

## Erratum: Direct Mechanical Detection and Measurement of Wave-Matter Orbital Angular Momentum Transfer by Nondissipative Vortex Mode Conversion [Phys. Rev. Lett. **123**, 244301 (2019)]

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Here, we correct the simulated data reported in Fig. 2 of the original Letter, which corresponds to calculations the power  $P$  intercepted by the helical mirror as a function of its distance  $d$  from the transducer [Fig. 2(a)], the corresponding power  $P'$  of the reflected field intercepted back by the transducer [Fig. 2(b)] as well as forward [Fig. 2(c)] and backward [Fig. 2(d)] field propagation when the helical mirror is placed at  $d = 100$  mm.

Indeed, an incorrect flat circular transducer of 10 mm diameter was used for simulations instead of a 8 mm diameter with an on-axis 1 mm diameter hole corresponding to the actual transducer.

Additionally, the residual acoustic absorption in the air, which is quantitatively mentioned in the text, was not taken into account in the reported simulations.

Figure 1 of the present erratum provides the corrected version of originally published Fig. 2. The obtained values for the power  $P$  and  $P'$  in Figs. 1(a) and 1(b) do not alter the self-consistent nature of the trade-off choice for  $d = 100$  mm in experiments, which relies on neglecting the role of the secondary reflection on the helical mirror with respect to the first one. Also, the illustrative corrected plots shown in Figs. 1(c) and 1(d) have no consequence, neither on the results nor on the discussion of the original Letter.

Moreover, we take this opportunity to correct a unimportant typo on the second line of the right column of page 4. There,  $P = mgc_0/2 = 7.5 \pm 0.3$  mW should be replaced by  $P = mgc_0(R/R')^2/2 = 7.5 \pm 0.3$  mW.

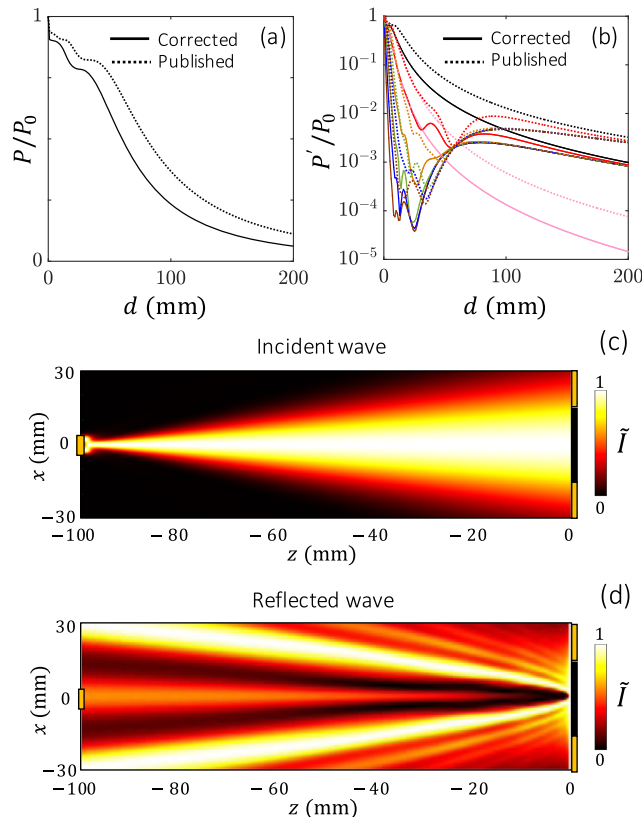


FIG. 1. Corrected version of originally published simulated data reported in Fig. 2. The color code for all curves in panel (b) is the same as the one used in the original publication.