

Nanomechanical analysis of SARS-CoV-2 variants and predictions of infectiousness and lethality

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Supplementary Material

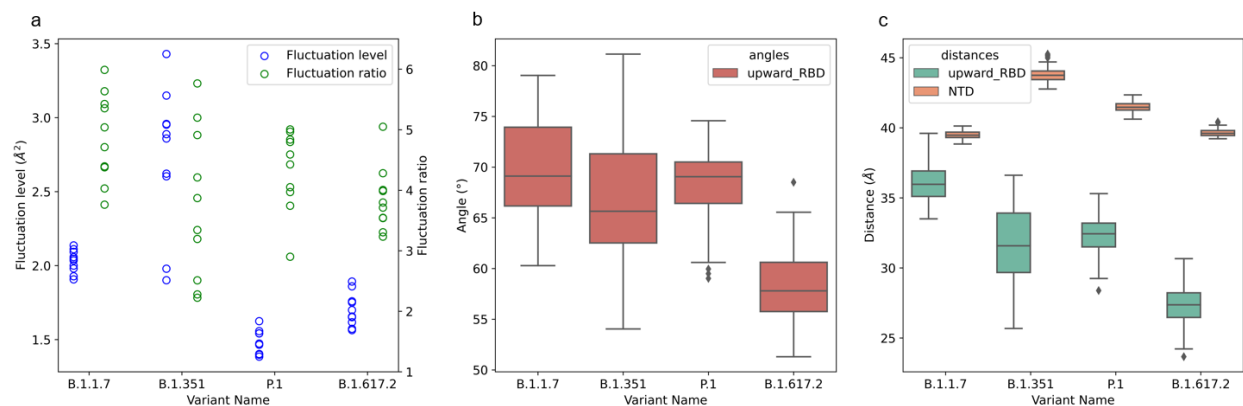


Figure S1. The variation of vibrational and important structural parameters for SARS-CoV-2 variants of interest, including B.1.1.7 (Alpha variant), B.1.351 (Beta variant), P.1 (Gamma variant), and B.1.617.2 (Delta variant). (a) Variation of vibrational parameters, namely fluctuation level and mobility ratio, for SARS-CoV-2 variants of interest. (b)(c) Variation of important structural angles and distances for SARS-CoV-2 variants of interest. For vibrational parameters, the variation of fluctuation ratio is comparatively large, accounting for its smaller impact shown in our predictive model (see Figure 4 for details). In terms of structural parameters, the angle and distance of upward RBD have larger variation compared to the average distance of NTD, which also demonstrates the mobility of upward RBD to some extent.