Supplementary Material

The frequency interval of A_0 and the scale range of B_0 were optimized in terms of the R-squared on linear fitting between A_0 and B_0. The minimum frequency interval was tentatively included by 11 successive frequency points (i.e., 0.1 THz gap). The scale range should be selected as the rule that starts from 10 (discussion in Fig. 3) and included as more effective scales as possible. By trial and error, the linear dependence could be found in a scale range from 15 to 20. Next, the searching area for the start point and end point of the optimal frequency interval is respectively from 0.2 to 0.4 THz and from 0.3 to 0.5 THz. Note that the 0.1THz gap is consistent with the given minimum frequency interval. Thus Fig.s1 exhibits the searching results that R^2<90% were set to zeros. The horizontal and vertical axis respectively represents start point and end point of the frequency interval. It can be seen obviously that the first two lines aggregate the linear relationships of R^2>90% and thereby showing the best several cases of linear fittings in Figs. s2 (a)−(e) with corresponding frequency intervals from 0.2 to 0.35, 0.36, 0.37, 0.38, and 0.39 THz. They have similar trends and R^2 are all above 90%. There is essentially no difference between the two intervals, 0.2−0.37 and 0.2−0.38, so the latter was selected in this work.

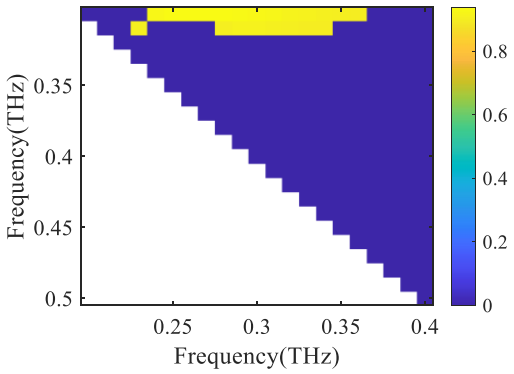

Fig. s1. The searching results of frequency intervals with R^2>90%.

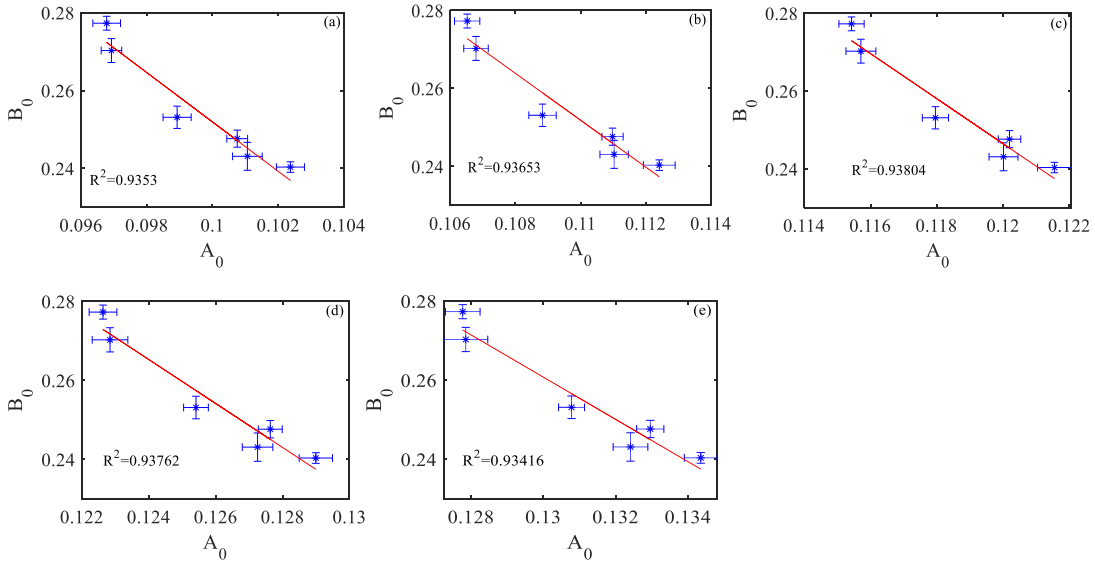

Fig. s2. The best several cases of linear fittings with the corresponding frequency intervals from 0.2 to (a) 0.35, (b) 0.36, (c) 0.37, (d) 0.38, and (e) 0.39 THz.