Photothermally induced dynamics in partially coated loaded microcantilevers

SHOMEEK MUKHOPADHYAY, UMAR MOHIDEEN, University of California, Riverside — Cooling of microcantilevers in a Fabry-Perot cavity either by radiation pressure or using the photothermal effect has attracted significant attention lately. We present ongoing experimental results on partially coated microcantilevers which are either loaded (gold sphere) or have a coating only at the tip. In particular, we will compare the results with that of recent work on fully coated cantilevers.