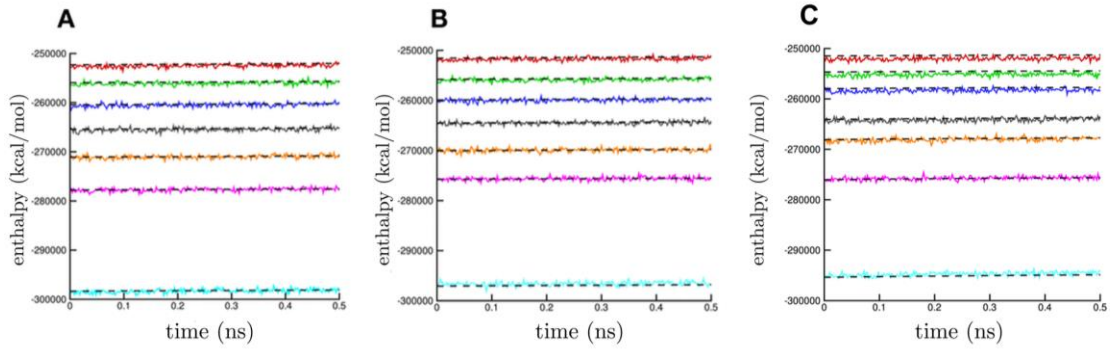
Supplementary Material

In S1, we show the enthalpy during dissolution simulations along with model fits used to estimate σ. In S2, we show the full average dissolution trajectory for each polymorph, along with the model fit.

S1: dissolution enthalpies (kcal/mol) vs. time (ns) for (A) α-, (B) β-, and (C) γ-glycine nanocrystals. Red corresponds to the 1.85 nm particle, green to the 2 nm particle, dark blue to the 2.15 nm particle, grey to the 2.3 nm particle, orange to the 2.45 nm particle, pink to the 2.6 nm particle, and light blue to the 3 nm particle. Dashed black lines correspond to the model fits.



S2: number of solid molecules vs. time (ns) for all (A) α-, (B) β-, and (C) γ-glycine nanocrystals. Red corresponds to the 1.85 nm particle, green to the 2 nm particle, dark blue to the 2.15 nm particle, grey to the 2.3 nm particle, orange to the 2.45 nm particle, pink to the 2.6 nm particle, and light blue to the 3 nm particle. n_α corresponds to the number of solid α- particles. n_β corresponds to the number of solid β- particles. n_γ corresponds to the number of solid γ- particles. Dashed black lines correspond to the model fits.