

## Co/Pt nanodot arrays formed via pulsed laser deposition by using (PS-*b*-PMMA) diblock copolymer template

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We have fabricated Co and Co/Pt nanodot arrays by using phase separated (PS-*b*-PMMA) diblock copolymer thin films as templates. Microphase separation of (PS-*b*-PMMA) diblock copolymer thin film and subsequent removal of PMMA resulted in the formation of hexagonal arrays of cylindrical hollows perpendicular to the surface with a diameter of 20 nm and the separation of 40 nm. Pulsed laser deposition technique was used to deposit Co and Co/Pt arrays onto Si substrates. The size and the separation of nanodots correspond to those of the templates used. The density of nanodots was estimated to be  $6 \times 10^{11}/\text{cm}^2$ . The composition of Co/Pt nanodots was varied and the resultant change of magnetization was measured by vibrating sample magnetometer and magnetic force microscope. The magnetization was enhanced with increase of the Pt composition.