Supplemental material: Probing the magnetic moment of FePt micromagnets prepared by Focused Ion Beam milling

I. FIXATION OF MAGNETIC RODS TO CANTILEVERS

The FePt rods can be attached to cantilevers in several orientations. Fig. S1(a) shows the orientation in which the rod and cantilever are attached when aiming for alignment between the out-of-plane direction of the FePt film and the direction of motion of the cantilever. This is the orientation which is suitable for cantilever magnetometry. In Fig. S1(b) the rod is attached with the out-of-plane direction of the film perpendicular to the direction of motion. Finally, Fig. S1(c) shows that by milling the rods out of the film in another geometry, it is possible to attach the rod with its long side along the width of the cantilever. The magnet studied in the paper was attached as in Fig. S1(a).

FIG. S1. (a) Orientation in which a FePt rod can be attached to a cantilever such that the out-of-plane direction of the film is along the direction of motion. (b) Orientation in which the FePt rod can be attached with the plane of the film along the direction of motion. The dashed line indicates the cantilever position. The plane of the FePt film is perpendicular to the flat side of the cantilever in this configuration. (c) A rod attached to a cantilever with the long side of the rod along the width of the cantilever.