Supplementary Materials: Charge Transport in LDPE Nanocomposites Part I—Experimental Approach

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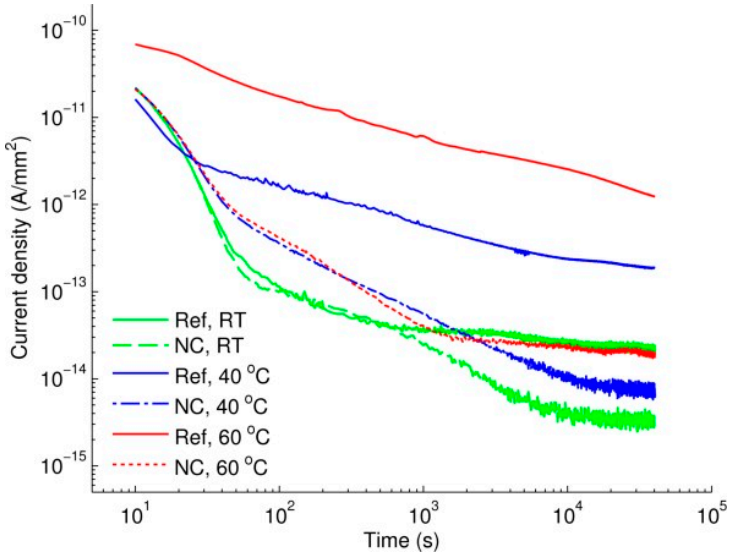

Figure S1. Densities of charging currents as functions of time measured at room temperature (RT) ~20–22 °C, 40 °C, and 60 °C for the reference LDPE (Ref) and LDPE/MgO 3 wt % nanocomposite (NC).

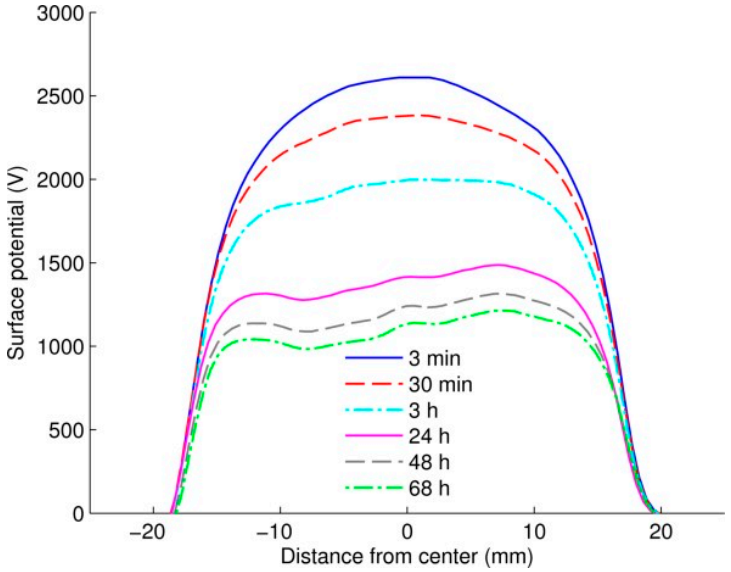

Figure S2. Distribution of surface potential during potential decay measurement on LDPE/MgO 3wt % nanocomposite at 60 °C.

