All data shown, both in the main text figures and Supplementary Materials figures are provided, as labelled. In total, there are fifteen microsoft Excel files. For convenience, brief column headings were provided inside each file, where ‘X’ and ‘Y’ refer to the data recorded from horizontal and vertical channels, respectively. While 1, 2, 3, 4 correspond to the experimental condition that the incident THz pulse is polarized at 0, 30, 40, 90, respectively, and ‘r’ means error bar data.