Supplementary Materials: Pair Distribution Function Analysis of ZrO_2 Nanocrystals and Insights in the Formation of ZrO_2-$YBa_2Cu_3O_7$ Nanocomposites

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Refined crystal structure

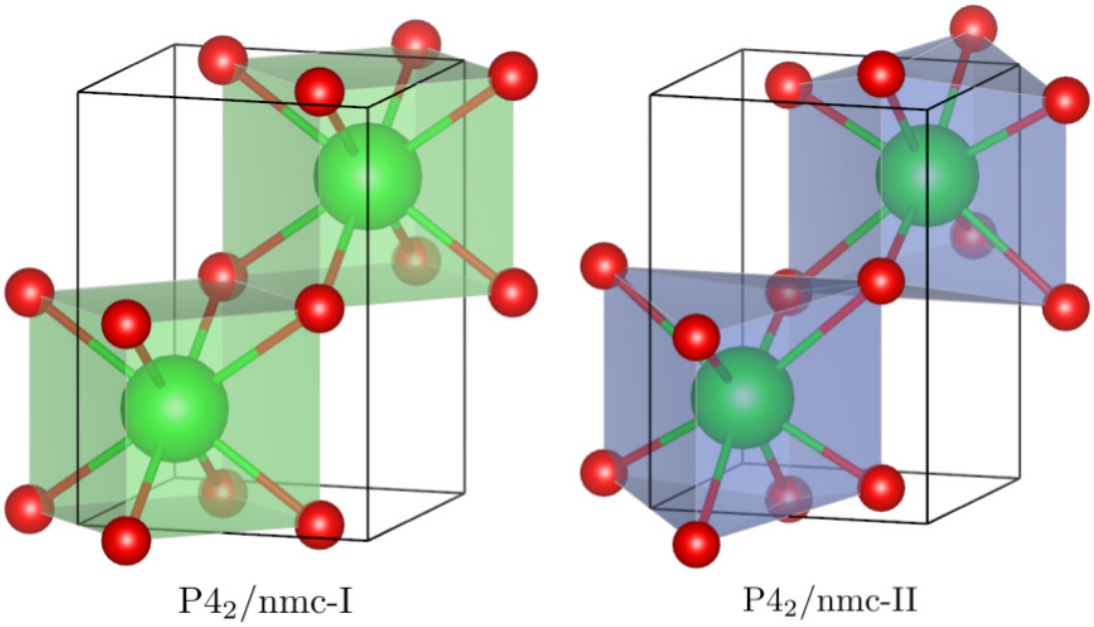

Figure S1. (left) tetragonal and (right) distorted tetragonal crystal structure for ZrO_2 after PDF refinement.

Nuclear Magnetic Resonance analysis of the bisphosphonate stabilized nanocrystals

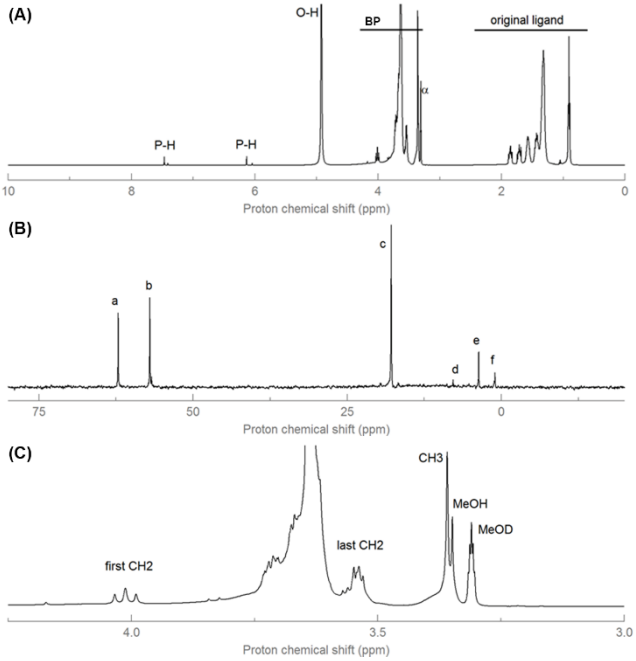

Figure S2. (A) 1D ^{1}H spectrum and (B) ^{31}P spectrum of ZrO_2 nanocrystals stabilized with bisphosphonate (BP) in MeOD-d_4, with (C) a zoom on BP resonances.

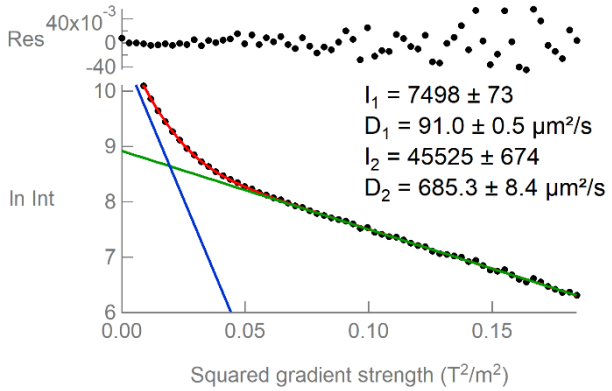

Figure S3. Bi-exponential diffusion decay fitting of the bisphosphonate ligand.