

Correlating Nanorod Structure with Experimentally Measured and Theoretically Predicted Surface Plasmon Resonance [*ACS Nano*, **2010**, 4, 5453–5463]. Abrin L. Schmucker, Nadine Harris, Matthew J. Banholzer, Martin G. Blaber, Kyle D. Osberg, George C. Schatz*, and Chad A. Mirkin*

Supporting Information. In the supporting information of our paper,¹ a numerical error was found in the model used to calculate the f-Factor in the “Fitted Model Derivation.” On page 6, Figure S3 should be replaced with:

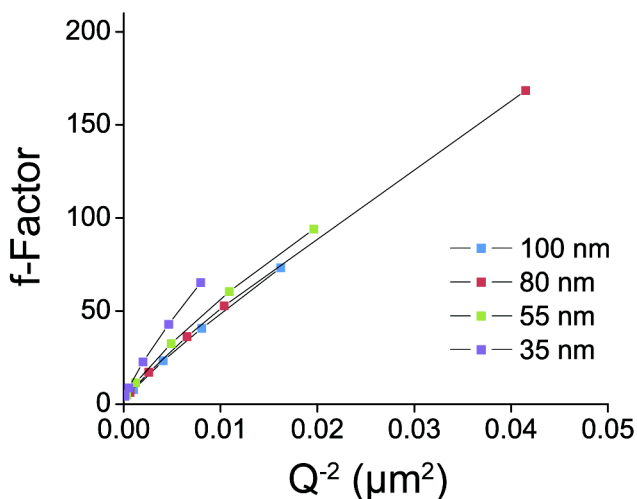


Figure S3. Graph of f-Factor as a function of $1/Q^2$ for rod diameters of 35 nm, 55 nm, 80 nm, and 100 nm. Note: For the model, the rod diameters were converted to microns.

On page 6, immediately beneath equation S6, “ $\gamma = -6.034$ ” should be changed to “ $\gamma = -3.407$.” In the last paragraph on page 6, the portion of the paragraph, “. . . is easily rationalized because Encina considered rods with diameters smaller than the minimum rod diameter within this study (35 nm). Consequently, one would expect their f-intercept to have a lower value if the range of the model were increased to include these smaller structures.” should be replaced with “. . . however, one would not expect both derived values to be the same because not only were different dielectric tables used to calculate the f-factors (Frederikse and Weaver as compared to Palik), but different ranges of both rod diameter and lengths were considered.”

Further, on page 7, Figure S4 should be replaced with:

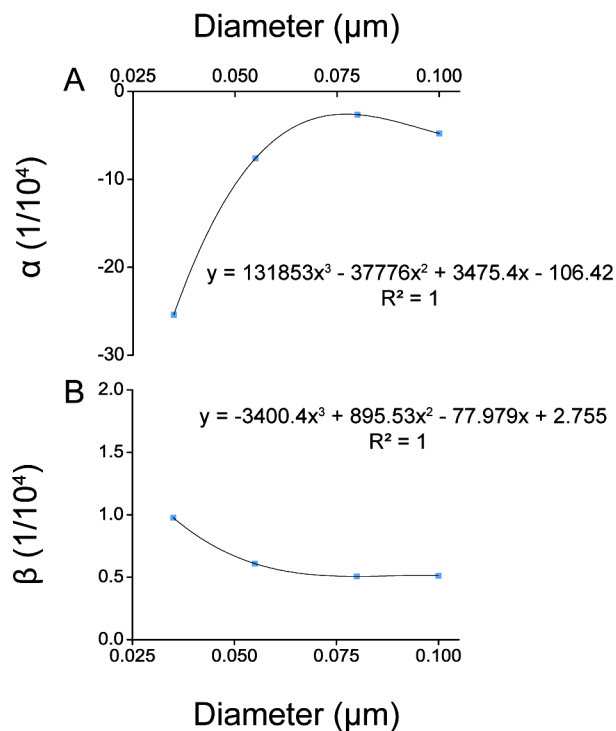


Figure S4: A) α plotted as a function of rod diameter (μm). B) β plotted as a function of rod diameter.

On page 7, immediately following equation S7, the sentence, “. . . where $A = 233588$, $B = 66924$, $C = 6157$, and $D = 188.53$ ” should read “. . . where $A = 131853$, $B = 37776$, $C = 3475.4$, and $D = 106.42$.” Immediately following equation S8 on page 7, the sentence, “. . . where $E = 6025.7$, $F = 1586.8$, $G = 138.17$, and $H = 4.881$.” should read “. . . where $E = 3400.4$, $F = 895.5$, $G = 77.979$, and $H = 2.755$.” The first sentence in the last paragraph on page 7, which reads, “Substituting equations 2 and 3 into equation 1 . . .” should read “Substituting equations S7 and S8 into equation S6 . . .”

