

Supplementary information

Anisotropic Mesoporous Silica/Microgel Core-Shell Responsive Particles

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Figure S1: SEM micrographs of silica (a) platelets, (b) primary particles and (c) rods from powder deposition on the stub

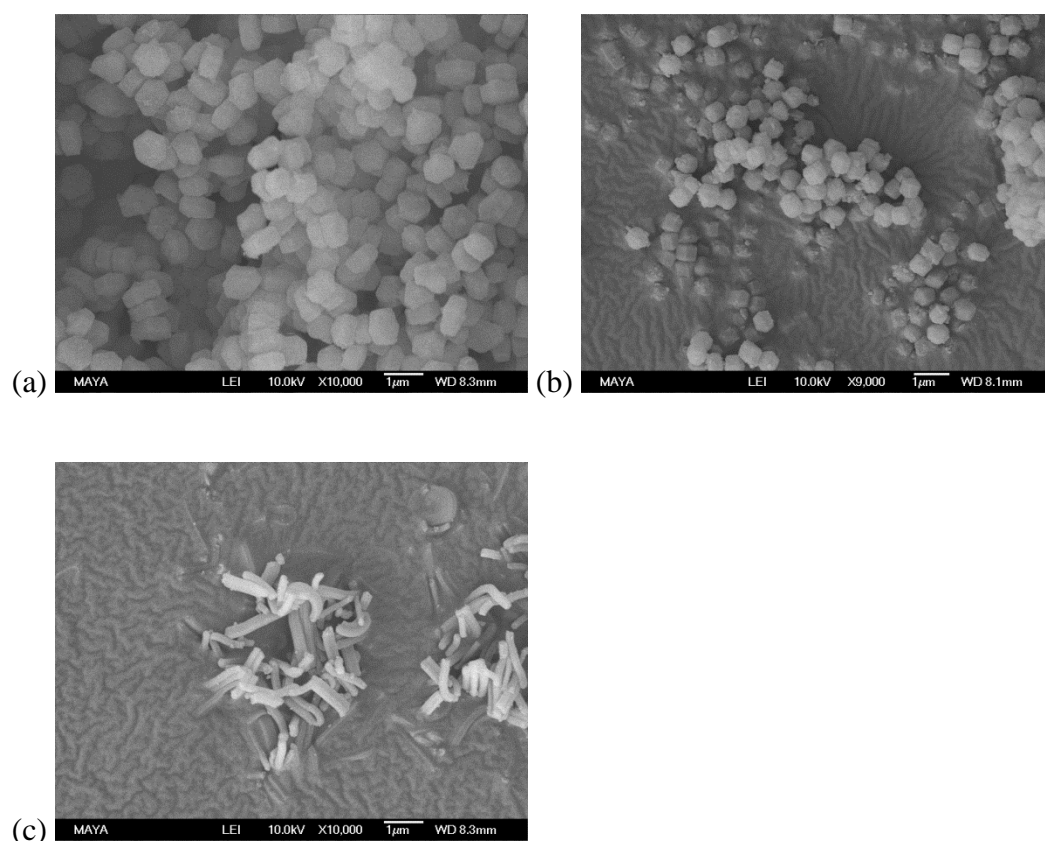


Figure S2: SEM micrographs of hybrid silica/PNIPAM (a) platelets, (b) primary particles and (c) rods from droplet deposition of a 0.2wt% suspension on a glass coverslip then deposited on the stub. The black arrows highlight the PNIPAM bridges between particles

