

Correction

Correction: Bonyár, A. Maximizing the Surface Sensitivity of LSPR Biosensors through Plasmon Coupling—Interparticle Gap Optimization for Dimers Using Computational Simulations. *Biosensors* 2021, 11, 527

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1. Error in Figure/Table

In the original publication [1], there was a mistake in *Figures 3 and 6* as published. The unit of D/D_0 (in the axes labels) is indicated as (nm), while it should correctly be dimensionless (-). The mistake only involves the figures; in the text and in the figure captions D/D_0 , was always correctly referred to as dimensionless. The corrected *Figures 3 and 6* appear below.

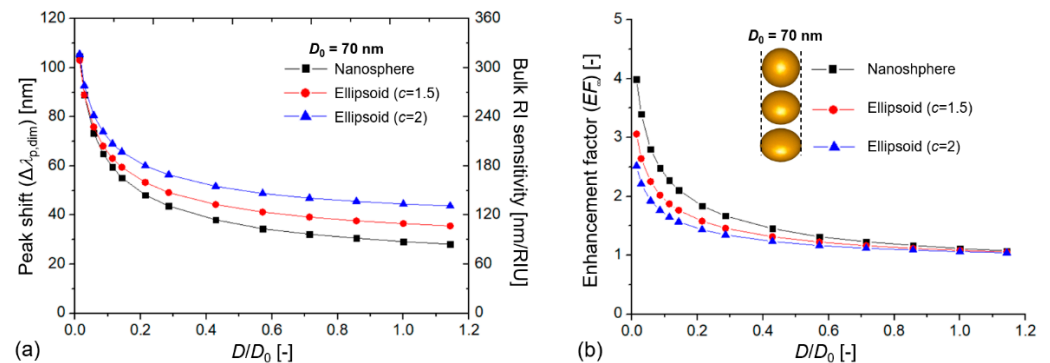


Figure 3. (a) Extinction peak shift of coupled plasmonic dimers ($\Delta\lambda_{p,dim}$) and their calculated bulk refractive index sensitivity (RIS) as a function of the dimensionless D/D_0 value, where D is the interparticle distance, and D_0 is the particle diameter ($D_0 = 70$ nm). (b) Calculated bulk enhancement factor (EF_∞) values compared to single, uncoupled particles with the same size as a function of D/D_0 .

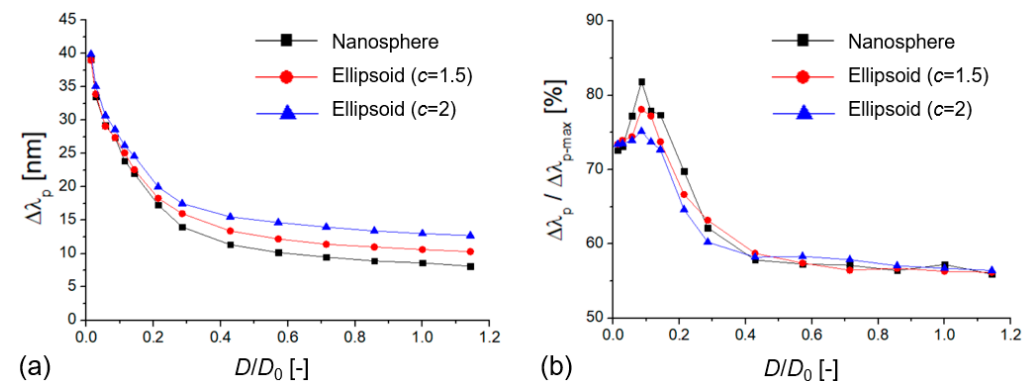


Figure 6. Cont.



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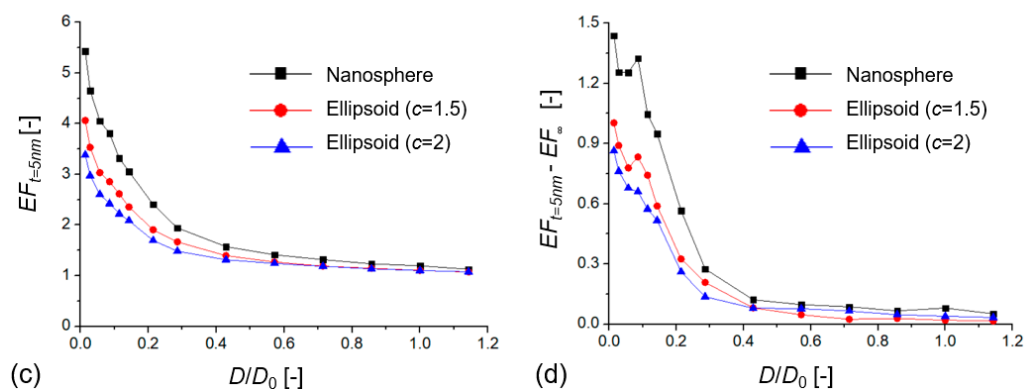


Figure 6. (a) Extinction peak shift ($\Delta\lambda_p$) of different dimer arrangements as a function of the dimensionless D/D_0 value ($D_0 = 70$ nm) with a dielectric layer of 5 nm ($n_1 = 1.5$ in water medium, with $n = 1.33$). (b) Relative extinction peak shift as a function of the dimensionless D/D_0 value, where $\Delta\lambda_{p-max}$ is calculated as the peak shift upon the RI of the medium changing from 1.33 to 1.5. (c) Enhancement factor ($EF_{t=5nm}$) as a function of D/D_0 . (d) Difference between surface and bulk enhancement factors ($EF_{t=5nm} - EF_{\infty}$) as a function of D/D_0 .

2. Text Correction

There were two textual errors in the original publication.

On page 4, in one instance, RIS_{dim} was written instead of $\Delta\lambda_{p,dim}$.

A correction has been made to “3. Results and Discussion”, first paragraph:

“By depositing a dielectric layer of 5 nm thickness and $n_1 = 1.5$, the experienced extinction peak shifts were $\Delta\lambda_{p,sp} = 6.1$ nm and $\Delta\lambda_{p,dim} = 18.2$ nm (Figure 2b), corresponding to an enhancement of 2.98 ($EF_{t=5nm}$)”.

On page 6, in one instance, $t = 7$ nm was written instead of $t = 5$ nm.

A correction has been made to “3. Results and Discussion”, seventh paragraph:

“The practical meaning of EF_t is, for example, that dimer nanospheres of 70 nm diameter and 10 nm gap provide a 3.2 times higher signal compared to uncoupled spheres of the same size with $t = 5$ nm layer thickness”.

The author apologizes for any inconvenience caused and states that the scientific conclusions are unaffected. The original publication has also been updated.

Reference

1. Bonyár, A. Maximizing the Surface Sensitivity of LSPR Biosensors through Plasmon Coupling—Interparticle Gap Optimization for Dimers Using Computational Simulations. *Biosensors* **2021**, *88*, 527. [[CrossRef](#)] [[PubMed](#)]