

Supplementary Material

# Synthesis of Silver Nanoplates with the Assistance of Natural Polymer (Sodium Alginate) Under 0 °C

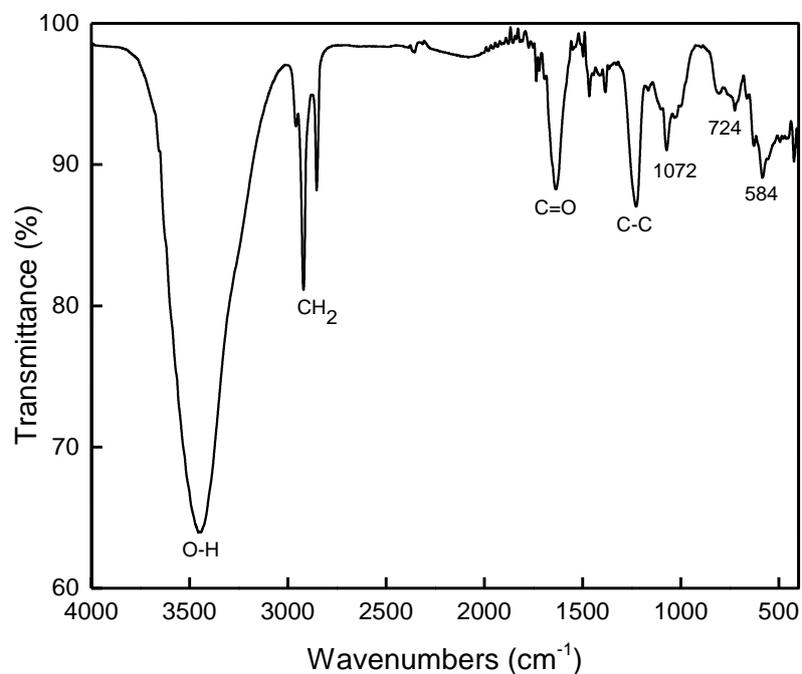
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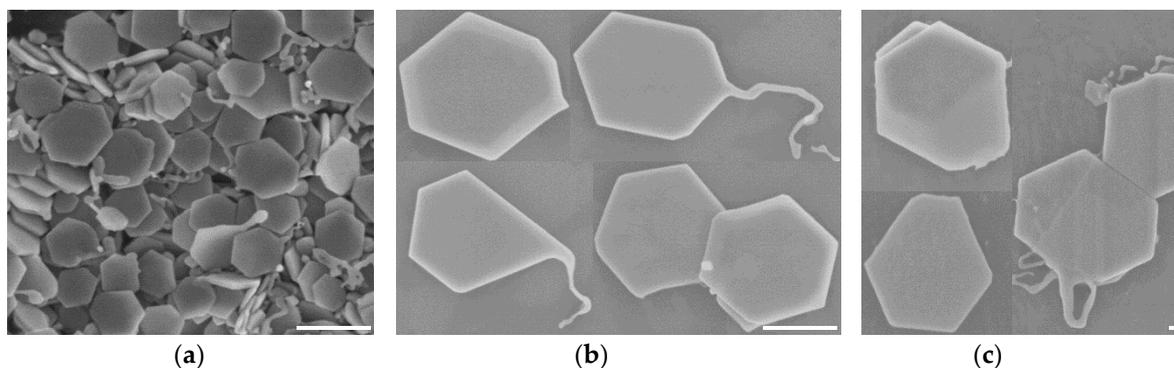
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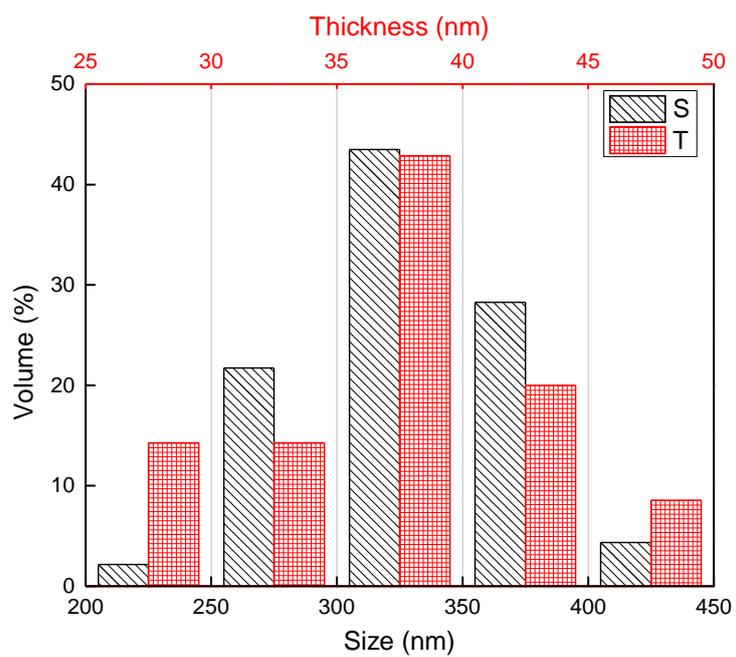
† These authors contributed equally to this work.



