Supporting Information

Self-Limiting Electrospray Deposition (SLED) of Polyimide Nanoparticle Coatings as Effective Battery Separator Membranes

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Figure S1(a-d). UV vis scattering plot of SLED PI film on Si wafer annealed at (a) room temperature (~23°C) (b) 50°C (c) 100°C (d) 200°C.
Figure S2(a-d). UV vis scattering plot of SLED PI film on Si wafer annealed at (a) 250°C (b) 300°C (c) 350°C (d) 400°C.

Figure S3. Matrimid 5218 molecular structure.
Figure S4. PI mass series showing dense thickness plotted against mass highlighting the self-limiting behavior of Matrimid 5218. These samples were sprayed at 0.2 mL/h at a concentration of 0.2 wt.% PI in 2:1 DCE:Chloroform to obtain the respective electrosprayed mass. Each spray was conducted in a low humidity dry box between 15-20% relative humidity and a temperature range of 20-25°C.