

Supplementary

Composite Metal Oxide Nanopowder-Based Fiber-Optic Fabry–Perot Interferometer for Protein Biomarker Detection

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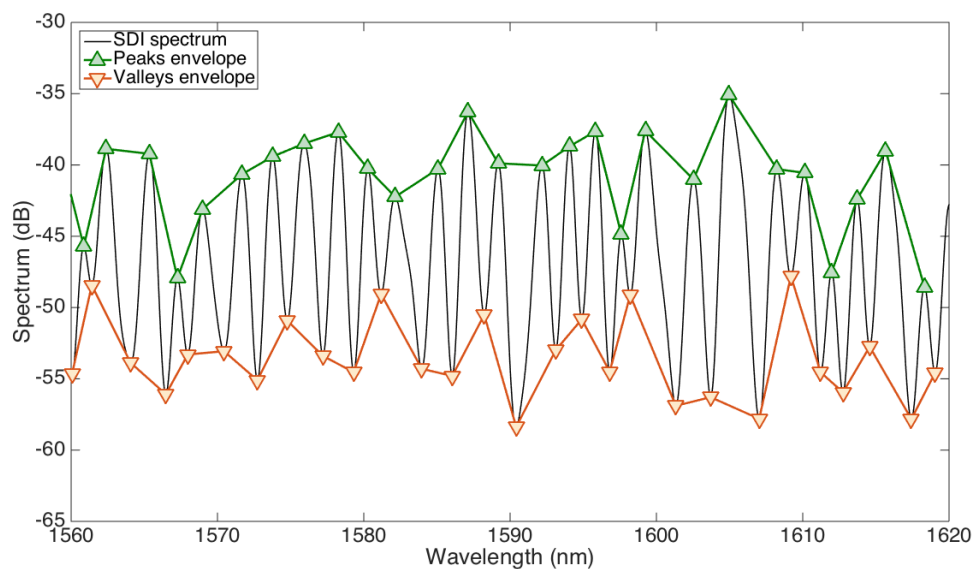


Figure S1. Envelope used to evaluate all the peaks/valleys of the SDI spectrum with peak prominence > 1.5 dB.

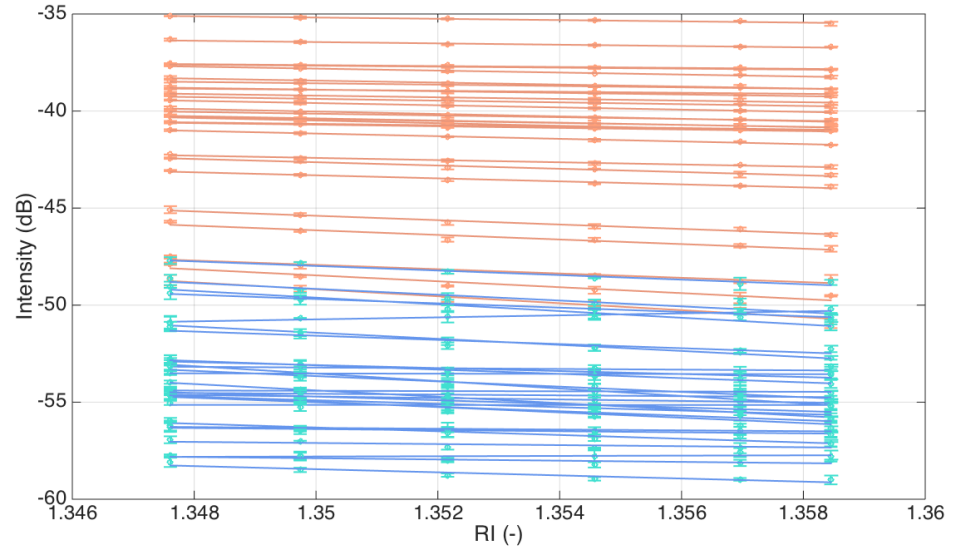


Figure S2. Method for calculation of the RI sensitivity for SDI sensors. The chart shows, for each spectral feature identified in the envelope of the spectrum (red = peaks; blue = valleys), the intensity (mean st. dev. of 3 measurements) and the linear regression to estimate the RI sensitivity.

