Gold nanocones fabricated by nanotransfer printing and their application for field emission

Arrays of gold nano-cones can be fabricated by nanotransfer printing (nTP) method and we utilize these nano-cones for field emission. By nature of the printing, any shape of metal structure can be fabricated only at desired locations and step-and-repeat process, which enables large area fabrication, is possible. We demonstrate step-and-repeat printing with gold nano-cone patterns occupying an area of 9 mm× 8 mm.