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## Mechanical properties of silk materials due solvent effect: Molecular dynamics study

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Natural silk is fascinating material due to their mechanical properties and biocompatibility. It should be noted that there have been numerous attempts to artificially manufacture natural silk, but they have barrier to succeed in achieving the superior mechanical properties of natural silk. The reason behind this failure is still unknown, and various researches on this matter. In previous study, we shed light on the effect of solvent on the components of silk. In present work we perform steered molecular dynamics simulations with varying solvent conditions in order to investigate how the solvent affects the structural, mechanical, vibrational properties of each sequences of silk.

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