

Supplementary Materials

Sodium-Alginate-Functionalized Silver Nanoparticles for Colorimetric Detection of Dimethoate

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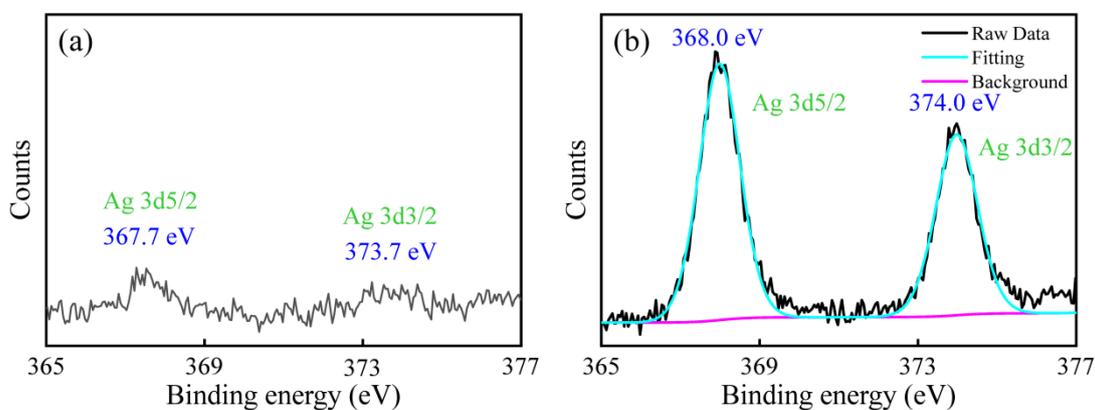


Figure S1. High-resolution Ag 3d XPS spectra of (a) SA-AgNPs and (b) SA-AgNPs with dimethoate.

