Hyperbolic Graded index Biophotonic Cholesterol Sensor with improved Sensitivity

Diptimayee Dash[a], and Jasmine Saini[a]

[a] Department of Electronics & Communication Engineering, Jaypee Institute of Information Technology, Noida, Uttar Pradesh, India-201309
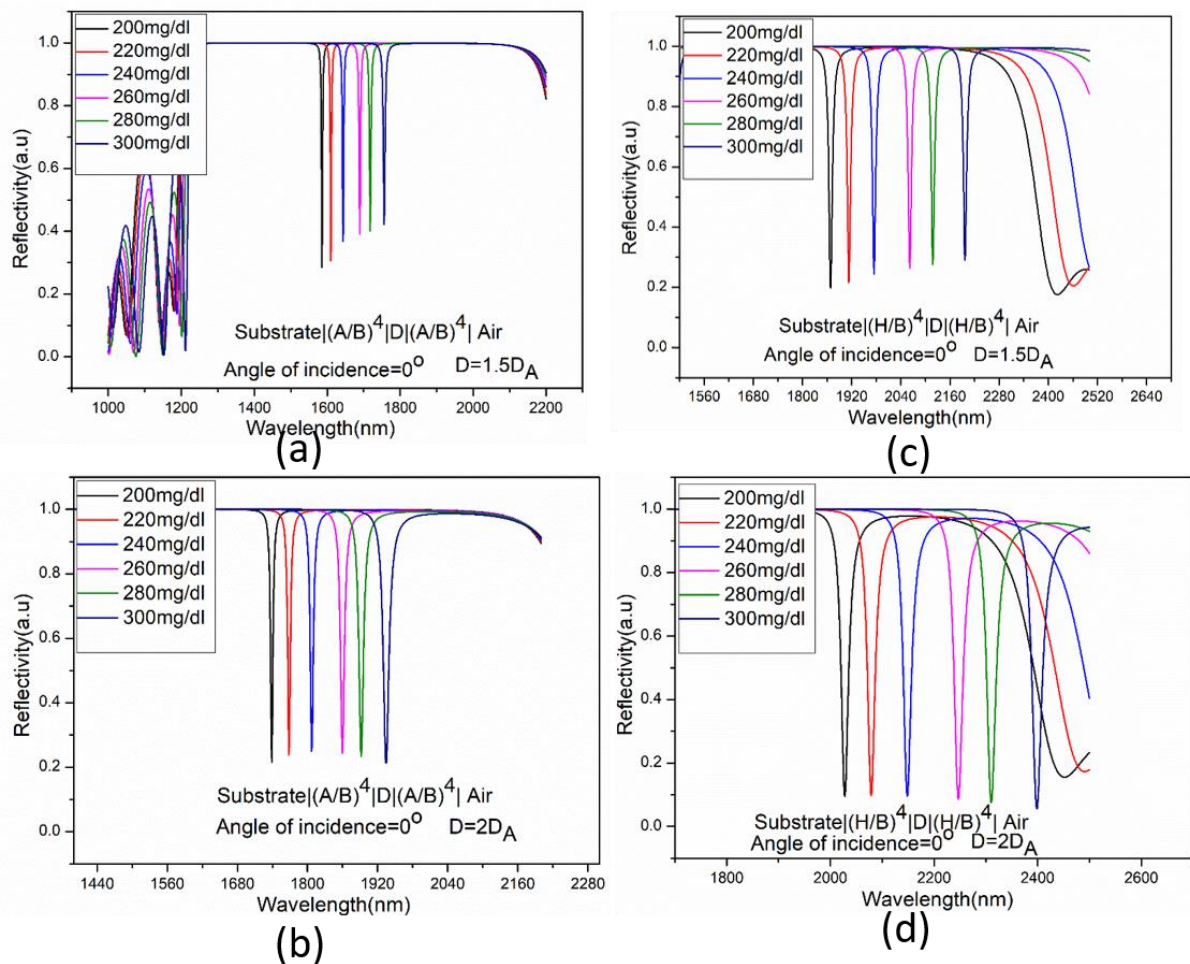
Fig. S1: Effect of varying defect layer thicknesses on sensitivity for the structure **Substrate/(A/B)^4 /D /(A/B)^4 /Air**, (a) D = 1.5D$_A$, (b) D = 2D$_A$ And for **Substrate/(H/B)^4 /D /(H/B)^4 /Air** (c) D = 1.5D$_A$, and (d) D = 2D$_A$. With incidence angle 0 degrees
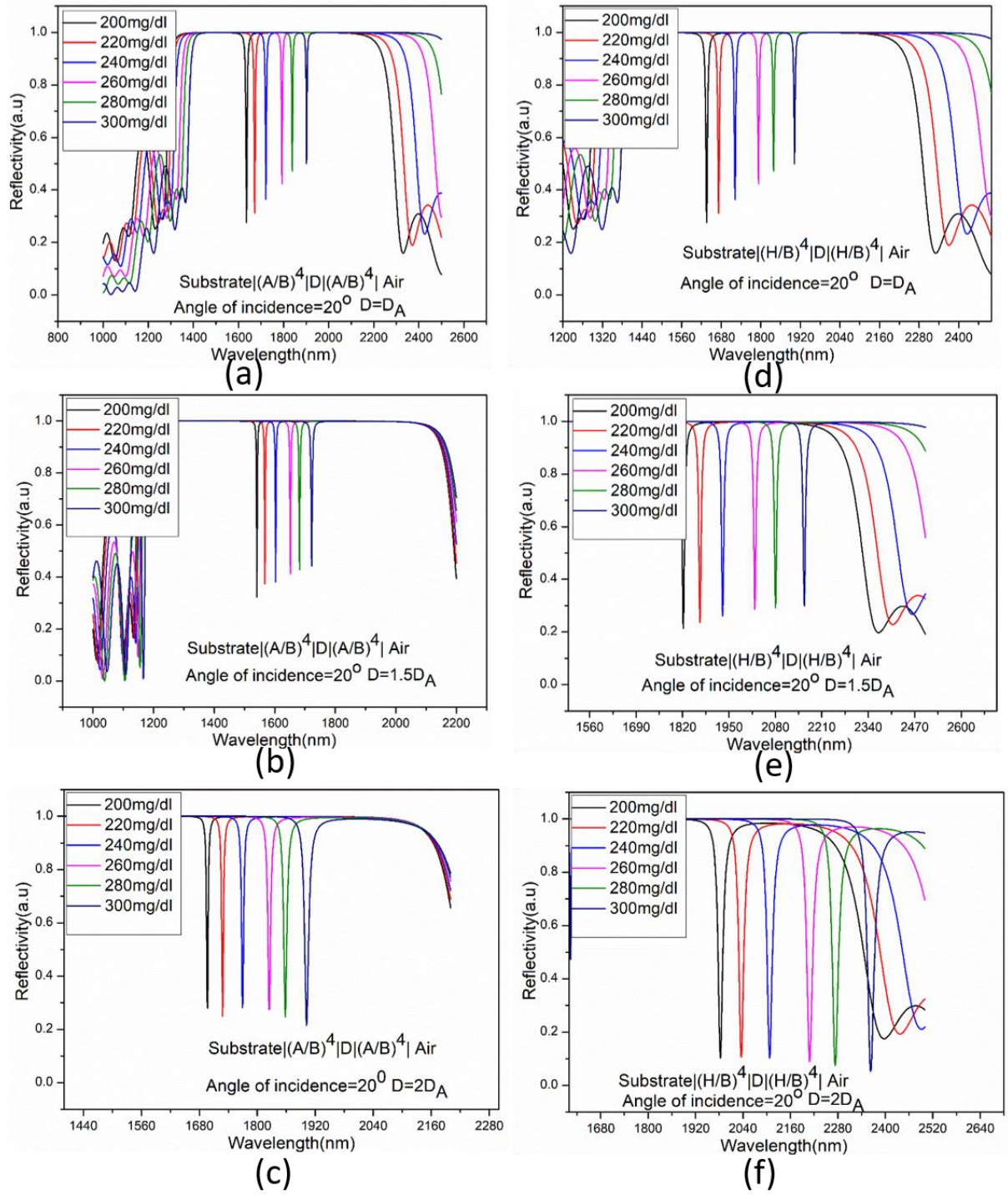
Fig. S2: Effect of varying defect layer thicknesses on sensitivity for the structure **Substrate/(A/B)⁴ /D /(A/B)⁴ /Air**, (a) $D = D_A$, (b) $D = 1.5\ D_A$, (c) $D = 2D_A$ and for **Substrate/(H/B)⁴ /D /(H/B)⁴ /Air** (d) $D = D_A$, (e) $D = 1.5\ D_A$, and (f) $D = 2\ D_A$. With incidence angle 20 degrees
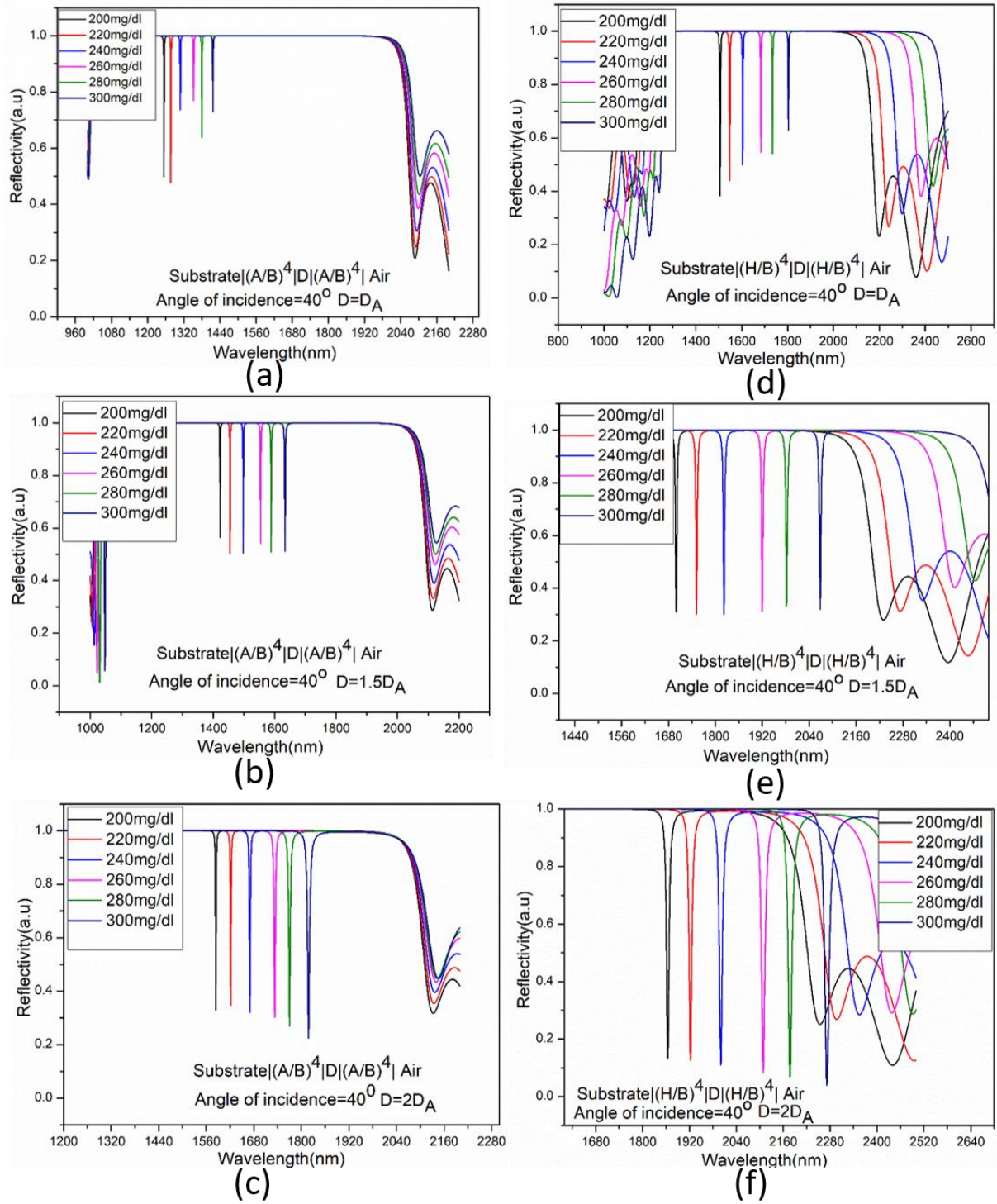
Fig. S3: Effect of varying defect layer thicknesses on sensitivity for the structure **Substrate/(A/B)^4 /D /(A/B)^4 /Air,** (a) D = D$_A$, (b) D = 1.5 D$_A$, (c) D =2D$_A$ and for **Substrate/(H/B)^4 /D /(H/B)^4 /Air** (d) D = D$_A$, (e) D =1.5 D$_A$, and (f) D = 2 D$_A$. With incidence angle 40 degrees