

S5 Table. Best-fit models of f_r and Q in the analysis of the vibrational dynamics measurements.

Response	Fixed-effect	Estimate (SE)	t	p
f_r	Orientation (in-plane vs. out-of-plane)	-2.22 (0.23)	-9.46	< 0.0001
	Sex (male vs. female)	0.26 (1.49)	0.18	0.86
	Top area	-0.82 (0.46)	-1.78	0.10
Q	Orientation (in-plane vs. out-of-plane)	-1.26 (0.25)	-4.94	< 0.0001
	Sex (male vs. female)	1.85 (0.49)	3.71	0.005
	Top area	-0.37 (0.15)	-2.40	0.04