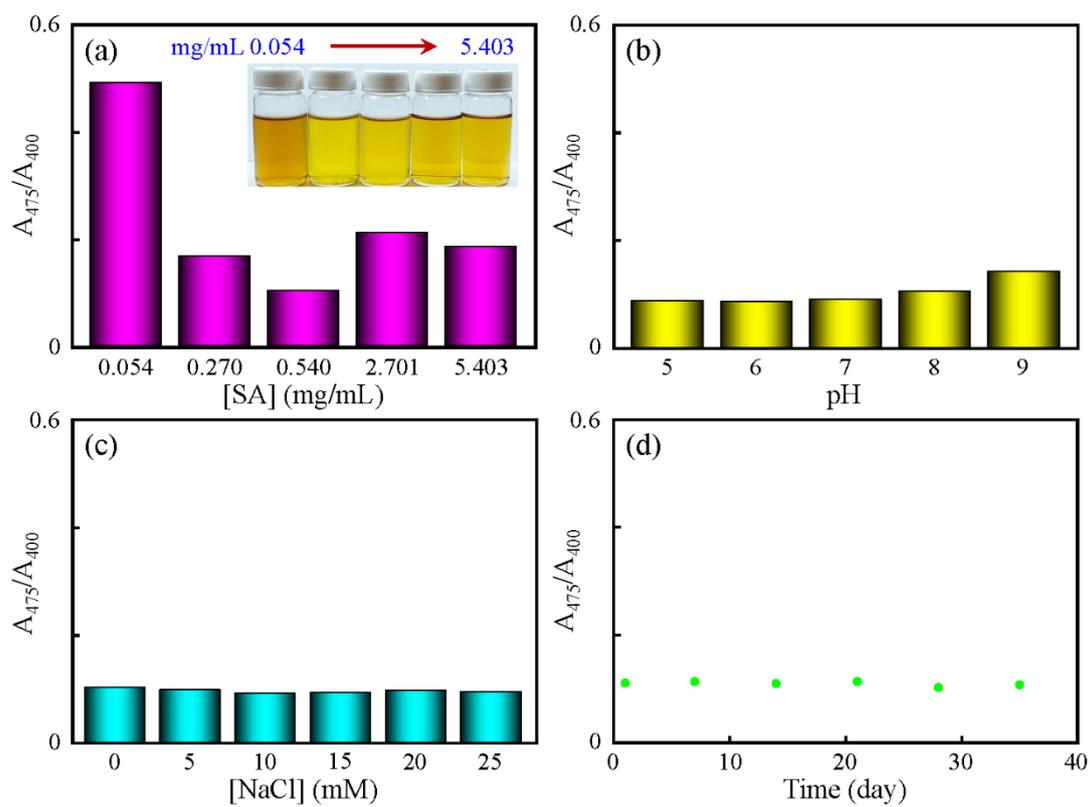


Figure S2. Effect of (a) the amount of SA, (b) pH, (c) NaCl concentrations, and (d) storage time on the absorption ratio A_{475}/A_{400} of SA-AgNPs. Inset: the images of various amounts of SA stabilized AgNPs.

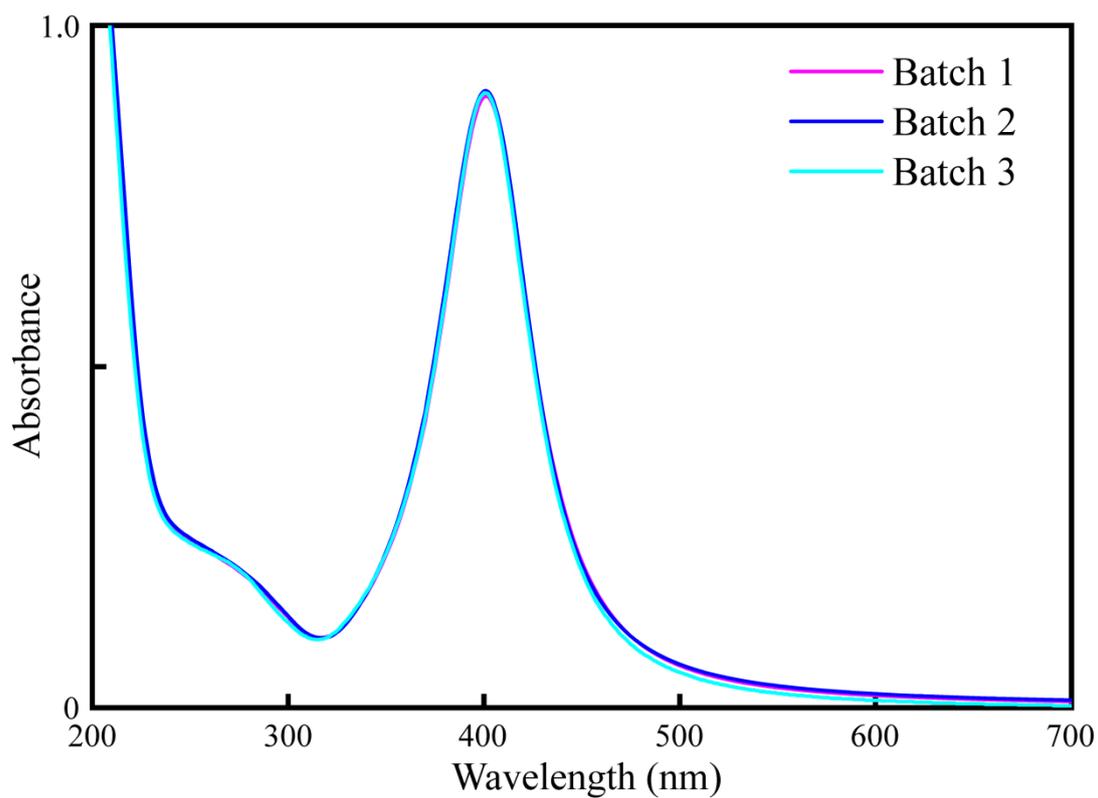


Figure S3. The batch-to-batch reproducibility for the preparation of the SA-AgNPs.

