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Erratum: Raman spectroscopy of single-domain multiferroic BiFeO₃ [Phys. Rev. B 81, 064110 (2010)]

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The original manuscript gives assignment of all $A_1(LO)$ and E(TO) phonon modes and the lowest-frequency $A_1(TO)$ mode in bismuth ferrite (BiFeO₃) single crystal. The scattering geometry for observing $A_1(TO)$ modes is $Y(ZZ)\bar{Y}$. However, the room-temperature spectrum in this orientation was quite weak, and the peaks appeared as shoulders over the strong Rayleigh scattering. Therefore, $A_1(TO)$ modes could not be extracted accurately due to heavily dominating Rayleigh scattering. At least two of the three higher-frequency $A_1(TO)$ modes (127, 168, and 212 cm⁻¹ marked with "?" in Fig. 2) listed as $A_1(TO)$ in Table I are incorrect, because such assignments violate the required alternation of $A_1(TO)$ and $A_1(LO)$ modes with increasing frequency. The alteration rule follows from the requirement that the poles and zeroes of the dielectric constant along a given axis of any medium must necessarily alternate.