



Supplementary Materials

# Hollow TiO<sub>2</sub> Nanoparticles Capped with Polarizability-Tunable Conducting Polymers for Improved Electrorheological Activity

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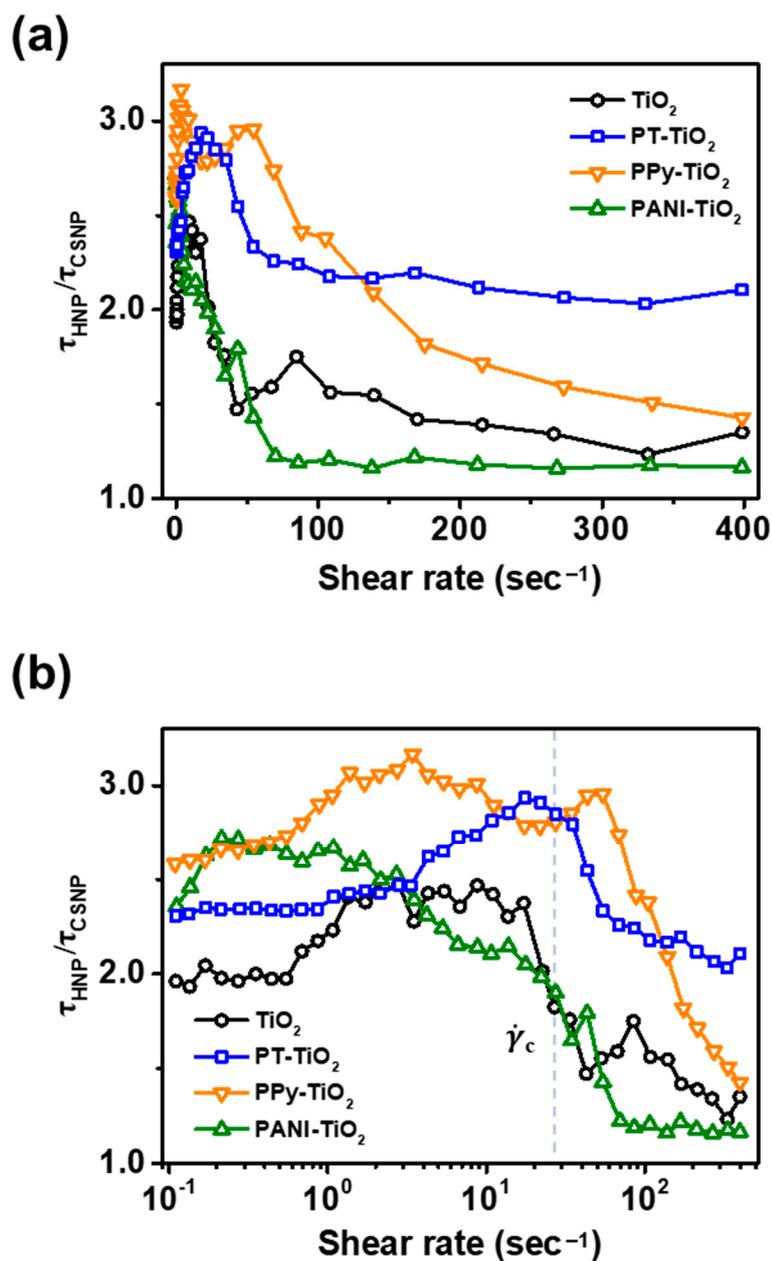


Figure S1. Improvement shear stress ratio ( $\tau_{HNP}/\tau_{CSNP}$ ) of bare, PT-, PPy-, and PANI-capped HNPs to CSNPs measured by varying the shear rate (a) as a decimal scale and (b) a log scale at a constant electric field strength of  $3.0 \text{ kV mm}^{-1}$ .

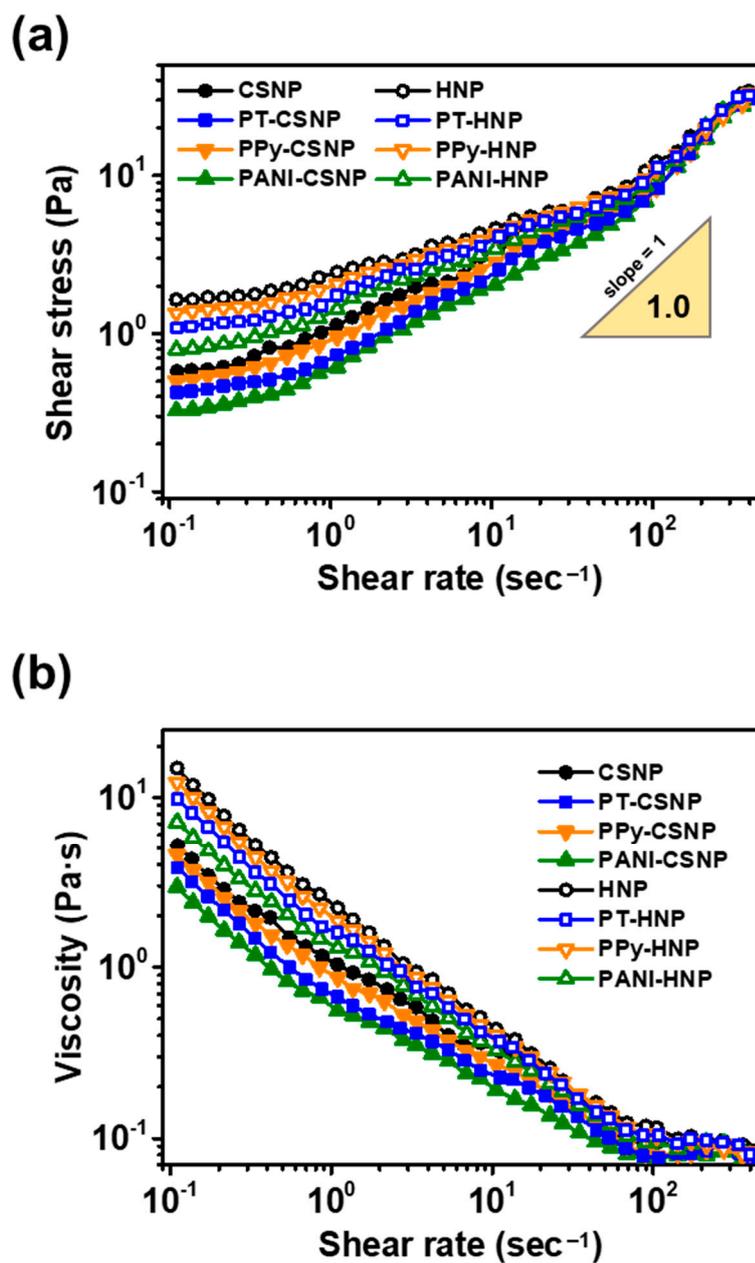


Figure S2. (a) Shear stress and (b) viscosity of CSNPs and HNPs obtained before and after polymer capping with PT, PPy, and PANI dispersed in silicone oil (3.0 wt%) measured by varying the shear rate without an electric field.