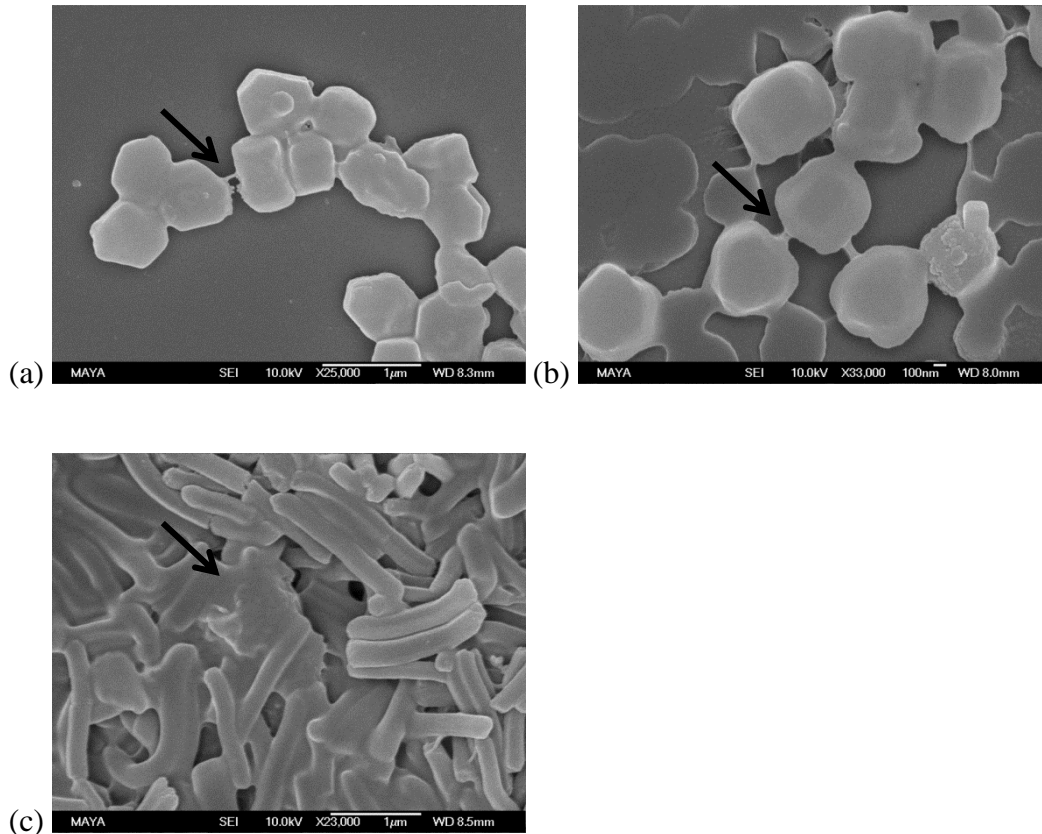
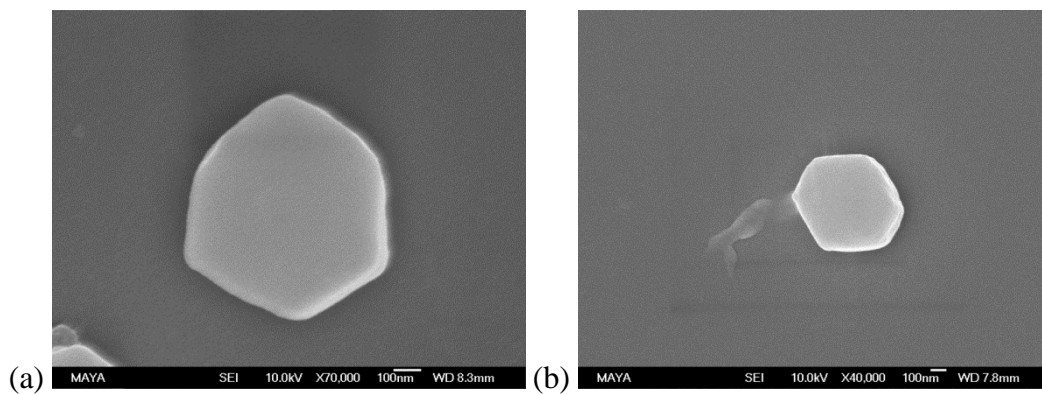


Figure S3: SEM micrographs of hybrid silica/PNIPAM (a) platelets, (b) primary particles and (c) rods obtained after spin-coating of suspensions of particles at 0.01 wt% on a glass surface.



