

Description of Additional Supplementary Files

File name- Supplementary Data 1

File description- The source data corresponding to the damping signals in Fig. 2(b), the fitted eigenfrequencies in Fig. 2(d), and the fitted linewidths in Fig. 2(e).

File name- Supplementary Data 2

File description- The source data corresponding to the phase information in Fig. 3(b), the control parameters in Fig. 3(c), and the corresponding oscillation frequency in Fig. 3(d).

File name- Supplementary Data 3

File description- The source data corresponding to the phase-tracked closed-loop oscillation frequencies in Fig. 4(a) and the tracked phases in Fig. 4(b).

File name- Supplementary Data 4

File description- The source data corresponding to the phase-tracked closed-loop oscillation frequencies in Fig. 5(a) and the tracked phases in Fig. 5(b).