Supporting Information

Influencing Colloidal Formation with Optical Traps
Ifat Jacob, Eitan Edri, Erel Lasnoy, Silvia Pipreno and Hagay Shpaisman*

Video files of the formation process of spherical and elongated colloids with an optical trap are attached (time accelerated X3).

Changes in Raman spectra for different cross-linker ratios (0% to 80%) of PDMS particles (that have not been manipulated with optical traps) are presented in Figure S1. The changes are expressed by the ratio between the Si-O stretching band (around 485 cm\textsuperscript{-1}) and the Si-C stretching band (around 698 cm\textsuperscript{-1}). As the cross linker ratio increases, the Si-C stretching band decreases (Si-O stretching band maxima was used for normalization for all spectra). This change is due to the lower amounts of Si-C bonds and higher Si-O bonds at high cross linker ratios.

![Raman Spectra](image)

**Figure S1:** Raman spectra of PDMS particles with different cross-linker ratios.

Additionally, we observe (Figure S2) a shift in the Si-O stretching band as a function of cross-linker ratio. The band shifts from 494 cm\textsuperscript{-1} for 0% cross-linker, to 477 cm\textsuperscript{-1} for 80% cross-linker.
Figure S2: Si-O stretching band shift as a function of cross-linker ratio.