Supporting Information:

Characterization of Water Confined between Silica Surfaces Using the Resonance Shear Measurement

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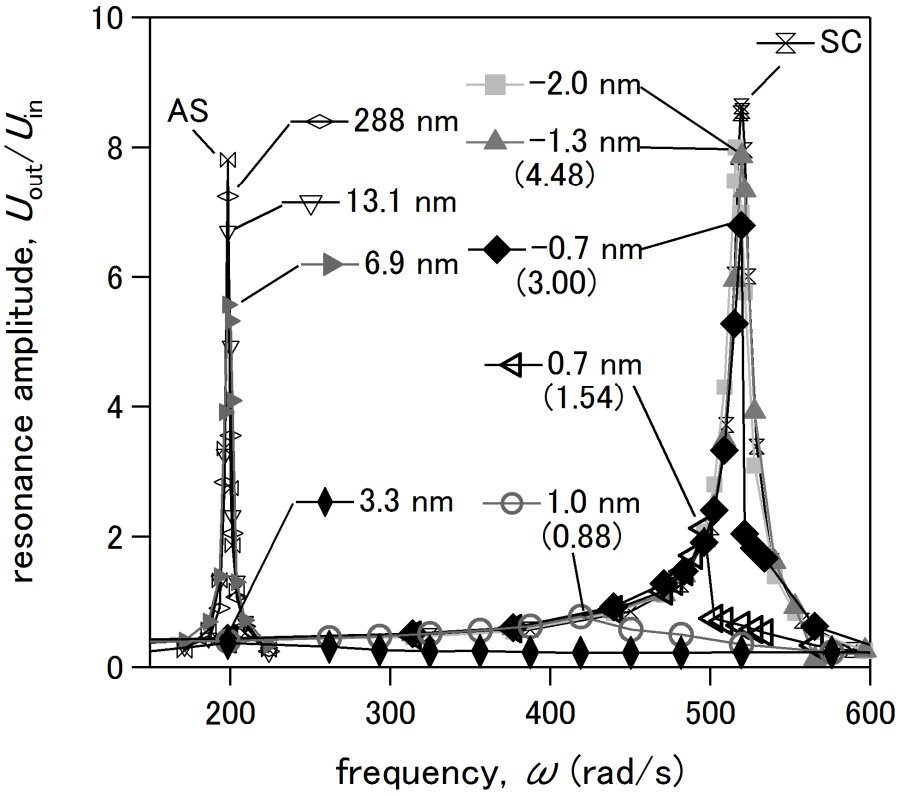

Figure. S1. Resonance curves obtained from water confined between untreated silica surfaces at various separation distances, *D*'. Dry contact between the silica surfaces was defined as "zero" of separation, to determine the distance *D*'. Number in parentheses indicated vertical load *L* (mN). Two reference states the curves for the separation in air (AS) and silica-silica contact (SC) are also plotted for convince.

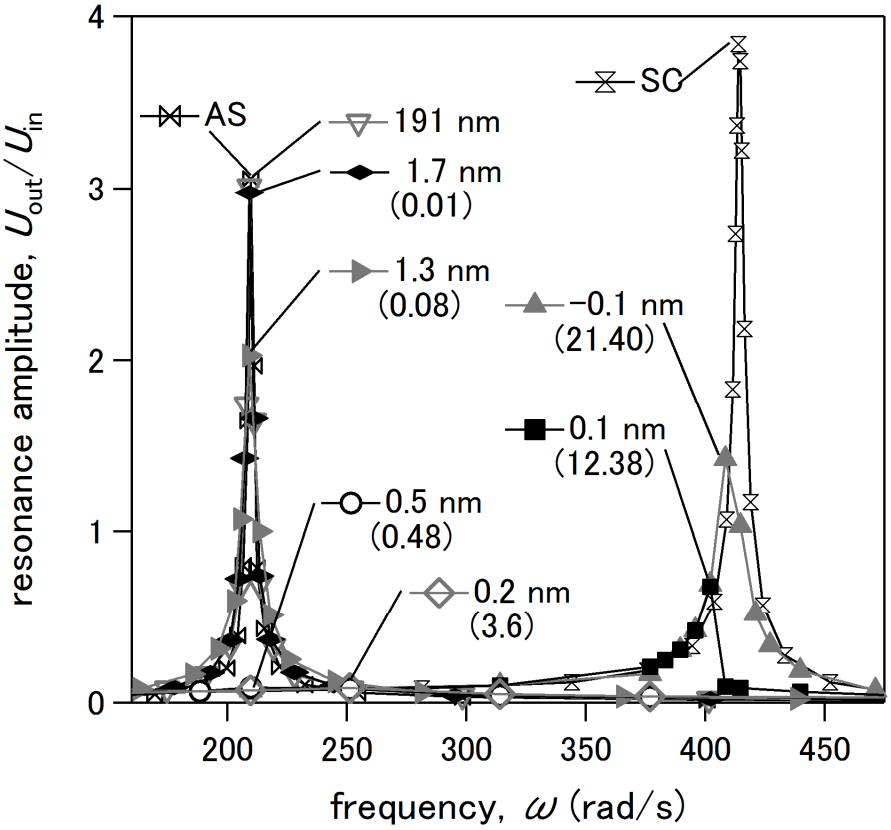

Figure. S2. Resonance curves obtained from water confined between untreated silica surfaces at various separation distances, *D*'. Dry contact between the silica surfaces was defined as "zero" of separation, to determine the distance *D*'. Number in parentheses indicated vertical load *L* (mN).

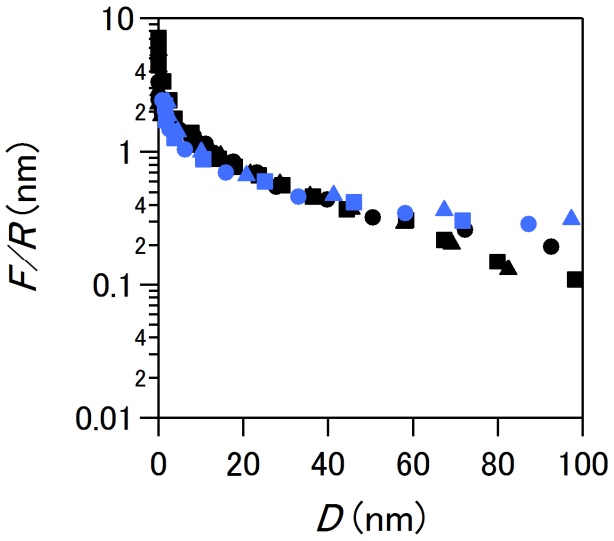

Figure. S3. Surface forces profiles between silica surfaces in water. Black and Blue points were the profiles for the untreated and the plasma-treated silica.