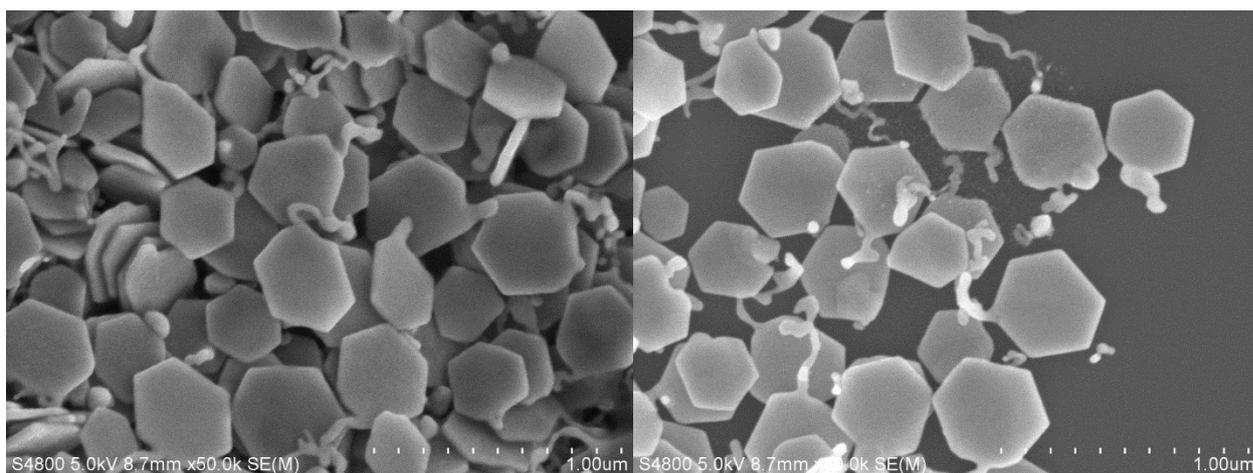
**Figure S1.** The Fourier-transform infrared-attenuated total reflectance spectra of the silver nanoplates (SNPs) stored in aqueous solution.



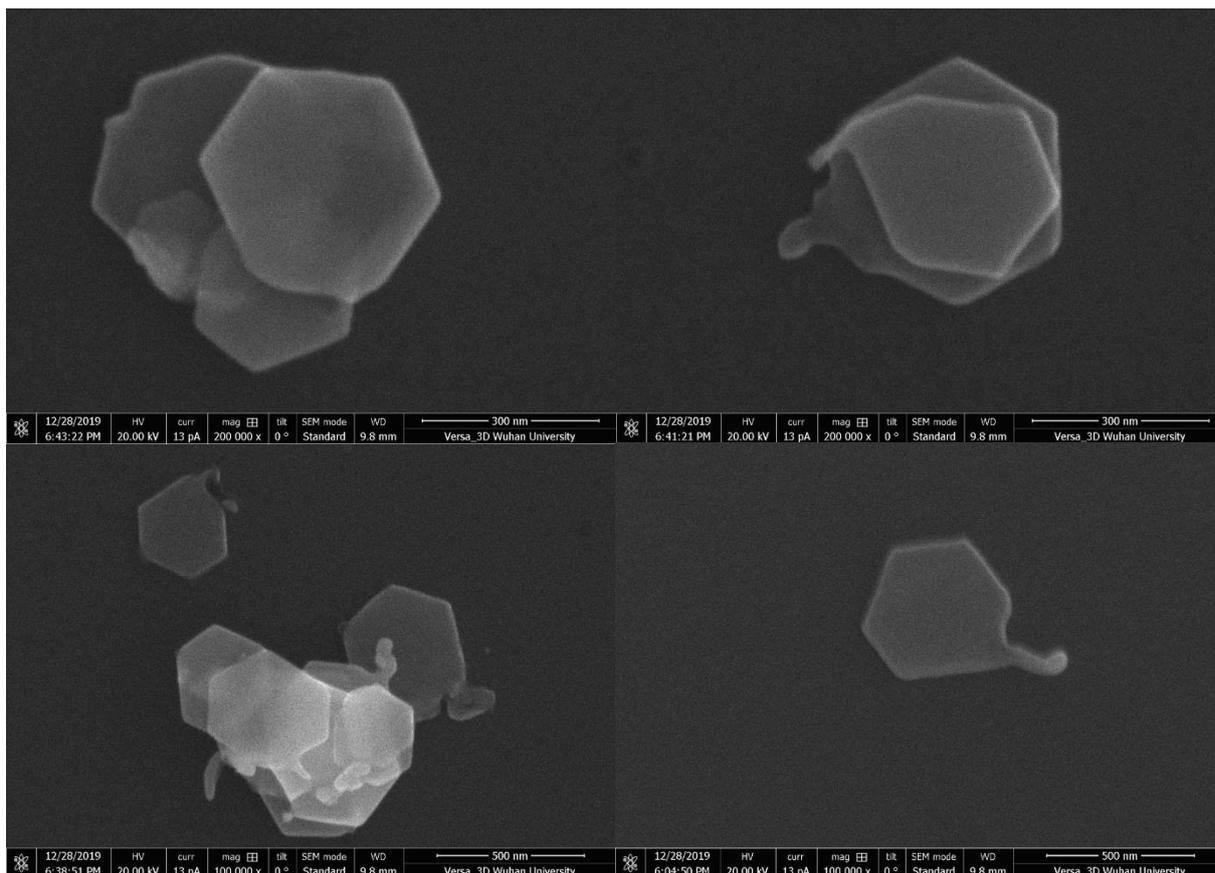
**Figure S2.** The scanning electron microscope (SEM) images of SNPs produced under the same reaction conditions using 50  $\mu$ L sodium alginate (SA) during synthesis with different reaction durations: (a) 3, (b) 4, and (c) 5 h. The scale bar is 500 nm.



**Figure S3.** The size (S) and thickness (T) distributions of the SNPs after grown for 2 h in 50  $\mu$ L SA.



**Figure S4.** The SEM images of SNPs obtained after growing 2 h in the one of the two repeated experiments using 50  $\mu$ L SA at 0  $^{\circ}$ C.



**Figure S5.** SEM images of SNPs obtained after growing for 2 h in the one of the two repeated experiments using 50  $\mu$ L SA at 0 °C.



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