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Supporting Information

Tailoring optical cross sections of gold nanorods at a target plasmonic resonance wavelength using bromosalicylic acid

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BSA concentration (mM)	Length (nm)	Width (nm)	Aspect ratio
0	71.4 (6.5)	35.4 (2.3)	2.03 (0.24)
0.2	71.3 (6.6)	36.3 (2.7)	1.98 (0.25)
0.5	70.9 (5.2)	36.3 (2.7)	1.96 (0.21)
1	69.9 (6.6)	36.2 (3.5)	1.96 (0.28)
2	69.7 (6.8)	36.3 (3.2)	1.93 (0.32)
5	67.5 (5.3)	36.4 (3.8)	1.88 (0.25)
10	66.6 (6.2)	36.8 (2.7)	1.81 (0.23)
15	63.9 (7.7)	36.5 (3.4)	1.78 (0.30)

Table S1 Average length, width, and aspect ratio of the AuNRs after overgrowth with various BSA concentration.

LSPR wavelength (nm)	BSA concentration (mM)	Volume ratio	Length (nm)	Width (nm)	Aspect ratio
690	15	0.8	60.3 (6.1)	23.4 (2.1)	2.58 (0.28)
	4	1.6	68.2 (5.7)	28.2 (2.0)	2.42 (0.21)
	0	3	76.1 (6.3)	33.0 (2.8)	2.32 (0.28)
645	15	1.6	63.2 (6.5)	29.9 (3.3)	2.14 (0.32)
	4.6	3	73.0 (6.4)	35.4 (3.5)	2.08 (0.26)
	0.2	6	84.4 (5.7)	46.0 (3.4)	1.84 (0.19)
620	15	3	63.7 (7.4)	35.7 (3.0)	1.79 (0.24)
	2.7	6	82.7 (7.2)	50.0 (2.7)	1.66 (0.17)
	0.3	10	91.6 (7.3)	60.6 (3.2)	1.51 (0.15)

Table S2 Combinations of BSA concentration in the reaction solution and the volume ratio of the growth solution to the seed solution used for AuNRs samples with ensemble LSPR wavelength at 620, 645, and 690 nm. Average length, width, and aspect ratio of AuNRs after overgrowth are shown.

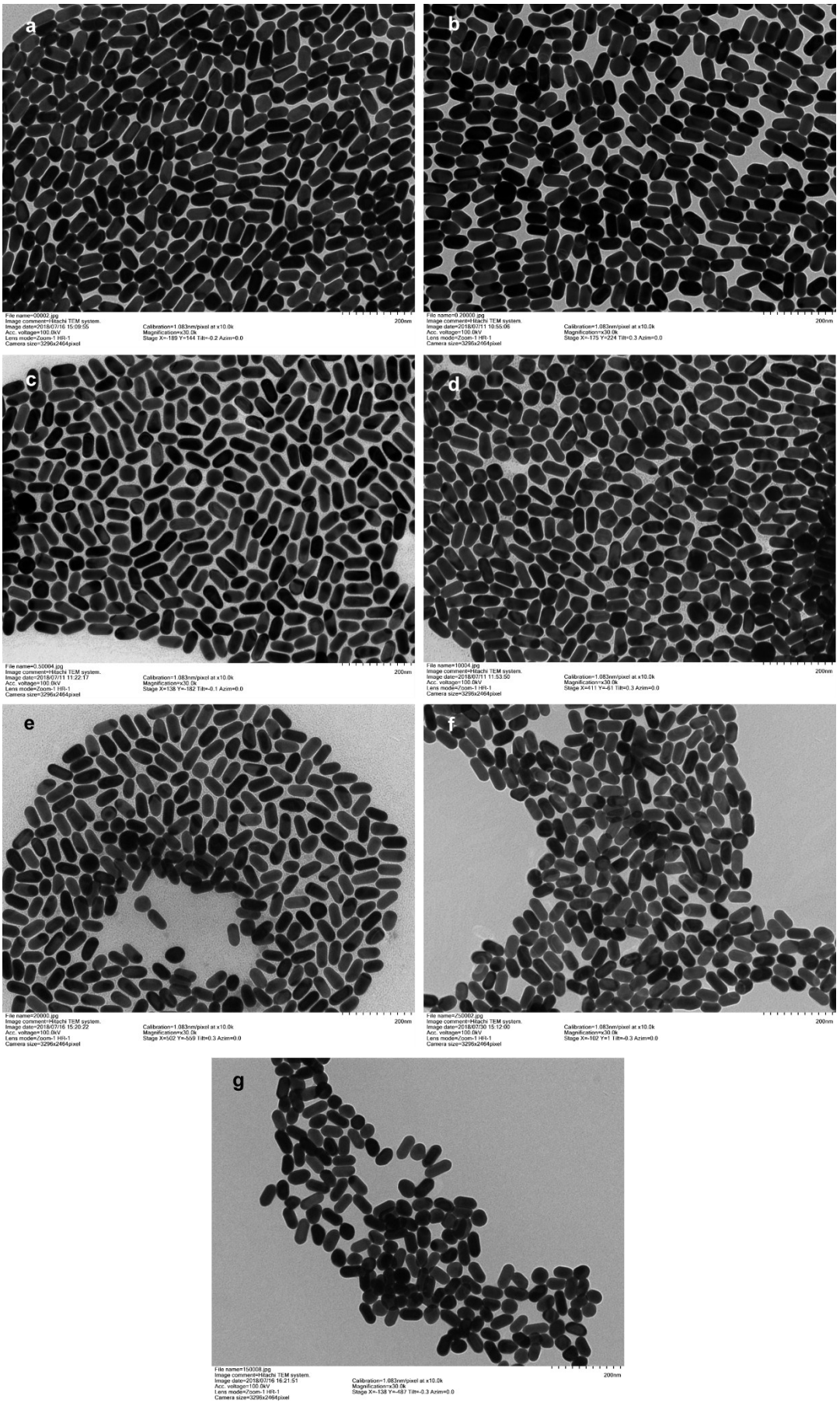

Figure S1 (a-g) TEM images of AuNRs after overgrowth at BSA concentrations of 0, 0.2, 0.5, 1, 2, 5, and 15 mM, respectively.