

Erratum: Brillouin Study of the Quantization of Acoustic Modes in Nanospheres [Phys. Rev. Lett. 90, 255502 (2003)]

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We have erred in our identification of the $l = 0$ spheroidal modes. Figure 3 of our Letter is replotted based on a refit of our Brillouin data using the correct eigenvalue equation [Eq. (59) in Ref. [13] of the original Letter] for the $l = 0$ modes and Eq. (1), of the Letter, for the $l > 0$ modes. The fitting yielded respective longitudinal and transverse acoustic mode velocities of $V_L = 5042$ m/s and $V_T = 2097$ m/s.

Equation (3) now becomes

$$\begin{aligned} \nu_{10} &= \frac{4.073}{D}, & \nu_{12} &= \frac{2.483}{D}, & \nu_{14} &= \frac{4.706}{D}, & \nu_{16} &= \frac{6.595}{D}, & \nu_{22} &= \frac{4.546}{D}, & \nu_{24} &= \frac{7.551}{D}, \\ \nu_{32} &= \frac{7.787}{D}, & \nu_{42} &= \frac{9.113}{D}. \end{aligned} \quad (3)$$

Our earlier conclusion remains valid.

We thank Lucien Saviot, Daniel B. Murray, Hervé Portalès, and Eugène Duval for drawing our attention to this error.

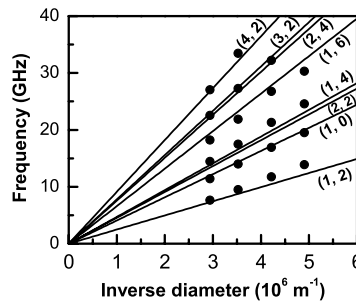


FIG. 3. Dependence of Brillouin peak frequency on inverse nanosphere diameter. Experimental data are denoted by dots. The lines represent the theoretical frequencies, ν_{nl} , given by Eq. (3), for various modes labeled by (n, l) .