Nanoparticles Shape-Specific Emergent Behaviour on Liquid Crystal Droplets

Supplementary Information

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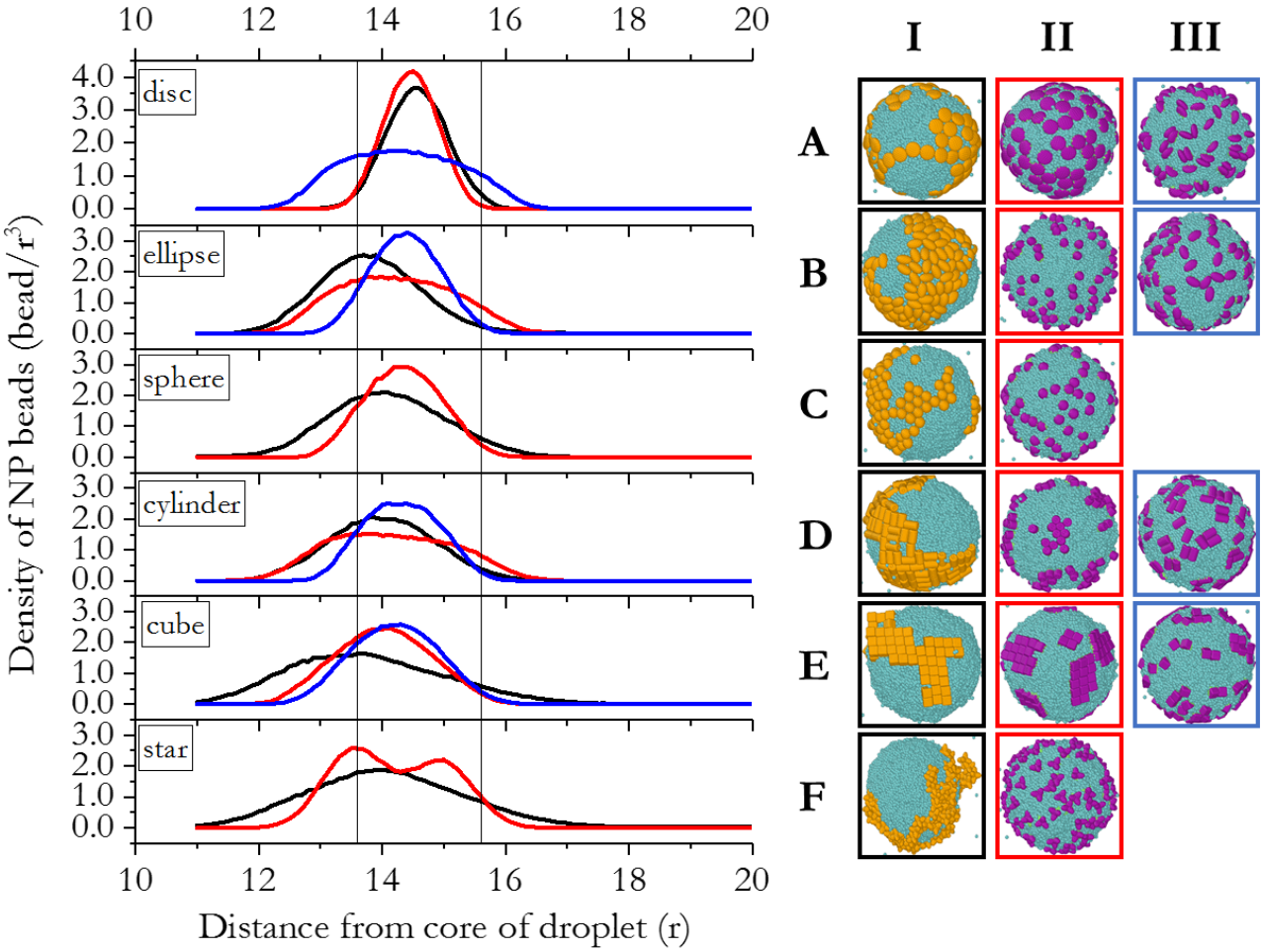

Figure S1. Left: Density profiles of NP beads with respect to distance from the oil droplet core. Lines in graph indicate the area between 13.6 – 15.6 r radii. Right: Corresponding snapshots of oil droplets.

