



Supporting Information

for

Photochemical synthesis of silver nanoprisms via green LED irradiation and evaluation of SERS activity

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Beilstein J. Nanotechnol. **2025**, *16*, 1417–1427. doi:10.3762/bjnano.16.103

Additional figures and tables

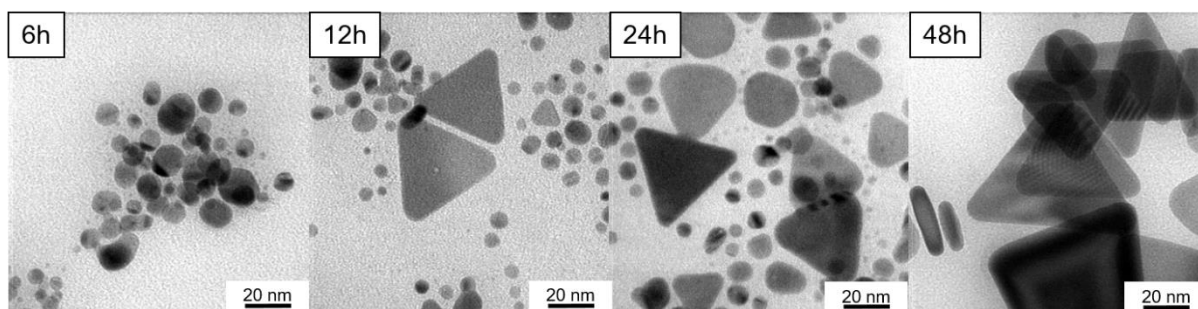


Figure S1: TEM images of the samples at a magnification of 200,000 after 6, 12, 24 and 48 hours of LED irradiation.