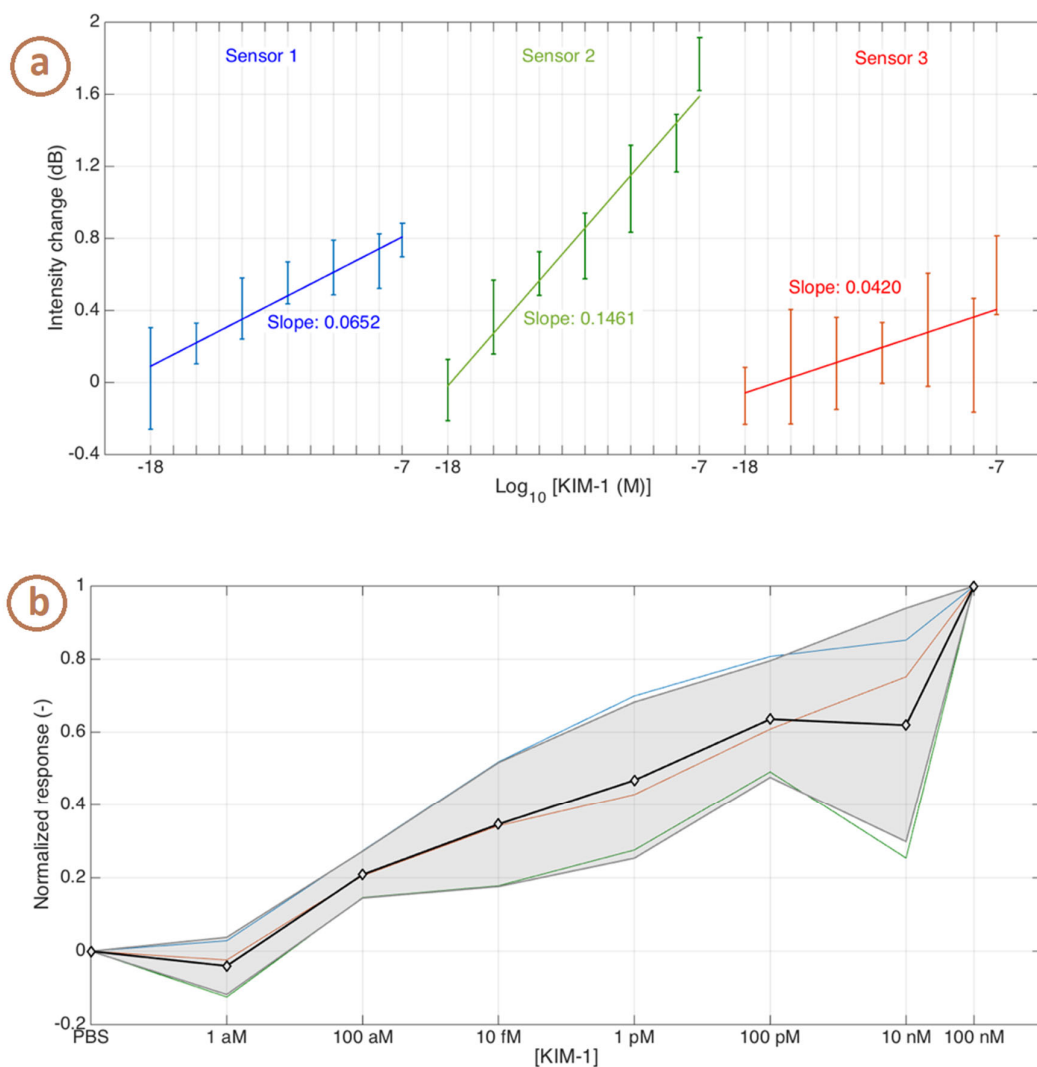


Figure S3. (a) Reproducibility analysis, showing the response and the sensitivity of 3 biosensors undergoing the same functionalization and measurement of KIM-1 in PBS buffer; **(b)** Reproducibility analysis, showing the normalized response of three biosensors for various concentrations of KIM-1 protein. The response is normalized (0 = PBS; 1 = KIM-1 max. concentration, 100 nM). Colored lines = mean responses of each sensor; black line: mean value of the response; shadowed region: standard deviation).