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Electronic Supplementary Information

All-thermoplastic nanoplasmonic microfluidic device for transmission SPR biosensing

Lidija Malic,[a] Keith Morton,[a] Liviu Clime[a] and Teodor Veres[a,b]*

Received (in XXX, XXX) Xth XXXXXXXXX 20XX, Accepted Xth XXXXXXXXX 20XX
DOI: 10.1039/b000000x

The abstract should be a single paragraph which summarises the content of the article.

Supplementary Information

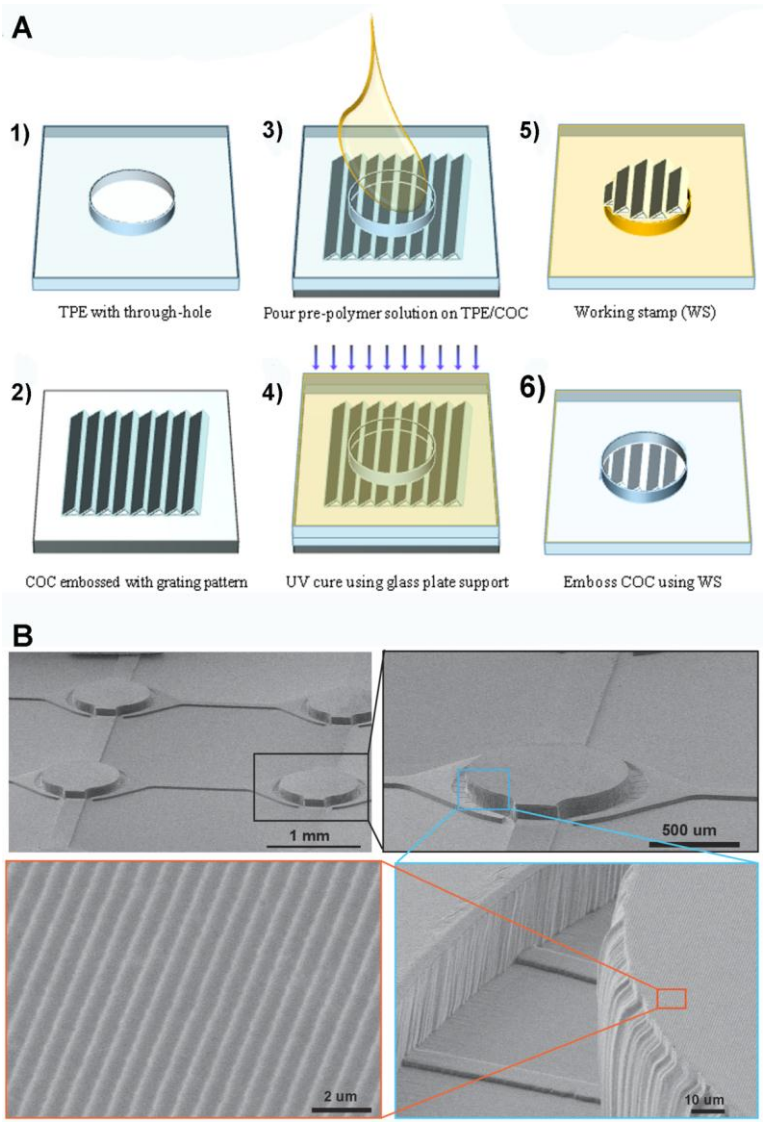

Fig.S1 (a) Fabrication process for integrated NMF biosensor (b) SEM images of a working stamp used to hot emboss NMF devices

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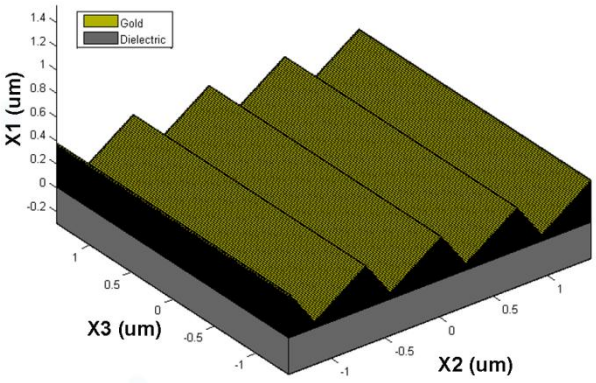

Fig.S2 Sample geometry of the blazed nanograting structure implemented in Matlab and used for numerical modelling via RCWA (GdCalc™)

