

Figure Captions - Supporting Information

- Figure S1. X-ray powder diffractograms of a) YF3.0-400, b) YF3.0. Marked reflections from diffraction data: o) YF_3 (PDF 32-1431).
- Figure S2. Thermoanalytical curves of YF2.0.
- Figure S3. Thermoanalytical curves of YF1.4.
- Figure S4. Thermoanalytical curves of YF0.5.
- Figure S5. ^1H - ^{89}Y CP MAS NMR spectra ($\text{vrot} = 3 \text{ kHz}$) of
a) YF2.0 ($\text{ns} = 6144$), b) YF1.4 ($\text{ns} = 3888$), c) YF1.0 ($\text{ns} = 4096$),
d) YF0.5 ($\text{ns} = 256$). The contact time p15 was set to 12 ms in all experiments.
- Figure S6. ^1H MAS NMR spectra ($\text{vrot} = 20 \text{ kHz}$) of
a) YF2.0, b) YF1.4, c) YF1.0, and d) YF0.5.
- Figure S7. DLS particle size distribution weighted by intensity of three yttrium acetate fluoride sols with fluorine supply of 2.4, 2.6 and 2.9 eq. HF (from left to right). (two repeat determination for each sample).

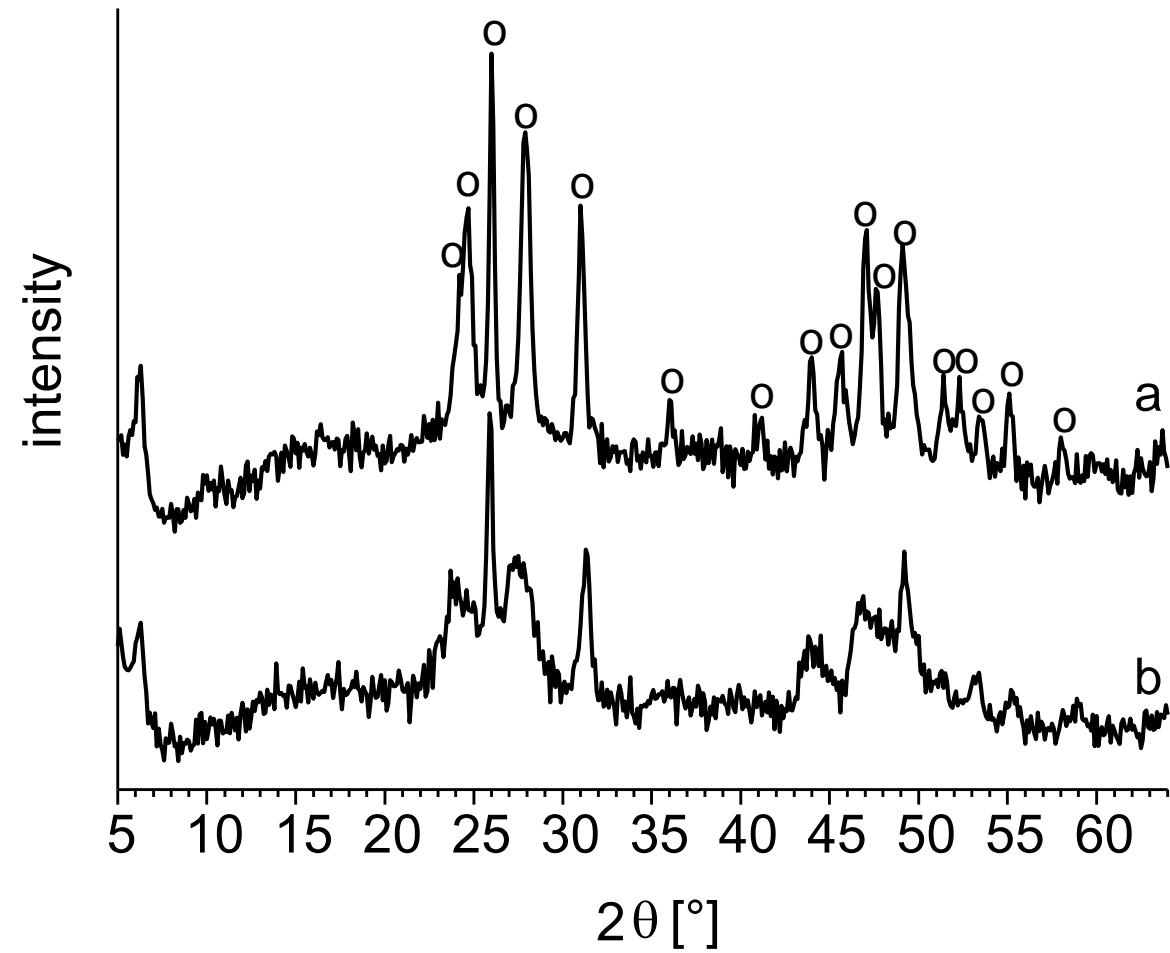


Fig. S1

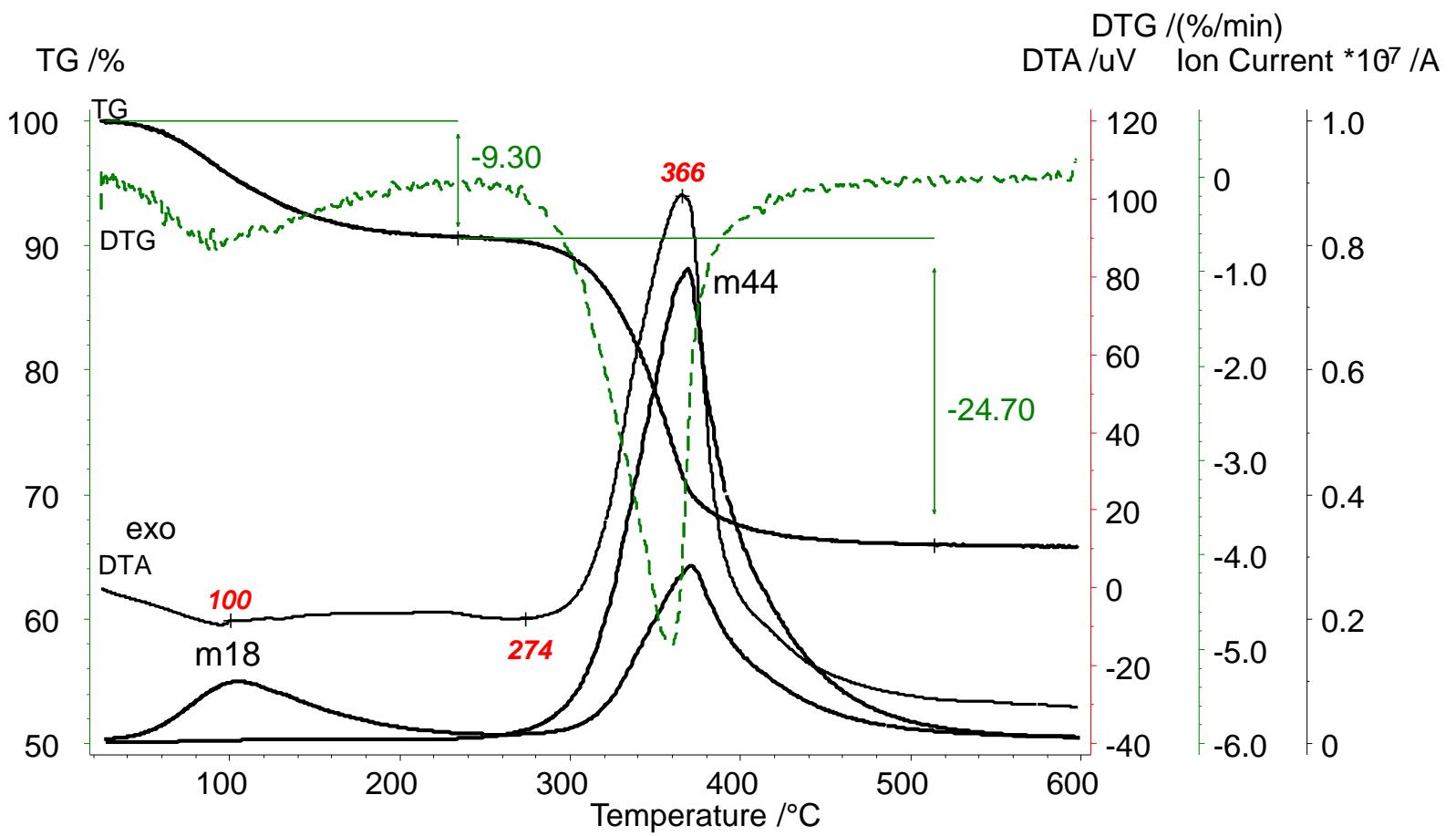


Fig. S2

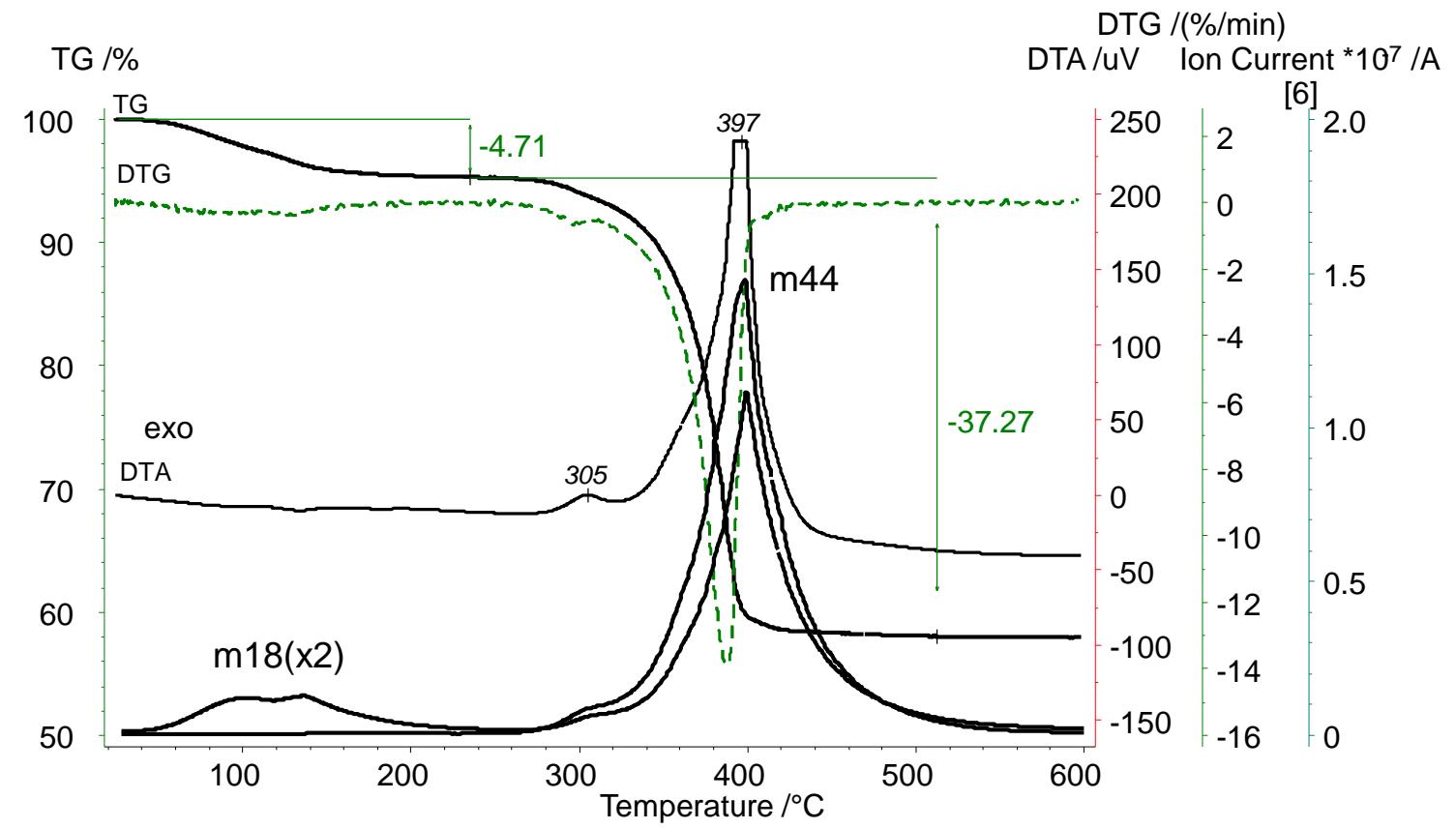