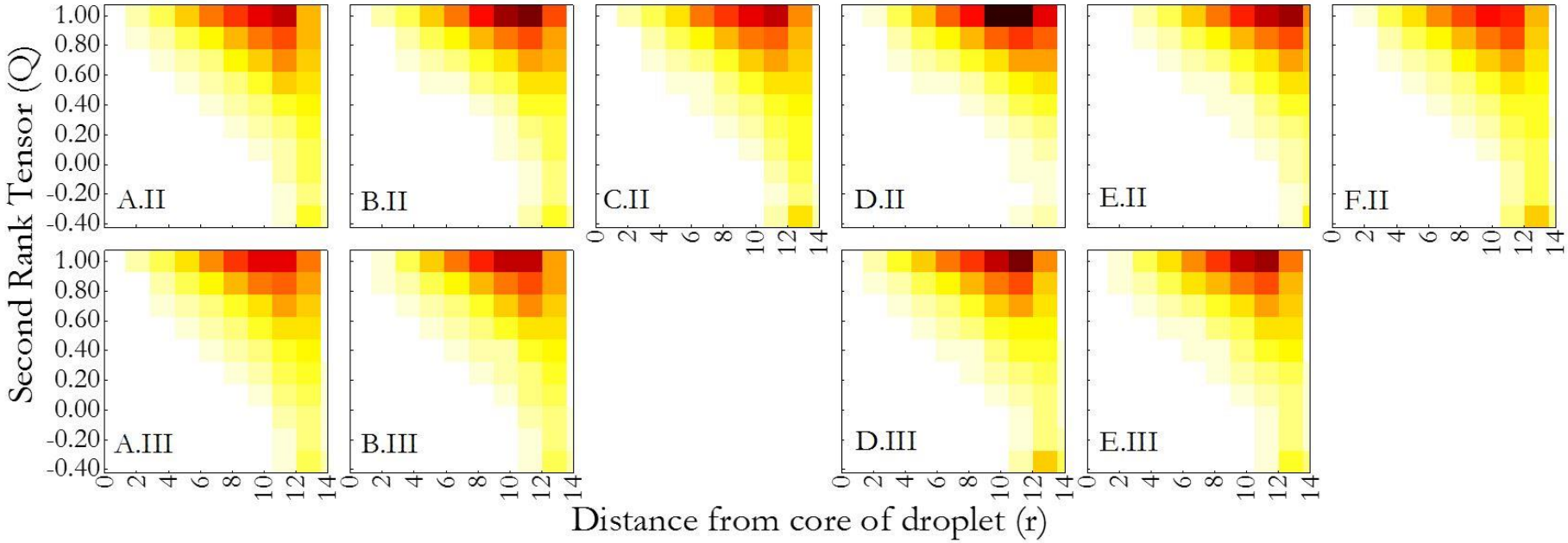

Figure S2. Probability distributions of LC mesogens with respect to their locations and second order tensors, for droplets that were exposed to Group II and Group III nanoparticles that were described in Section 3.1.