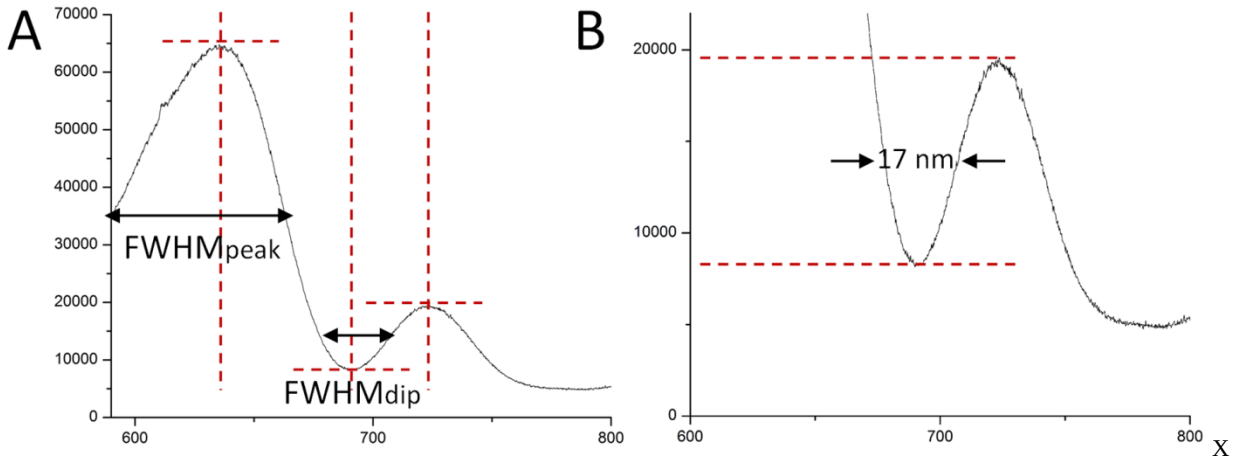

Fig.S3 (a) Definition of the FWHM for the dip and the peak and (B) Calculated FWHM value for the second transmission minimum at normal incidence for water sample

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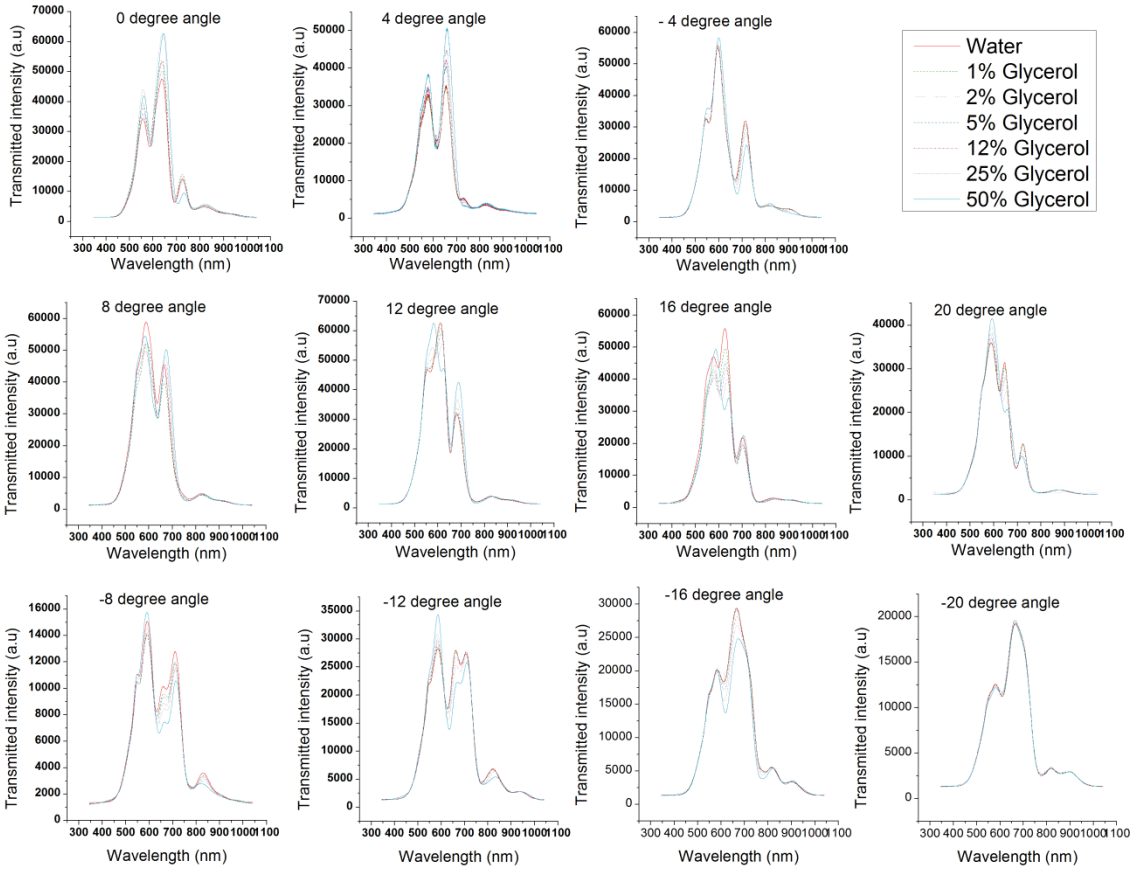

