Lucarelli *et al.* Reply: In their Comment on our paper [1], Tajima *et al.* [2] argue that our infrared (IR) results on nine single crystals of $La_{2-x}Sr_xCuO_4$ (LSCO) are not valid for the following reasons.

(i) Reference [1] reports three peaks, at 30 (for $x = 0.12$), 250, and 500 cm^{-1}. (ii) The $x = 0.05$ reflectivity $R(\omega)$ shows a dip at 470 cm^{-1} due to a transverse optical phonon of the c axis at 500 cm^{-1}; therefore, that sample is not a single crystal or it is miscut. (iii) The same dip is observed more or less in all samples, except for those with $x = 0.0$ and 0.26; therefore, those samples are bad crystals are miscut or the polarizer was not effective. (iv) As most samples contain the c axis, also the peak at 30 cm^{-1} is a spurious feature. (v) The previous observations on the same system do not show the peaks reported in Ref. [1]. Below we reply to each of the above points.

(i) and (ii) In Ref. [1], we discuss the peaks below $\sim$150 cm^{-1}, which are observed in all the superconducting crystals investigated. Those at 250 and 500 cm^{-1} are mentioned for the semiconducting 0.05 sample only, in connection with Thomas *et al.* who observed similar features in a flux-grown La_2SrCuO_{4+y} crystal where the surface is intrinsically a-b [3]. The 0.05 sample, which arrived already cut, was included after verifying that it was a good single crystal by a four-circle diffractometer in Garching.

(iii) This crucial point questions the peaks below 150 cm^{-1}. Figure 1 compares the $R(\omega)$ of our $x = 0.12$ sample with that of an $x = 0.13$ LSCO crystal from a paper [5] coauthored by one (D. N. B.) of the authors of the Comment. In the $x = 0.13$ sample, "the miscut angle between the polished surface and the c axis was checked by a high precision triple-axis x-ray diffractometer and was determined to be less than 0.8°" [5]. Both samples in Fig. 1 show a dip at 470 cm^{-1} for electric field orthogonal to the c axis. Therefore, its presence cannot be used as evidence for a miscut of our crystal. That dip has been observed, indeed, in flux-grown La_2CuO_{4+y} [4], in accurately cut (error less than 1°) LSCO [6], and, with minor changes, in many other cuprates where it has been explained in a nontrivial way [7].

(iv) Figure 1 also shows that the a-b plane $R(\omega)$ below 200 cm^{-1} is not affected at all by the corresponding drop in the c axis $R(\omega)$. Moreover, at $x = 0.15$ [1], one sees a strong peak in $\sigma(\omega)$ at low T while the dip at 470 cm^{-1} is negligible at any T.

(v) The authors of Ref. [2] cite three papers with data either on films, or at grazing incidence. Because of the substrate or to lack of brilliance, respectively, details of $R(\omega)$ at very low ω, which produce the peaks in $\sigma(\omega)$, can be lost in both cases. In contrast, in LSCO crystals at quasinormal incidence, anomalous peaks have been often observed (see Refs. [16],[21],[22] of Ref. [1] and, here, Ref. [8]).

In conclusion, the low-frequency peaks observed in Ref. [1] for several superconducting $La_{2-x}Sr_xCuO_4$ crystals from different growers, either by using polarizers or not, cannot be explained by an admixture of the a-b plane $R(\omega)$ with that of the c axis. The x, T behavior of the peaks supports a charge-stripe scenario for LSCO (Figs. 2 and 3 of Ref. [1]), that is confirmed by high-quality Raman [9] and neutron [10] data on samples from the same laboratories.

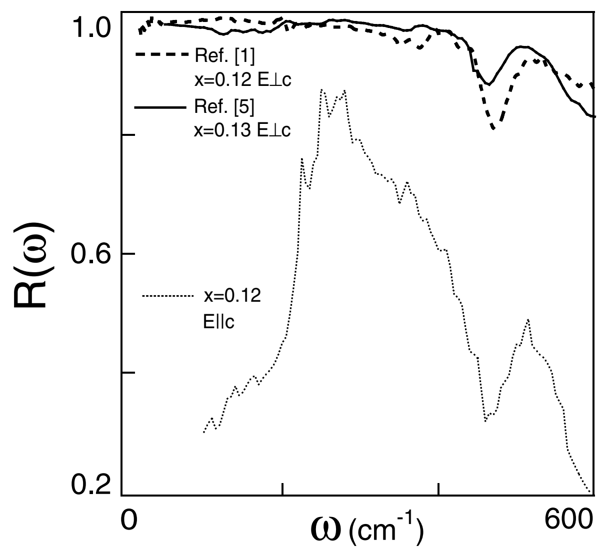

FIG. 1. Reflectivity for field orthogonal to the c axis for our sample with $x = 0.12$ at 30 K and for a sample with $x = 0.13$ at 10 K from Ref. [4]. In the latter crystal, the miscut was less than 0.8°. A quick test of $R(\omega)$ along c, at 295 K, for the same $x = 0.12$ sample, is also shown.

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