

# Supporting Information

## Relating Colloidal Stability of Fullerene (C<sub>60</sub>) Nanoparticles to Nanoparticle Charge and Electrokinetic Properties

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Additional Details on the Procedure for Electrophoretic Mobility Measurements.

FIGURE S1. Electrophoretic mobilities of sonicated and stirred fullerene nanoparticles in the presence of different anions at pH 5.5.

FIGURE S2. Representative SEM image and titration profile of C<sub>60</sub> material stirred in water for a prolonged period of time.

## **Additional Details on Materials and Methods**

**Electrophoretic Mobility Measurements.** The sonicated fullerene nanoparticle stock solution was diluted 20 times with deionized water while the stirred nanoparticle stock solution was either undiluted or diluted twice with deionized water for the electrophoretic mobility (EPM) measurements. The EPM measurements were conducted on 3 to 9 independent samples for each solution chemistry. Specifically, more measurements (up to 10) were conducted for a smaller number of samples prepared at low ionic strengths in which the nanoparticles were reasonably stable to aggregation. On the other hand, less measurements (as few as 2) were conducted for a greater number of samples prepared at high ionic strengths that have the potential to result in significant aggregation.

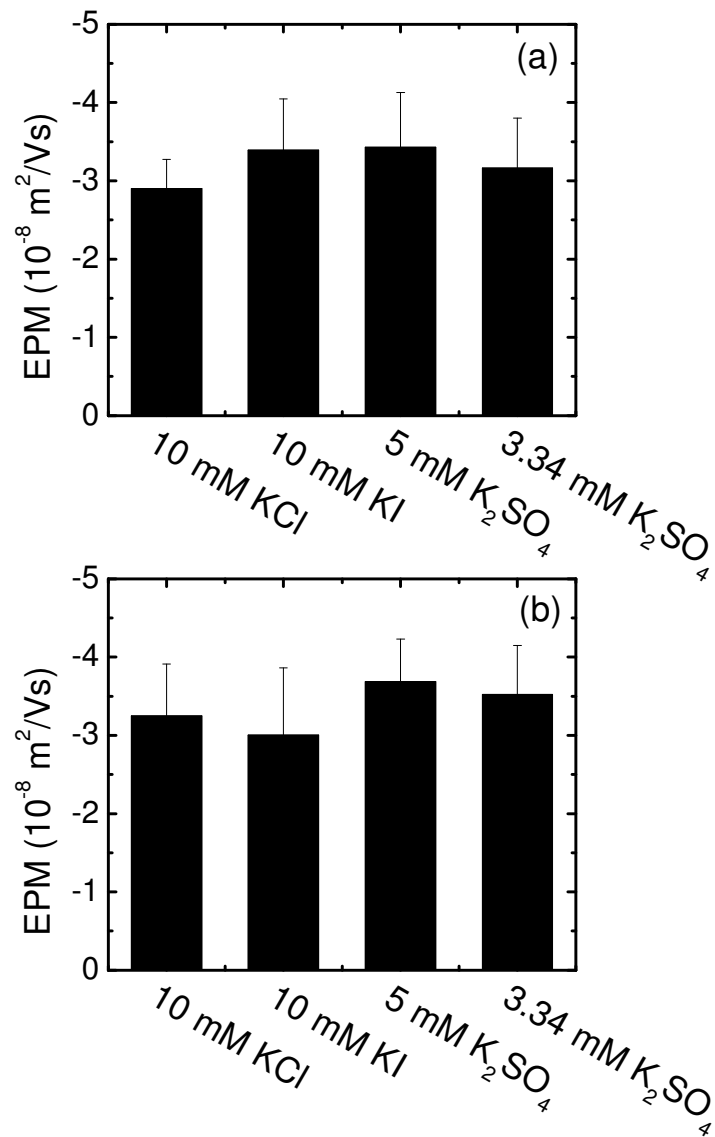


FIGURE S1. Electrophoretic mobilities (EPM) of (a) sonicated and (b) stirred fullerene nanoparticles in the presence of different anions at pH 5.5.

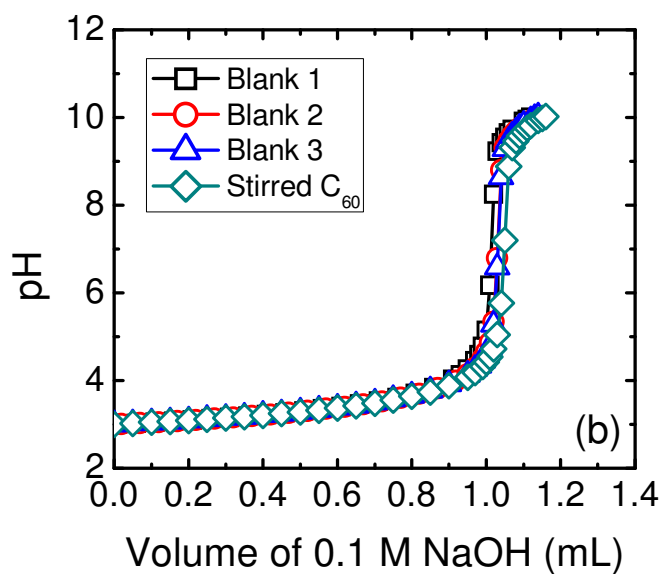
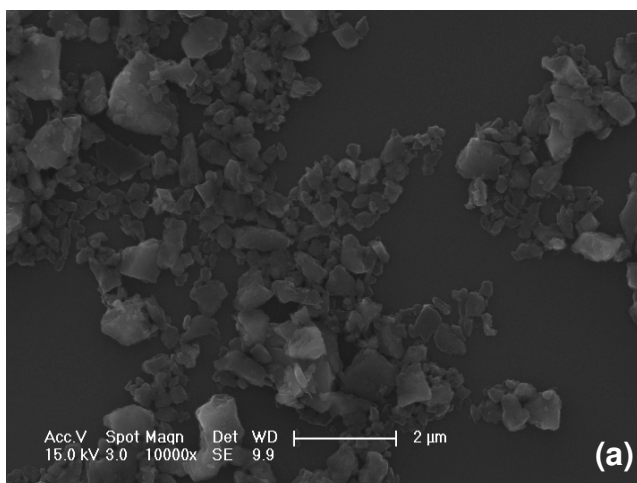


FIGURE S2. (a) Representative SEM image of C<sub>60</sub> material stirred in water for a prolonged period of time. (b) Titration profile of C<sub>60</sub> material stirred in water for a prolonged period of time. The concentration of C<sub>60</sub> material is approximately 1 g/L. A duplicate experiment conducted on another batch of C<sub>60</sub> suspension prepared in a similar manner yielded the same results.