

Supporting Information for

## Molecular Dynamics Study on Mechanism of Preformed Particle Gel

### Transporting through Nanopores: Surface Hydration

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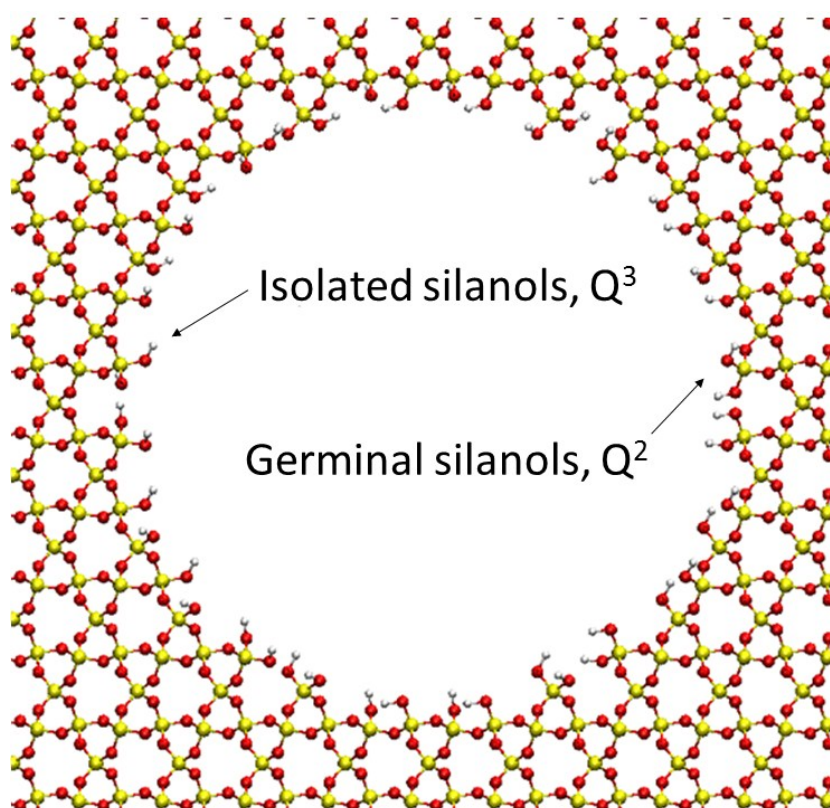


Figure S1. Illustration of the silanol groups inside the silica nanopore with a diameter of 3nm.

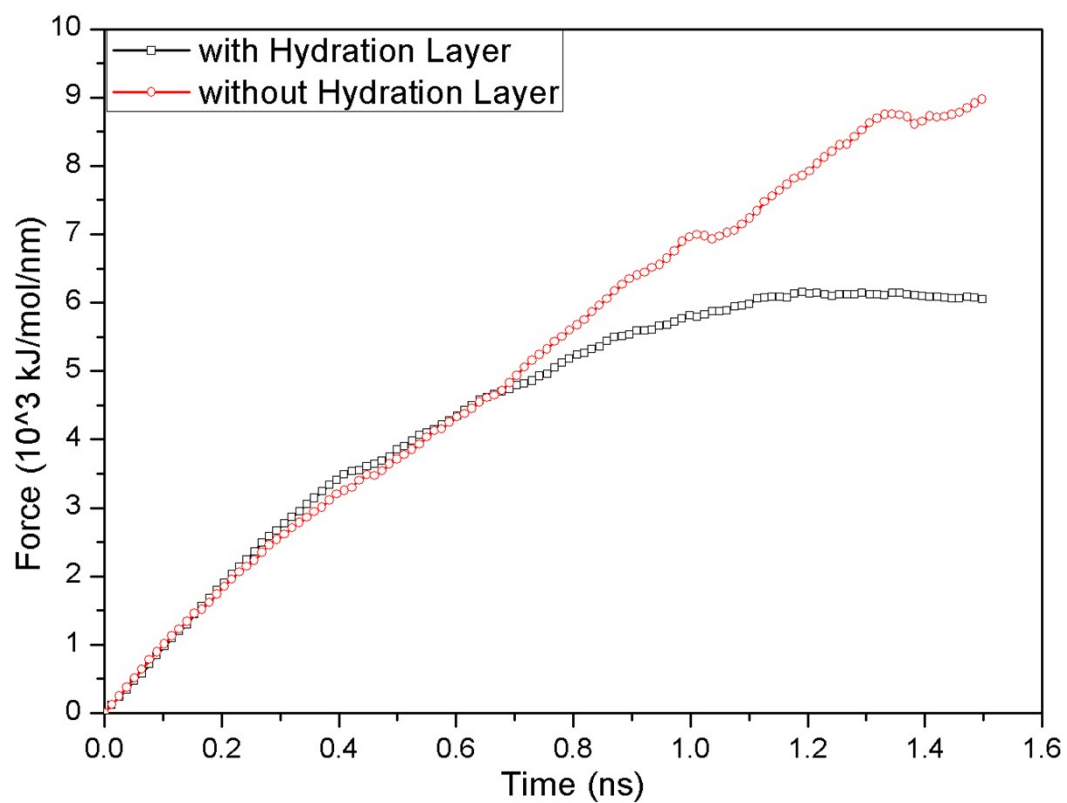


Figure S2. Profile of the external forces extend on the PPG with and without hydration layer.