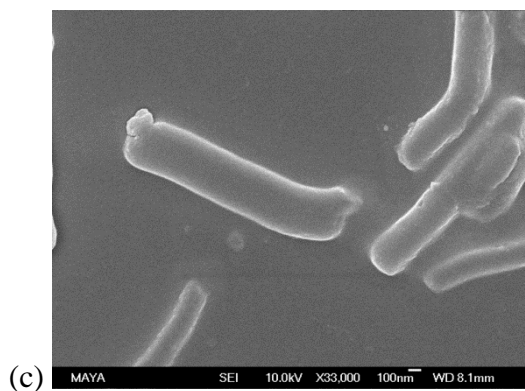
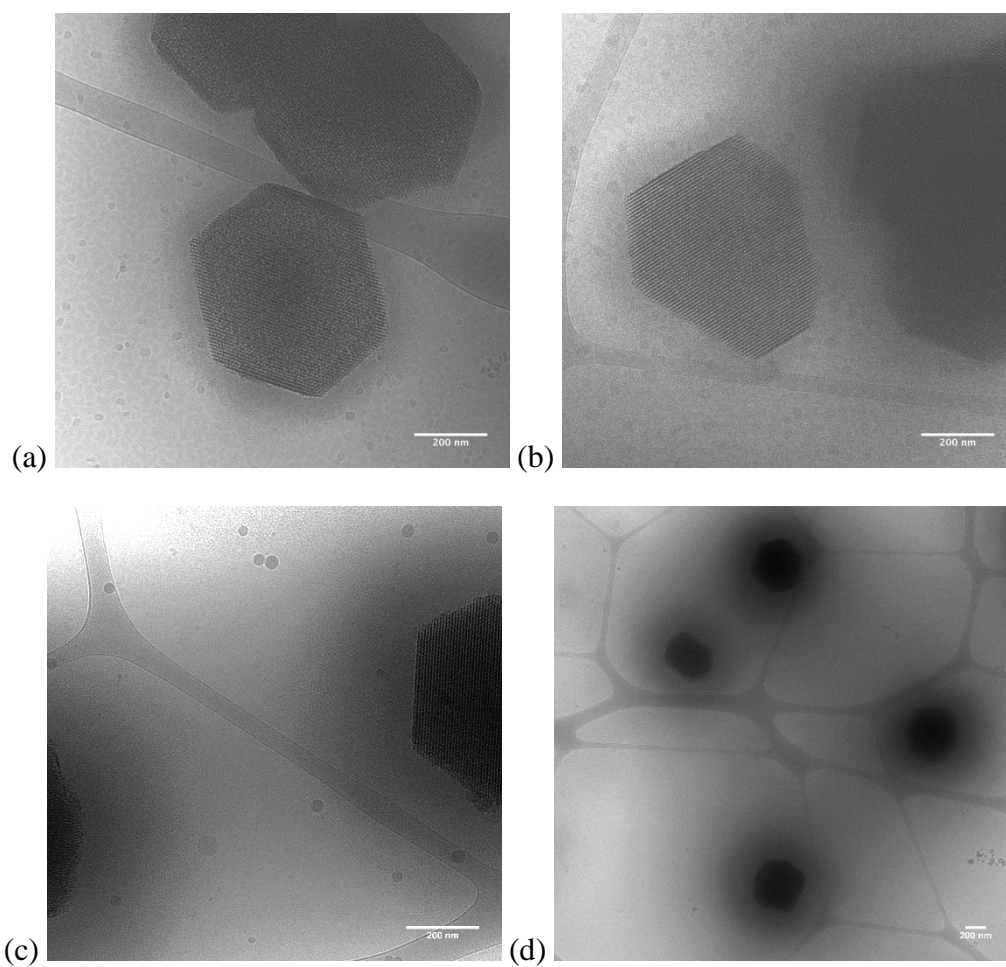


Figure S4: Cryo-TEM micrographs of hybrid silica/PNIPAM (a and b) platelets, (c and d) primary particles and (e and f) rods from dispersions at 0.2 wt% at 20°C.