Fig.S4 Recorded transmission spectra for varying incident angles (-20° to 20°) at different glycerol concentrations (1% to 50%).

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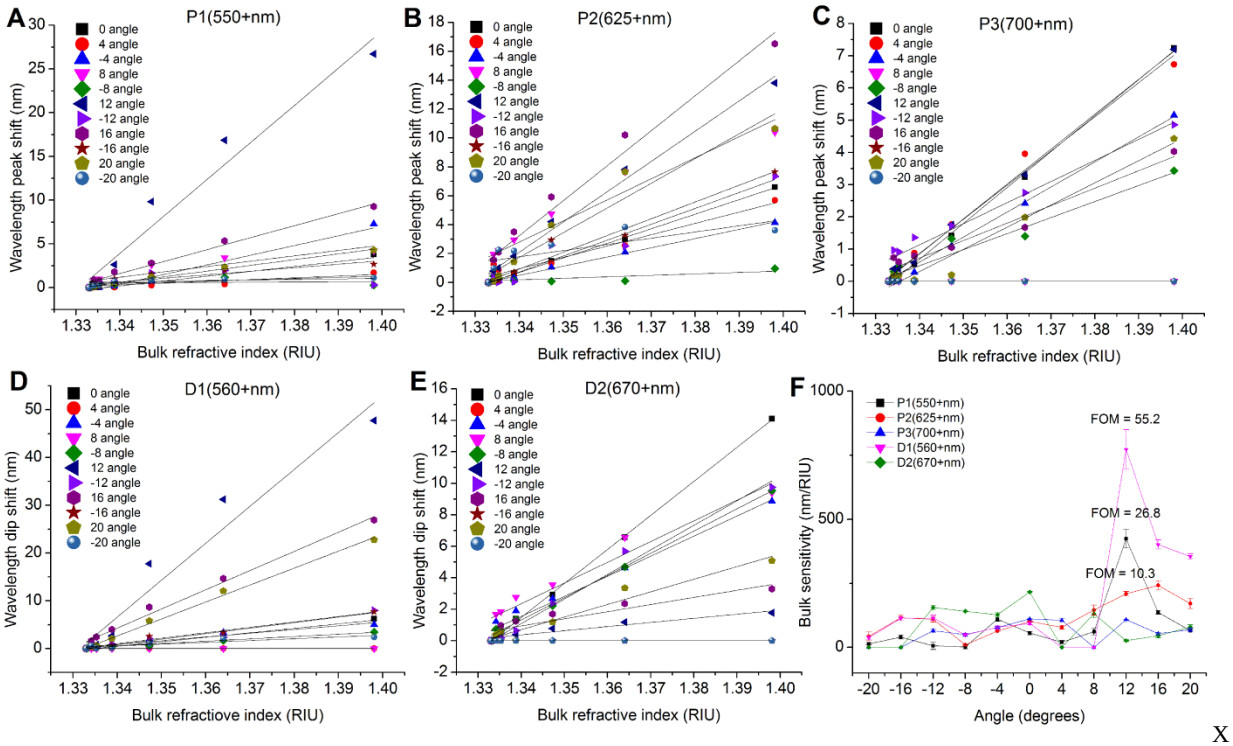

Fig.S5 (a-e) Resonant wavelength shift as a function of sample rotation angle (incidence angle) for each of the resonant wavelengths (peaks and dips). The symbols represent the experimental data and the line is a best fit using linear regression. Zero points correspond to polarizations where the SPRs are not excited and thus no fit could be performed. (f) The sensitivity of the blazed grating as a function of incident angle taken as a linear regression slope for the refractive index dependence at different resonant wavelengths in (a-e).

Notes and references

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