

## Supplementary Material

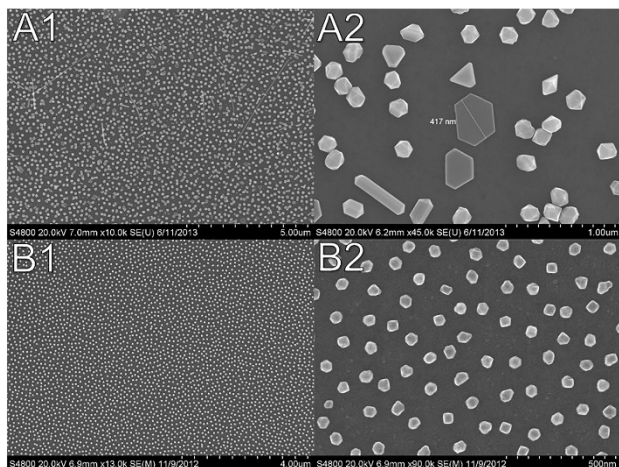
# One-Step Synthesis and Applications of Highly Concentrated Silver Nanoparticles with an Ultra-Thin Silica Shell

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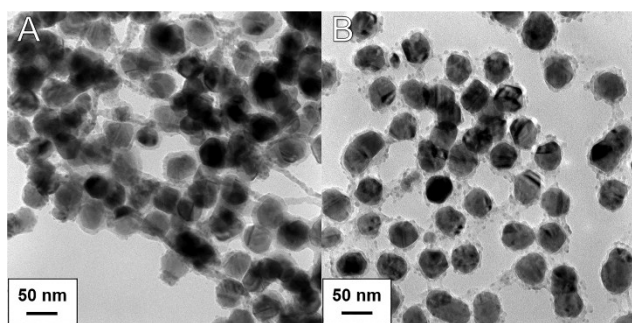
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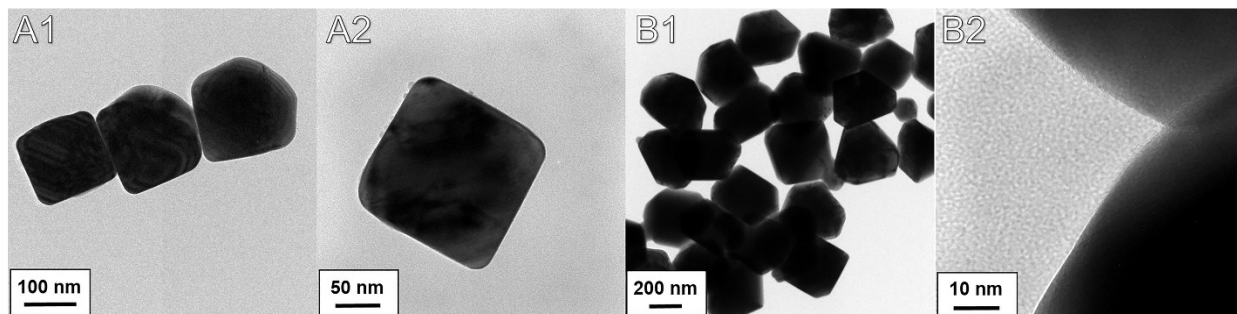
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**Figure S1.** SEM images of AgNPs grown to 100 nm in Pyrex (A) and AgNPs grown to 100 nm in quartz with the addition of 1 mM fumed silica (B)



**Figure S2.** TEM images of AgNPs grown to ~50 nm AgNP with 0.8 mM (A) and 6 mM (B) of sodium silicate added. (A) with an O.D. of 2.7 was obtained after 30 minutes while (B) an O.D. of 84 required 5 hours.



**Figure S3.** HR-TEM images of AgNPs grown to ~250 nm (A) and ~400 nm (B) with 1.27 & 0.5 mM fumed silica, respectively.