In Figs. 8–11 a wiggle in the optical conductivity curve is seen at twice the chemical potential. This effect is due to the presence of the phonons, but would not be noticed if the real part of the phonons’ self-energy had been included in the calculation. This has been shown to be true in another publication by two of the present authors.\textsuperscript{1} In conclusion, the aforementioned wiggle is not a physical effect but an artifact of the used approximation. We thank J. Carbotte and E. Nicols for pointing out the issue to us.