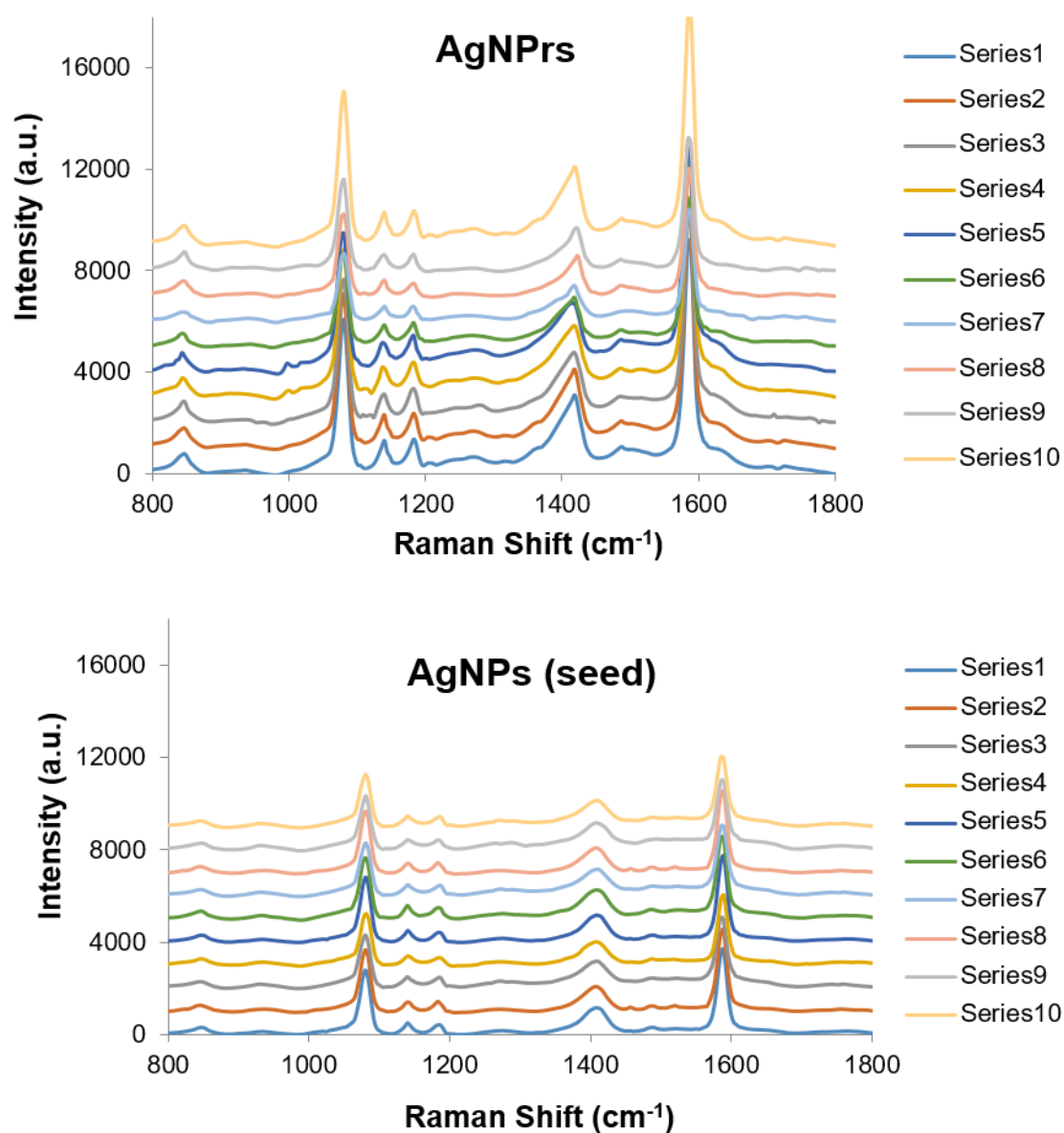


Figure S2: SERS spectra of 4-MBA at 10^{-5} M, enhanced by (a) AgNPrs and (b) AgNPs, recorded 10 different measurements.

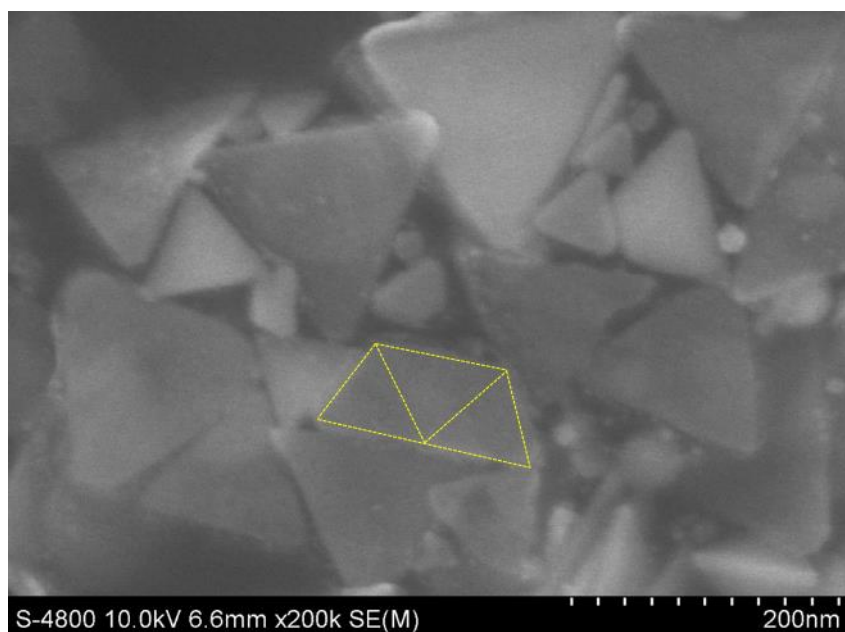


Figure S3: FE-SEM image of AgNPs at 72 h LED irradiation: a trapezoid-shaped silver nanoparticles was seen. An additional small AgNPs is required to assemble an AgNPs with twice the original size (via Mechanism 2 in Figure 6).

