

Fig. 1 (a) A top view of the fabricated periodic microstructures after Al<sub>2</sub>O<sub>3</sub>-Pt multilayer coating. Pitch and depth of microstructure is 800 nm and 170 nm, respectively. (b) Cross sectional view of the fabricated cylindrical microcavity coated with the multilayer taken by TEM.

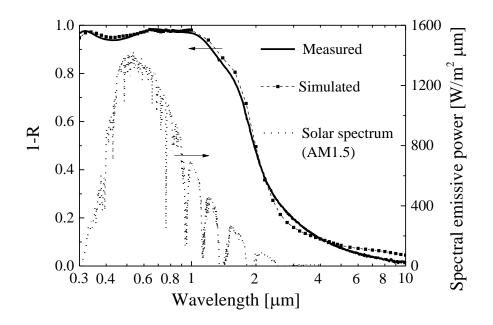


Fig. 2 Measured absorbance of cylindrical microcavity coated with multilayer at room temperature. Simulated results are shown by dashed line with square dots. In the simulation size of microcavity is *Pitch* = 0.8  $\mu$ m, *Aperture* = 0.6  $\mu$ m and *Depth* = 0.1  $\mu$ m, and each thickness of the multilayer is t<sub>top</sub>/t<sub>Pt</sub>/t<sub>bottom</sub> =55/4/50 nm. A dotted line shows the solar spectrum of AM1.5.