On page 8, Figure S5 should be replaced with:

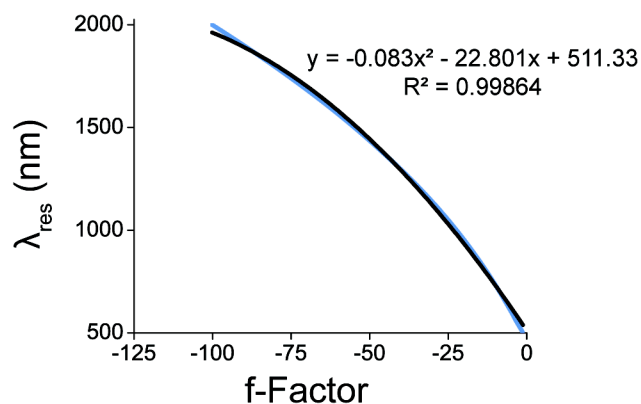


Figure S5: Resonance position as a function of f-Factor. These values are taken from an interpolated data table from Weaver and Frederikse.

On page 8, immediately following equation S9, the sentence, “. . . where $I = -0.02646$, $J = -12.87$, and $K = 511.33$.” should be changed to, “. . . where $I = -0.083$, $J = -22.801$, and $K = 511.33$.” On page 9, the Au-Palik LSPR in Table S4, for Aspect Ratio 2:1, Dimensions 160-80, should read “870” as opposed to “860.”

On Page 10, Figure S6 should be replaced with:

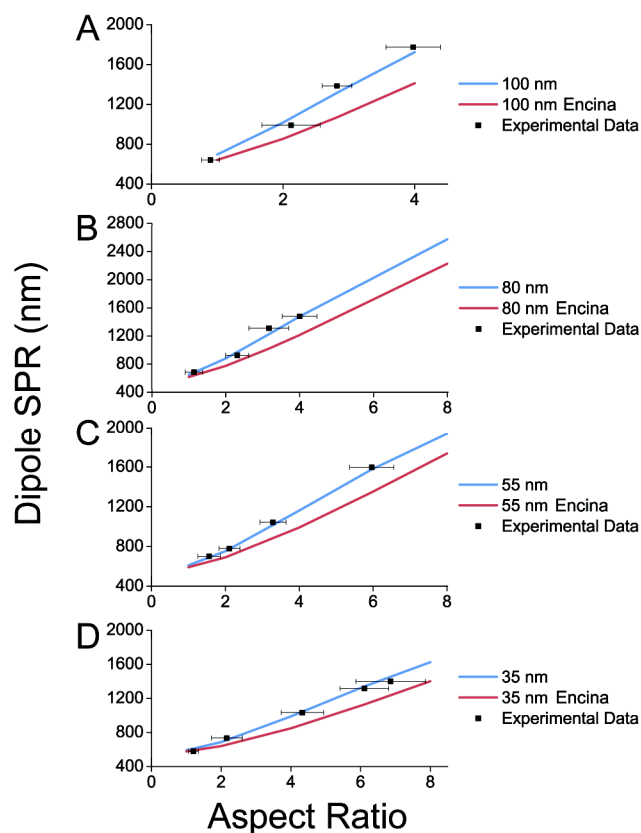


Figure S6. Experimental data plotted against our proposed model and that of Encina and coworkers for A) 100 nm, B) 80 nm, C) 55 nm, and D) 35 nm.

On pages 10 and 11, the MLWA LSPR values listed in Table S5 are incorrect and Table S5 should be changed to:

Aspect Ratio	Diameter (nm)	DDA LSPR (nm)	MLWA LSPR (nm)	Electrostatic LSPR (nm)
8.0	35	1628	1298	1205
4.0	100	1720	1221	787
	80	1472	1064	787
	55	1178	912	787
	35	1004	835	787
2.0	100	1016	802	599
	80	894	719	599
	55	768	649	598
	35	700	617	598
1.0	100	676	608	530
	80	636	570	528
	55	600	543	527
	35	580	531	527

Reference

- (1) Schmucker, A. L.; Harris, N.; Banholzer, M. J.; Blaber, M. G.; Osberg, K. D.; Schatz, G. C.; Mirkin, C. A. *ACS Nano*, **2010**, 4, 5453–5463.