

Plasma-assisted Destruction of Polystyrene Nanoplastics

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Electronic Supplementary Information

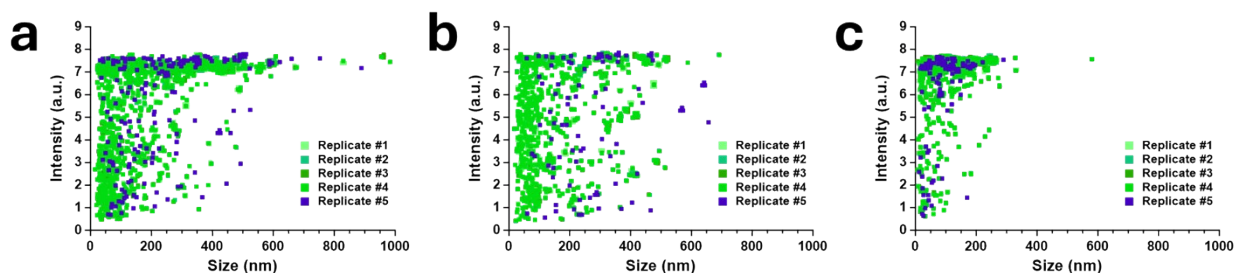


Figure S1. Plasma-assisted degradation of 200-nm polystyrene nanosphere aqueous solutions. Plots of particle intensity versus size for polystyrene nanosphere solutions plasma-treated for (a) 15 min., (b) 30 min., and (c) 45 min.

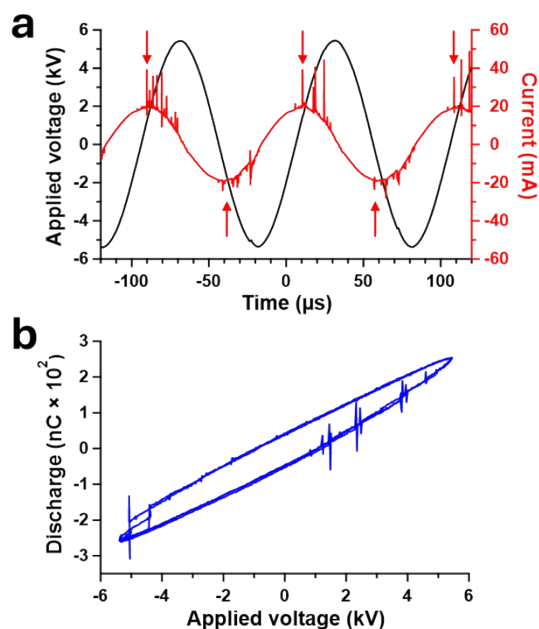


Figure S2. Electrical signals of the falling film plasma reactor (FFPR) operated with an applied sinusoidal voltage signal of 10 kV at 10 kHz for the treatment of the 100-ppm aqueous solution of 200-nm polystyrene nanospheres. (a) Plots of applied voltage and applied current versus time. Red arrows indicate the occurrence of electron streaming events between the inner electrode and the quartz tube. (b) Lissajous plot of the corresponding discharge versus applied voltage.