

Ultrasensitive Surface Plasmon Resonance Biosensor Using Blue Phosphorus-Graphene Architecture

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Supplementary Table

Table S1 The obtained phase detection sensitivity by slightly varying the SPR angle in an increment of ± 0.01 degree

Angle shift	Incident angle	$\Delta\phi_d$	Sensitivity (degree/RIU)
-0.10°	54.7152°	2.5686°	2.1405×10^3
-0.09°	54.7252°	2.5668°	2.1390×10^3
-0.08°	54.7352°	2.5649°	2.1374×10^3
-0.07°	54.7452°	2.5625°	2.1354×10^3
-0.06°	54.7552°	2.5591°	2.1326×10^3
-0.05°	54.7652°	2.5538°	2.1282×10^3
-0.04°	54.7752°	2.5441°	2.1201×10^3
-0.03°	54.7852°	2.5233°	2.1027×10^3
-0.02°	54.7952°	2.4661°	2.0551×10^3
-0.01°	54.8052°	2.1488°	1.7907×10^3
0.00°	54.8152°	176.7661°	1.4731×10^5
0.01°	54.8252°	177.1151°	1.4760×10^5
0.02°	54.8352°	177.1479°	1.4762×10^5
0.03°	54.8452°	177.1205°	1.4760×10^5
0.04°	54.8552°	177.0469°	1.4754×10^5
0.05°	54.8652°	176.9012°	1.4742×10^5
0.06°	54.8752°	176.5839°	1.4715×10^5
0.07°	54.8852°	175.5558°	1.4630×10^5
0.08°	54.8952°	23.5770°	1.9648×10^4
0.09°	54.9052°	0.6554°	5.4613×10^2
0.10°	54.9152°	1.4963°	1.2469×10^3

Supplementary Figure

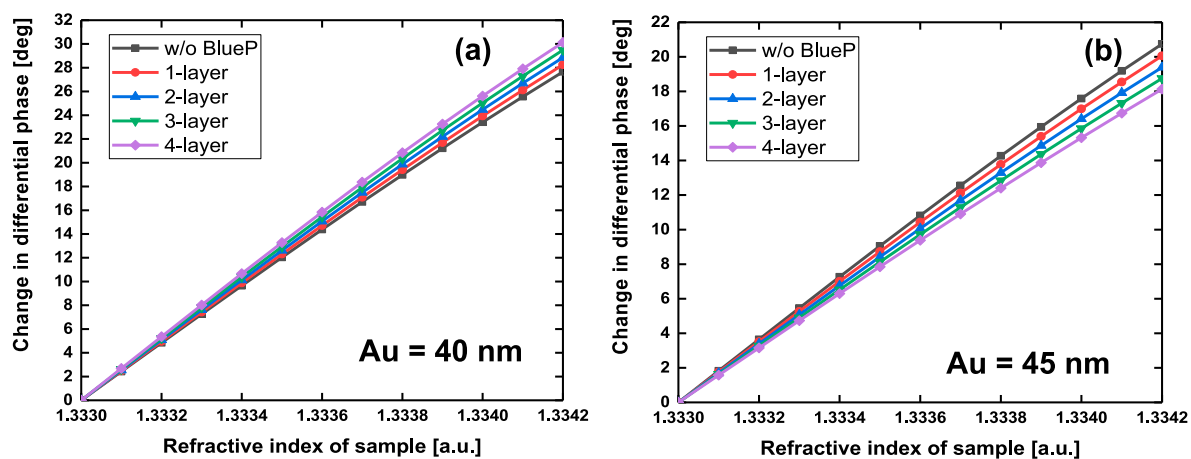


Figure S1. Change in differential phase with respect to the variation in local refractive index of sensing interface by modulating the numbers of BlueP interlayer and the thickness of Au film: (a) 40 nm, and (b) 45 nm, respectively.