

Electronic Supplementary Information

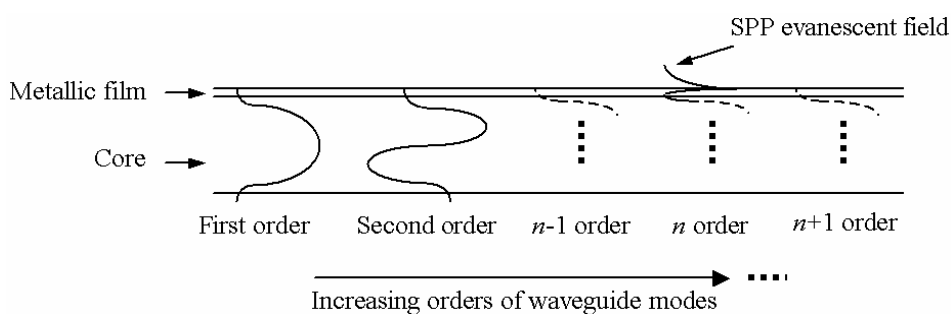


Fig. S1 Waveguide propagation modes and the excitation of SPP evanescent field at a particular mode.
(Discussed in the “Experimental procedures / Waveguide consideration” section)

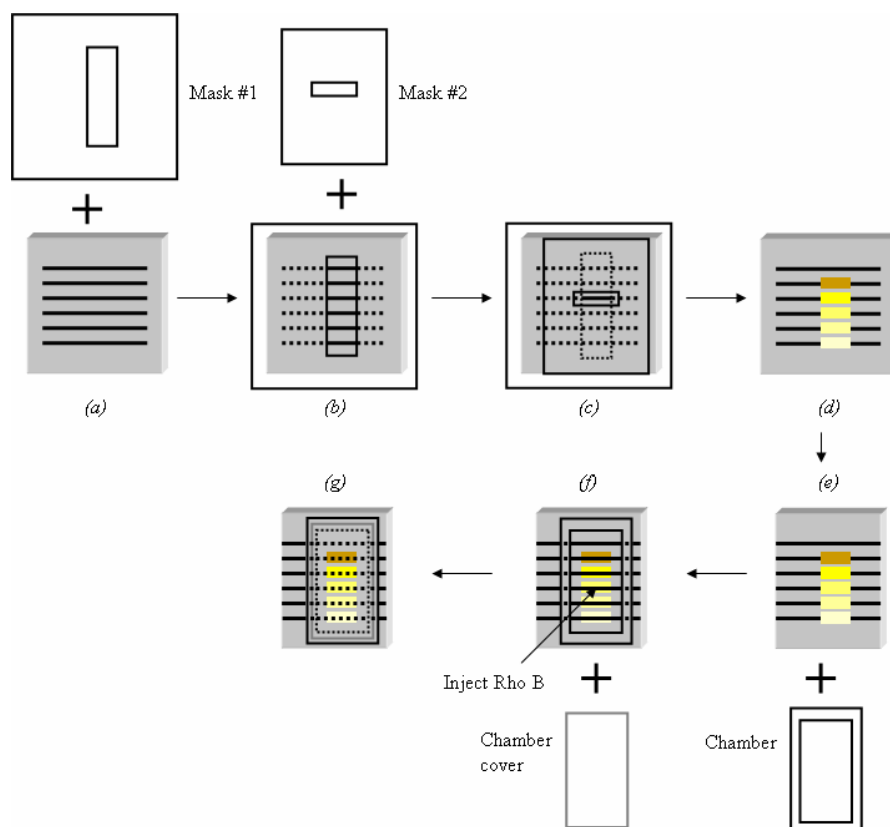


Fig. S2(a)–(d) Procedures for depositing various metallic films on waveguides;
Fig. S2(e)–(g) Fluorescence chamber and waveguide microchip integration
(Discussed in the “Metallic film deposition” section)

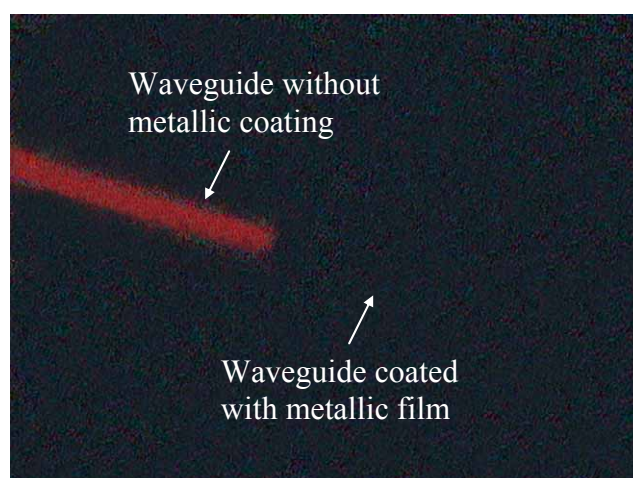


Fig. S3 CCD image of a waveguide with water on its surface, where the waveguide is bare on the left and coated with a 30 nm silver – 20 nm gold metallic film on the right.
(Discussed in the “Fluorescence behaviour of polymers” section)

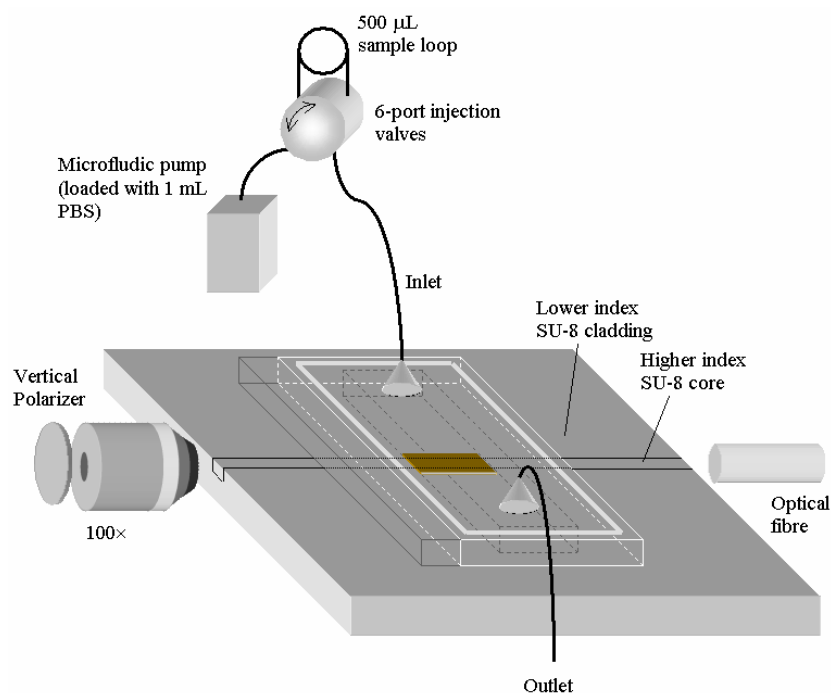


Fig. S4 Instrumental setup for transmittance measurement, as BSA solutions of different concentrations are flowed across the metal sensing surface.
(Discussed in the “Potential for sensing applications: Transmittance study of BSA solutions” section)