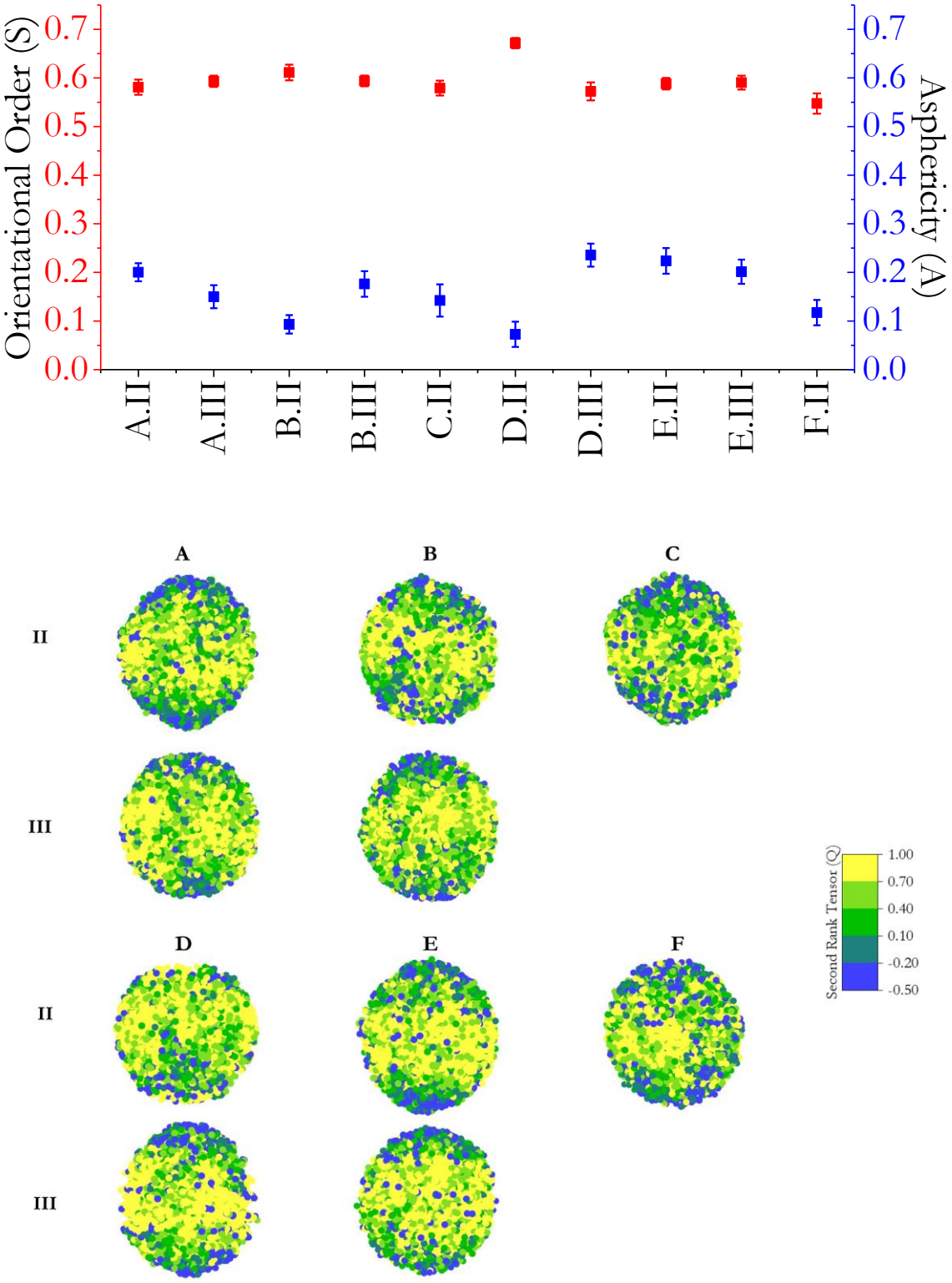

Figure S3. (top) Orientational orders (red) and asphericity (blue) and (bottom) map of LCs on droplets color-coded by their second rank tensor that were exposed to Group II and Group III nanoparticles.