Fig. S3

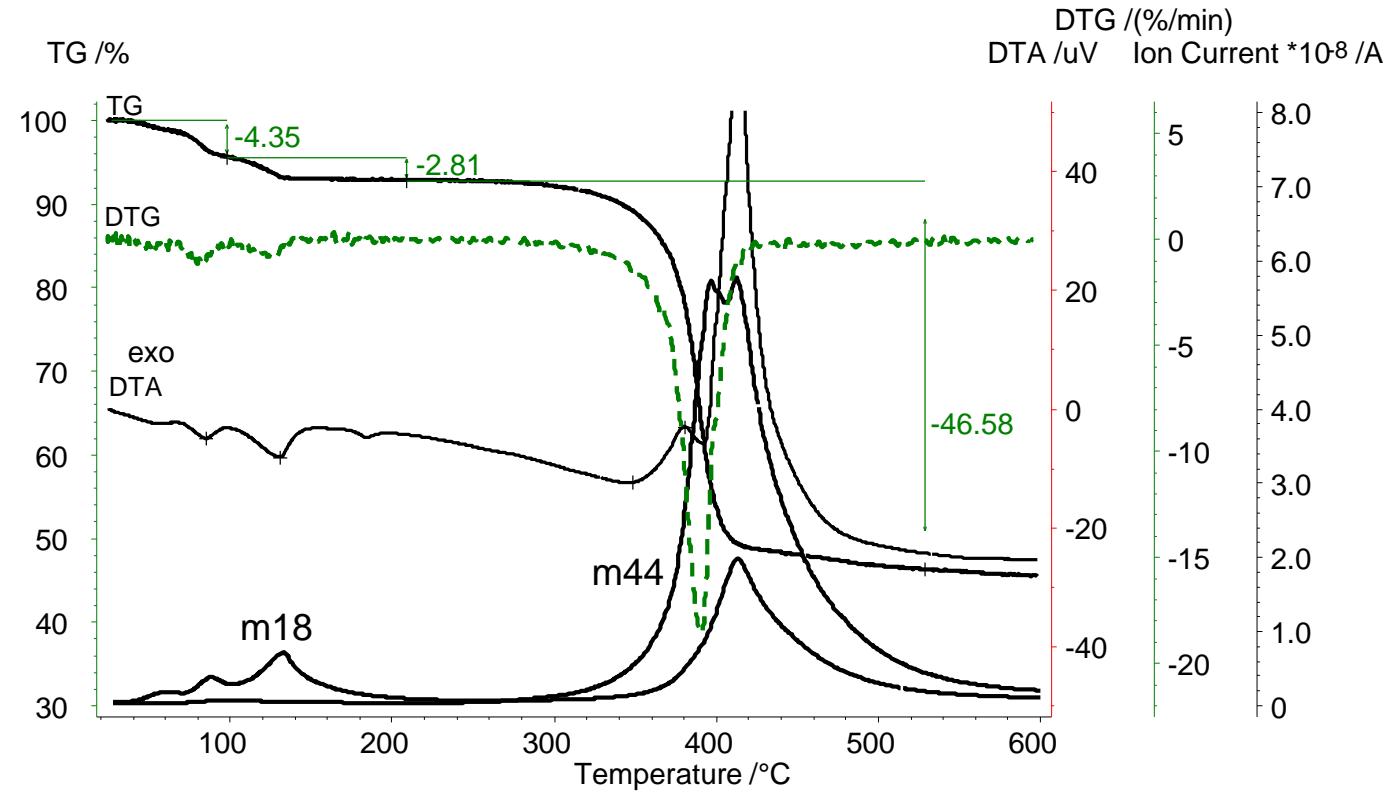


Fig. S4

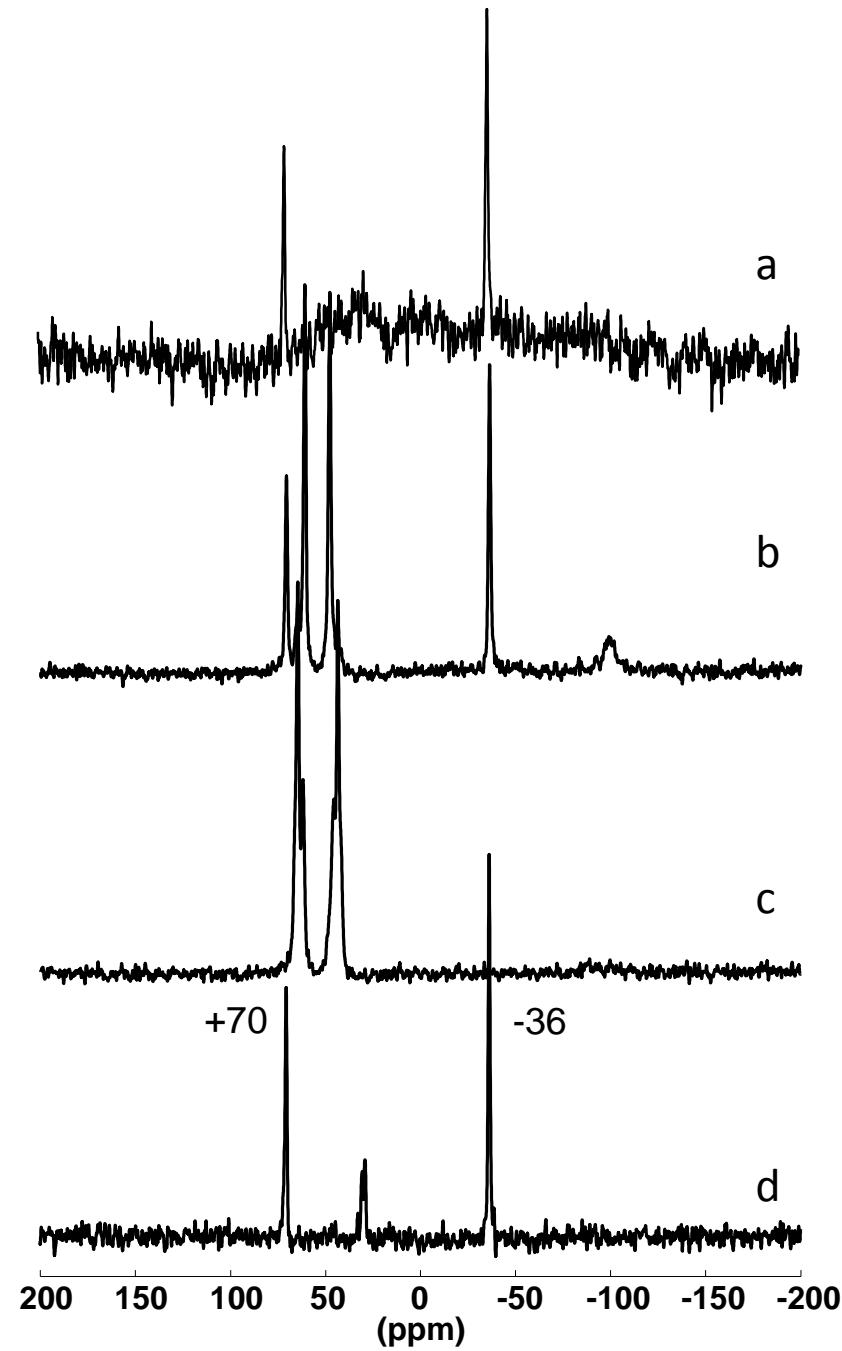


Fig. S5

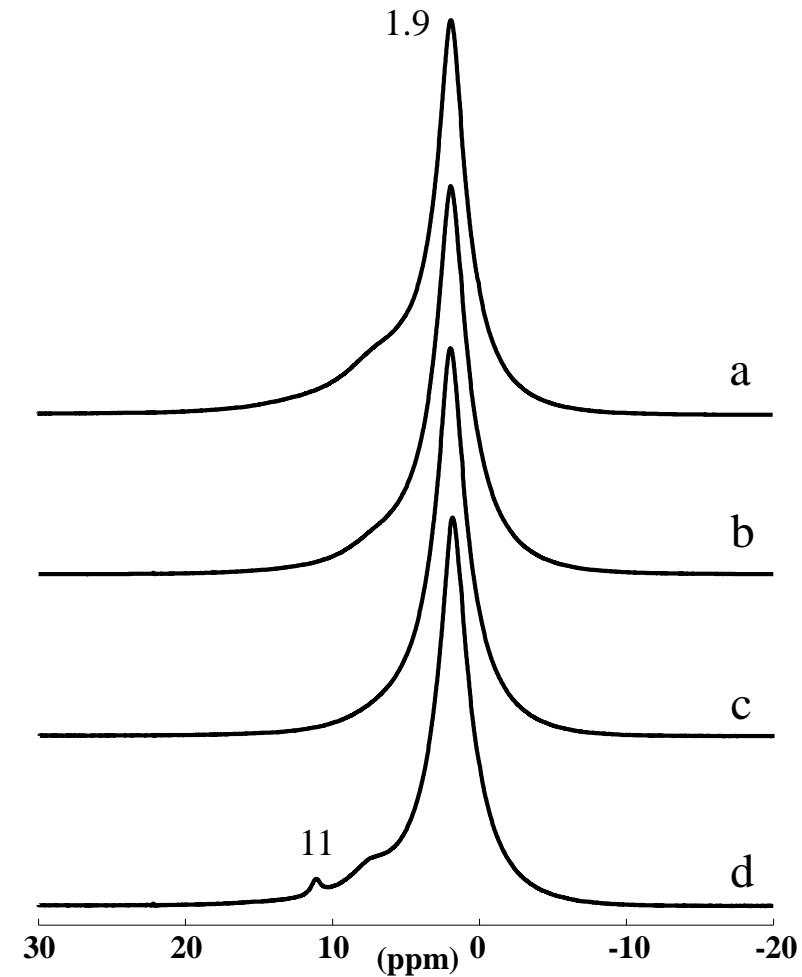


Fig. S6

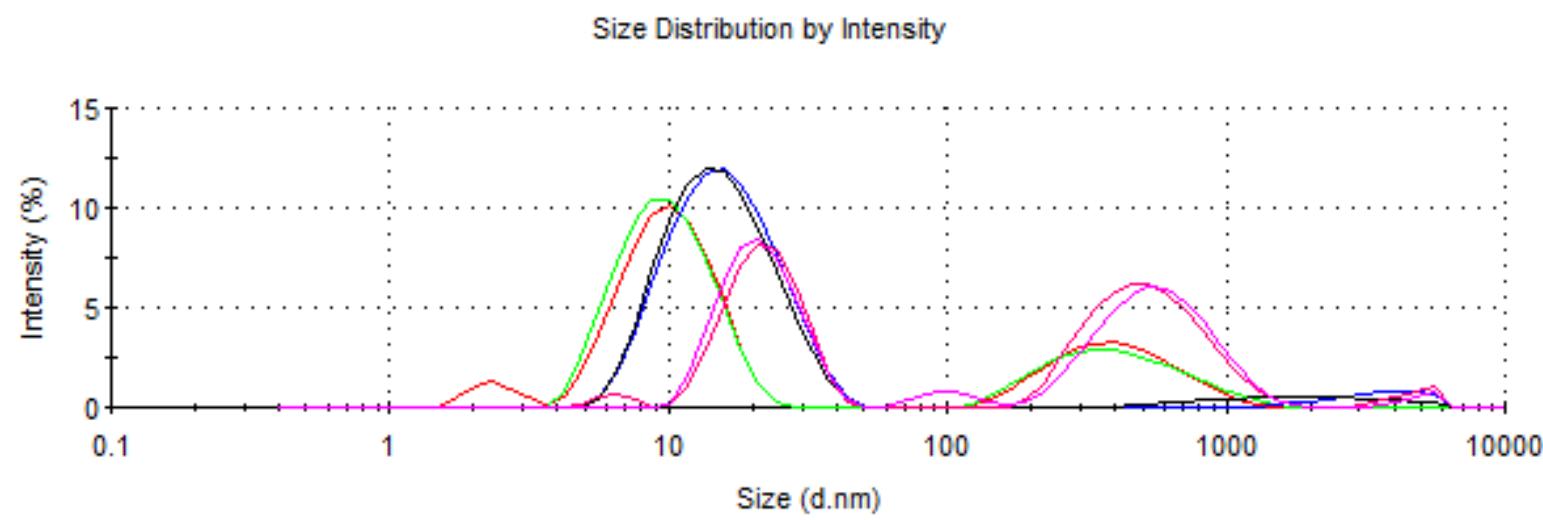


Fig. S7