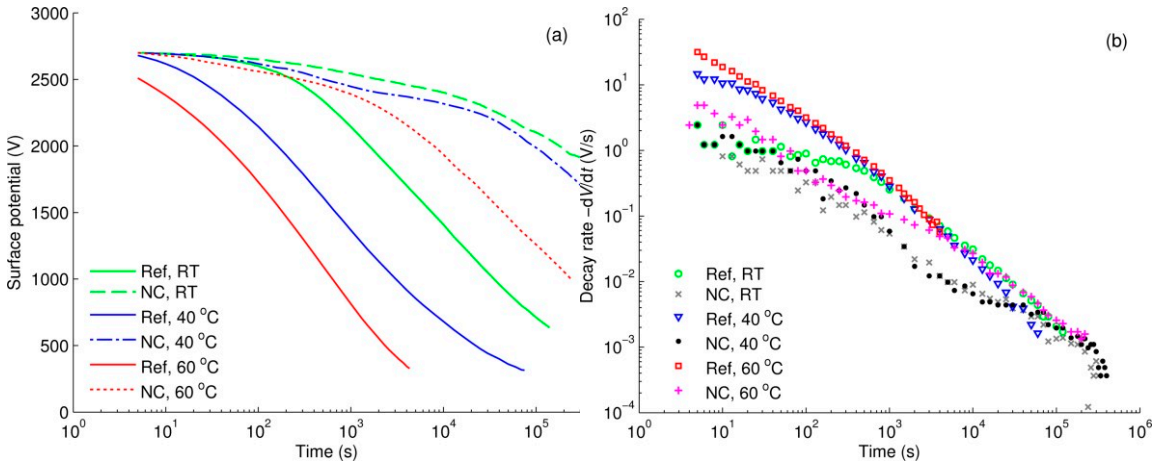

Figure S3. Measured surface potentials (**a**); and calculated decay rates (**b**) for reference LDPE (Ref) and LDPE/ MgO 3 wt % nanocomposite (NC) at different temperatures.

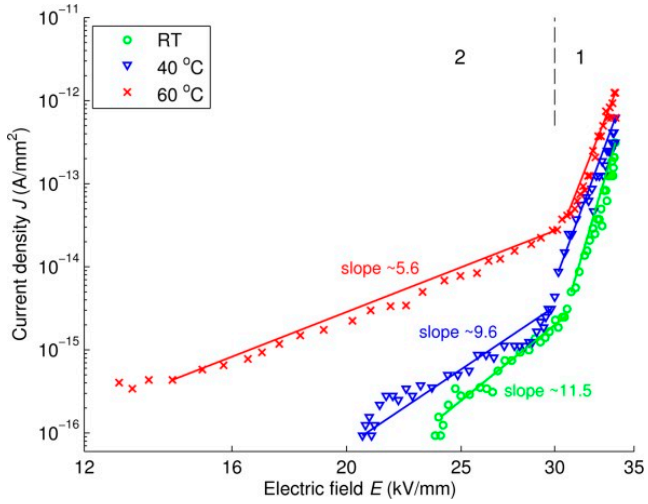

Figure S4. Log-log plot of *J* vs *E* for LDPE/MgO 3 wt % nanocomposite at various temperatures.

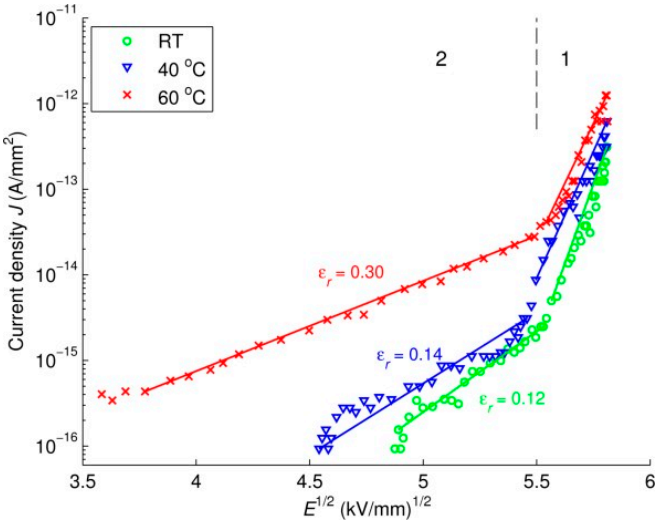

Figure S5. Schottky plot for LDPE/MgO 3 wt % nanocomposite at various temperatures.

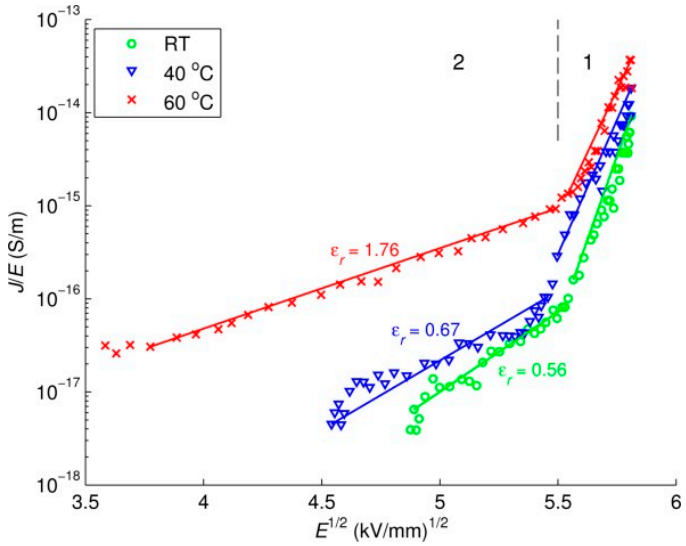

Figure S6. Poole-Frenkel plot for LDPE/MgO 3 wt % nanocomposite at various temperatures.