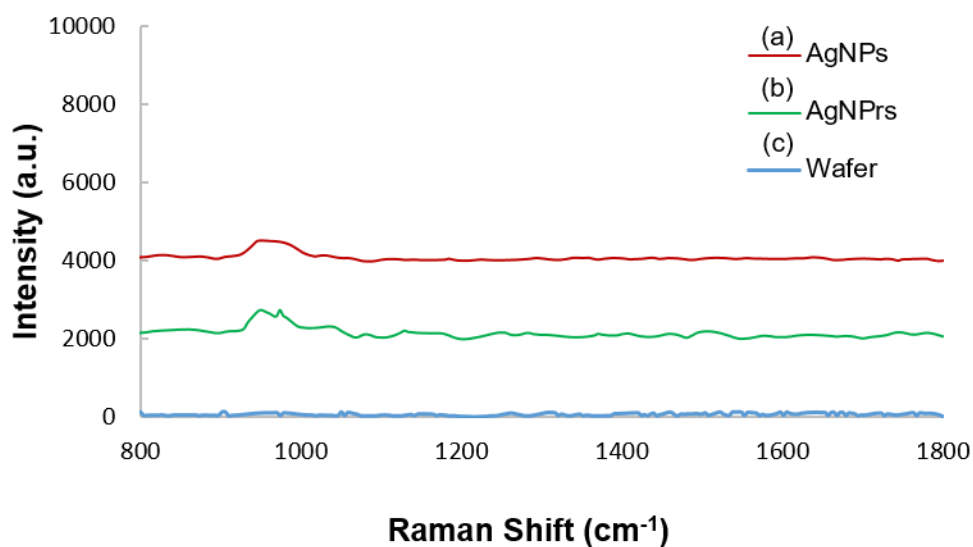


Figure S4: Raman spectra of (a) AgNPs, (b) AgNPs an (c) wafer.

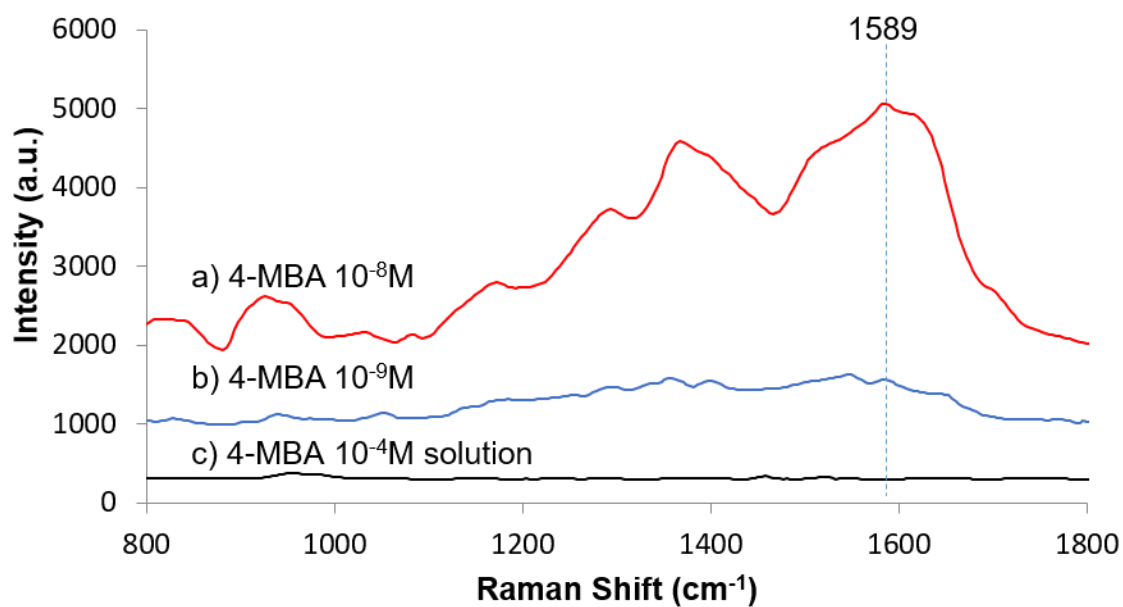


Figure S5: SERS spectra of (a) 4-MBA 10^{-8} M, (b) 4-MBA 10^{-9} M and (c) Raman spectrum of 4-MBA 10^{-4} M (not enhanced by AgNPRs).

Table S1: UV–vis absorption peak of silver nanoparticles at different LED irradiation times.

Samples	Peak OPQ (nm)	Peak IPQ (nm)	Peak IPD (nm)
6 h	-	-	402
12 h	-	-	405 650
24 h	-	-	405 662
48 h	333	420	654
72 h	333	440	604
96 h	333	440	600