



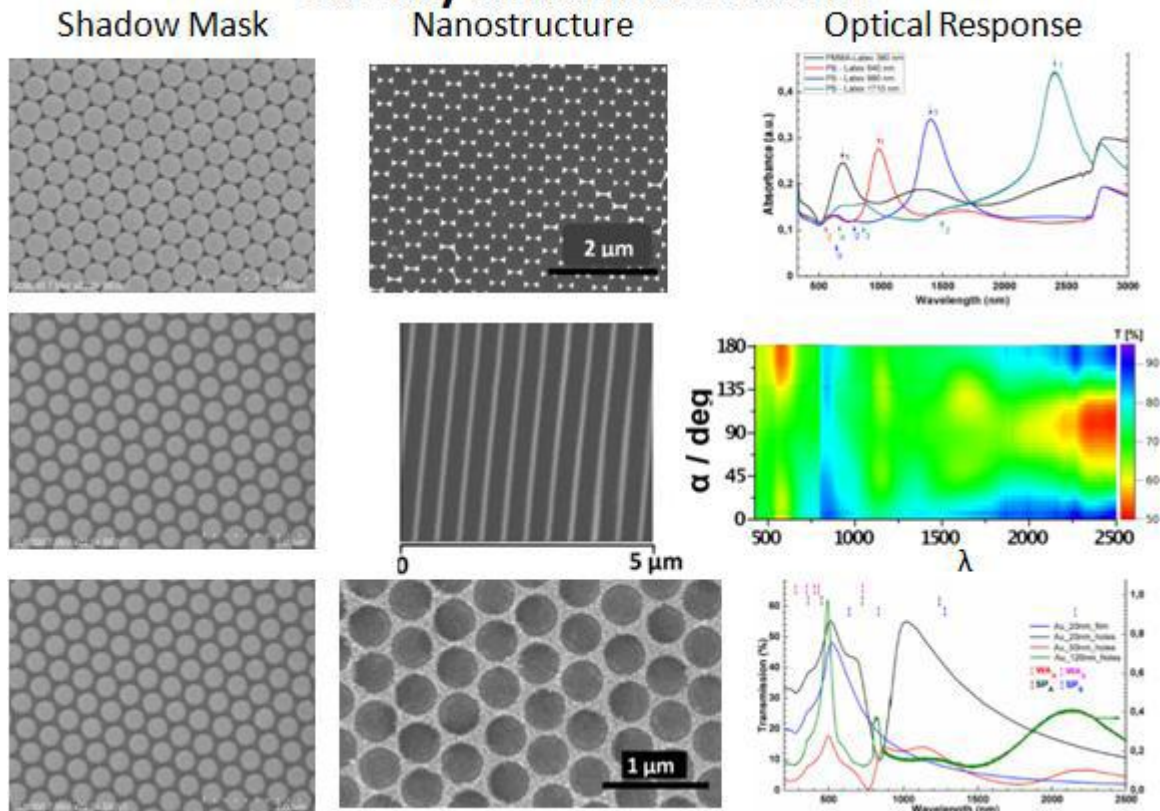
Electromagnetic waves interaction with various metallic nanomaterials

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In the last decade the possibility of active interaction of light with the nanosized plasmonic materials has been tremendously growth. The metallic nanoparticles can effectively confine the radiation to nanoscale in the proximity of Plasmon resonance whereby the position of this resonance is controlled by the morphology (size and shape) of the nanostructures. In this lecture we will discussed the physical and chemical preparations methods of various nanostructures and their structural and optical characterization.

Gallery of Nanostructures



References:

- [1] A. Kosiorek, W. Kandulski, P. Chudzinski, K. Kempa, and M. Giersig, **NanoLetters** 4, 7, 1359–1363, **2004** [2] A. Kosiorek, W. Kandulski, H. Glaczynska, M. Giersig, **Small** 1, 4, 439-444, **2005** [3] P. Patoka, T. Skeren, M. Hilgendorff, K. Kempa and M. Giersig, **Small** 7, 21, 3096-3100, **2011** [4] P. Patoka and M. Giersig, **J. Mater. Chem.**, 21, 16783-16796, **2011** [5] P. Patoka, T. Sun, M. Giersig and K. Kempa, **Advanced Materials** 24, 22, 3042-3045, **2012**