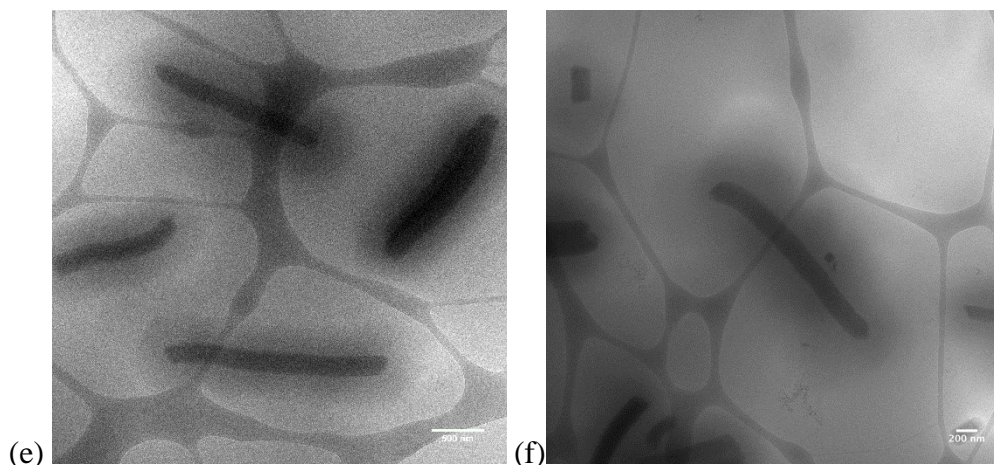
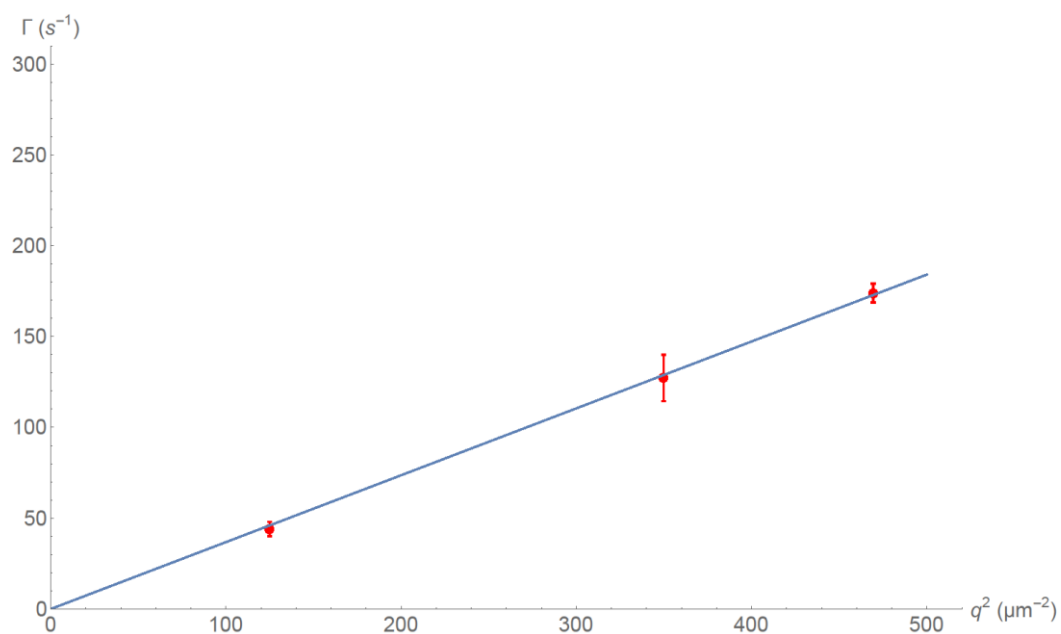


Figure S5: Plot of Γ versus q^2 , with Γ extracted using the second order cumulant analysis of the correlation function $g^I(\tau)$, obtained from DLS measurements at 50° ($q=11.18 \mu\text{m}^{-1}$), 90° ($q=18.70 \mu\text{m}^{-1}$) and 110° ($q=21.67 \mu\text{m}^{-1}$) for hybrid silica/PNIPAM rods at 18°C . The fit in blue gives the translational diffusion coefficient D_t ($\mu\text{m}^2.\text{s}^{-1}$) ($\Gamma = D_t q^2$)



Video S1: CLSM video of a suspension made of hybrid core-shell silica/PNIPAM rods at 2wt% and 25°C without electric field

Video S2: CLSM video of a suspension made of hybrid core-shell silica/PNIPAM rods at 2wt% and 25°C under an alternate electric field, with a field strength $E=50 \text{ kV/m}$ and

frequency $f=160$ kHz. The rods are aligned along the direction of the field, along the imaging plane.