TiCl_4$ catalyst edge and the EDS elemental mapping images of (b) Mo, (c) S, (d) Mg and (e) Ti from (a)



Figure S2. DSC (a) cooling and (b) heating curves of PE and $PE/EMoS_2$ nanocomposites with different $EMoS_2$ contents.



Figure S3. TGA and DTG curves of PE and PE/EMoS₂ nanocomposites.