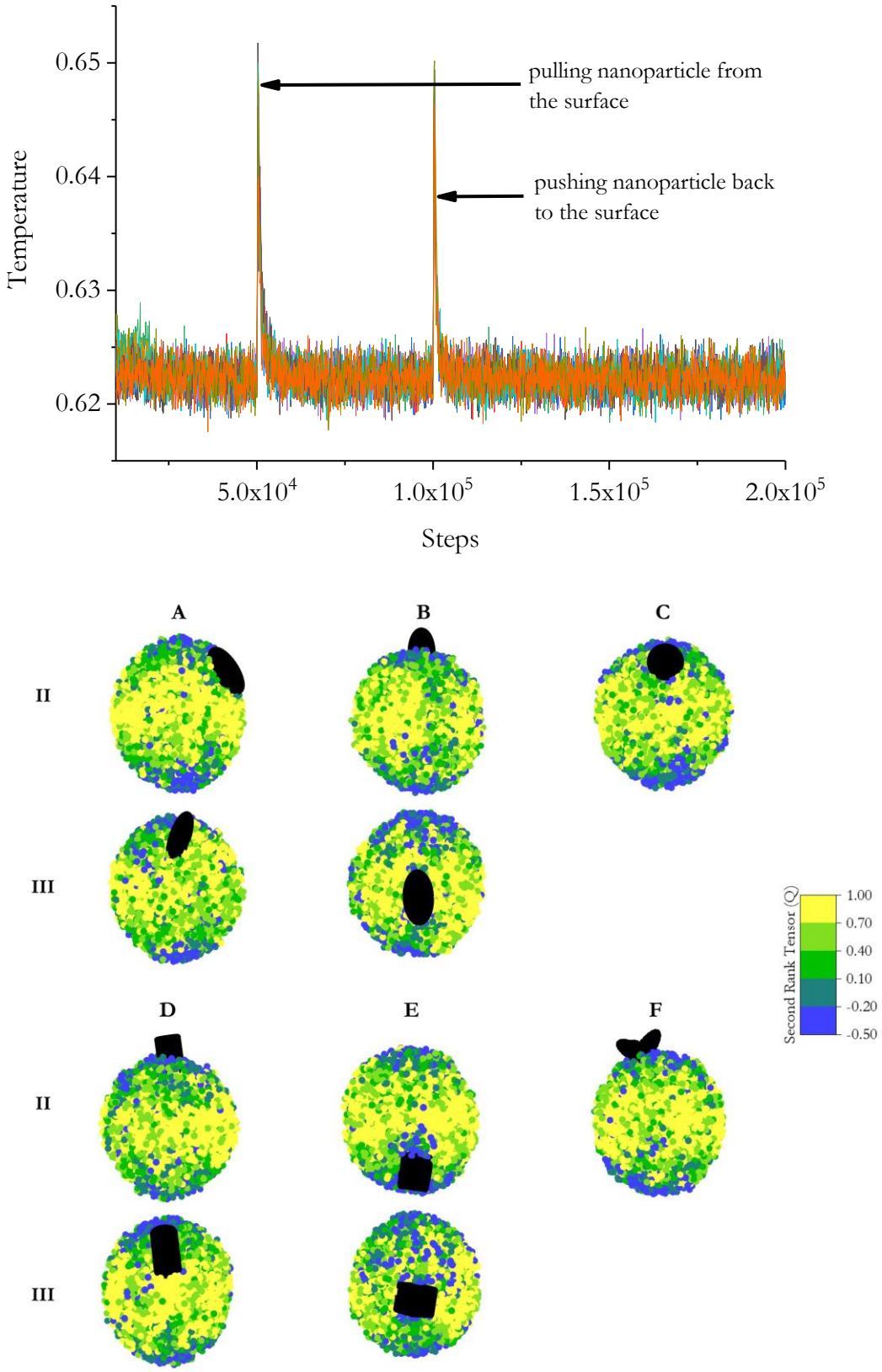

Figure S4. (top) Temperature oscillation during the manipulation of the particles. Graph contains all 10 Janus particles. (bottom) Simulation snapshots color-coded by second rank tensors of LC molecules. Snapshots are obtained after 3 million steps of simulations.