Supporting Information

Femtosecond Laser Trapping Dynamics of Nanoparticles: A Single Transient Assembly Formation Leading to Their Directional Ejection

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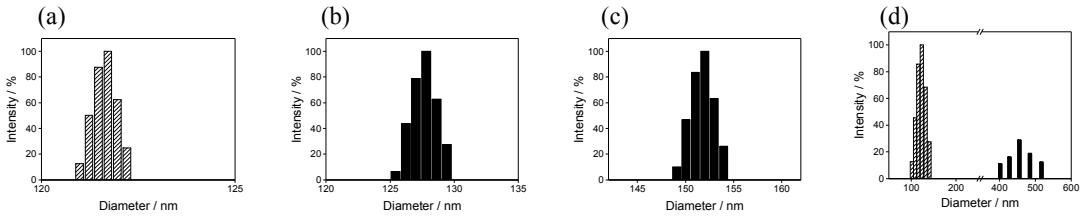

Fig. S1. The size distribution of (a) silica NPs-(100), (b) (OTES)-silica NPs-(100→130), (c) (OTES)-silica NPs-(100→150), and (d) (OTES)-silica NPs-(100→450). In Fig. (a) we found that the real size of NPs-(100) is about 120 nm, but here we write silica NPs-(100) as they are commercially labeled. In Fig. (d), two size distributions were found around 120 and 450 nm, where 120 nm is the original silica NPs-(100). Another one is ascribed to silanization of silica NPs-(100). After filtering out, some of (OTES)-silica NPs-(100→450) were removed because the pore size of the filter is close to their size, leading to the intensity is lower than that of Silica NPs-(100). The trapping experiments were carried out after the filtration. The unreacted silica NPs remaining in solution do not show the trapping and ejection behavior, the transient sphere-like swarm is ascribed to silanized silica NPs with the size of 450 nm.