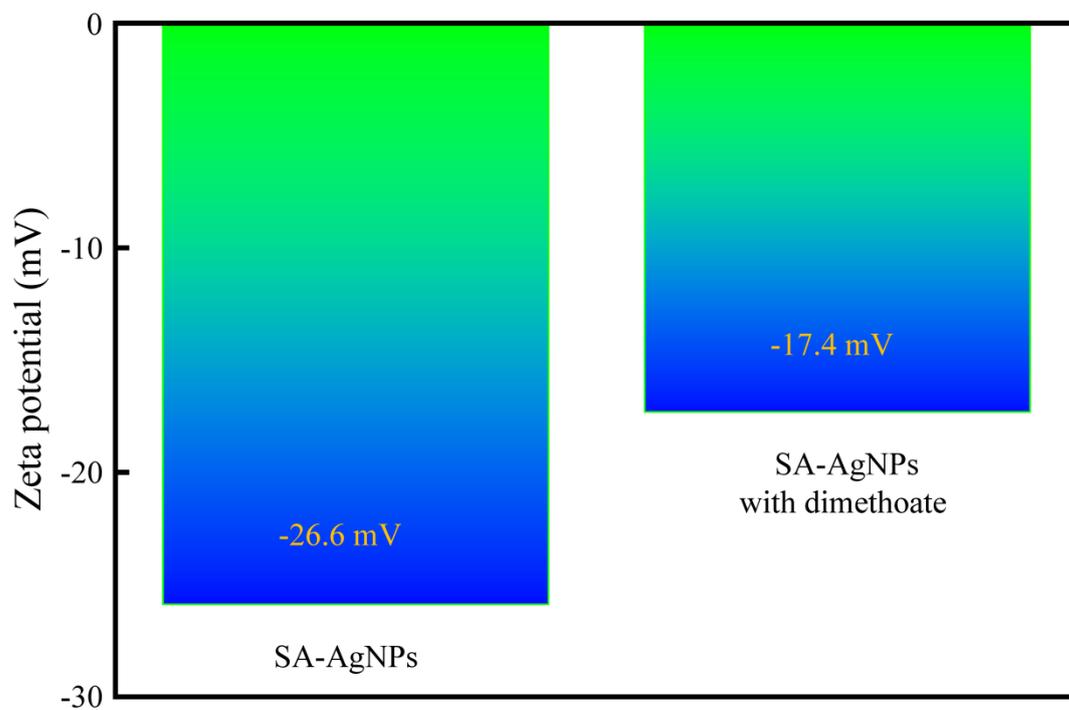


Figure S4. Zeta potentials of SA-AgNPs and SA-AgNPs with dimethoate (10 ppm).

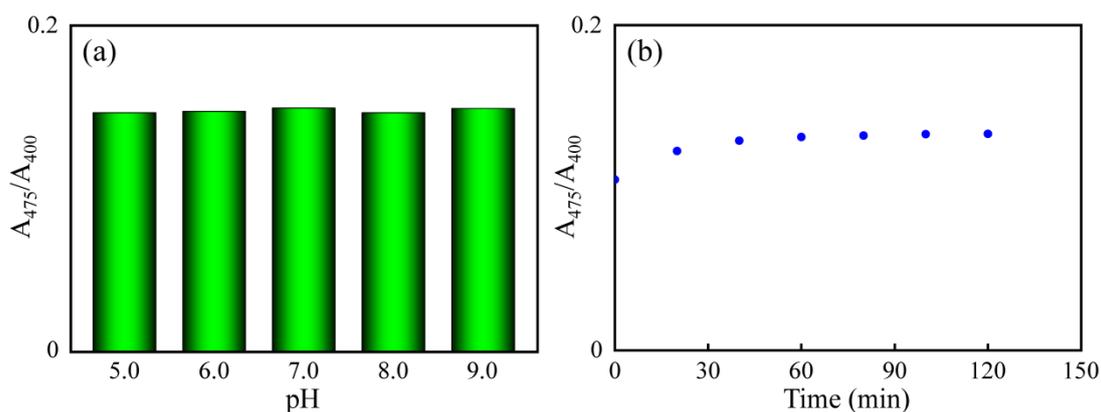


Figure S5. Effect of (a) pH and (b) incubation time on the absorption ratio of A_{475}/A_{400} of SA-AgNPs with dimethoate.

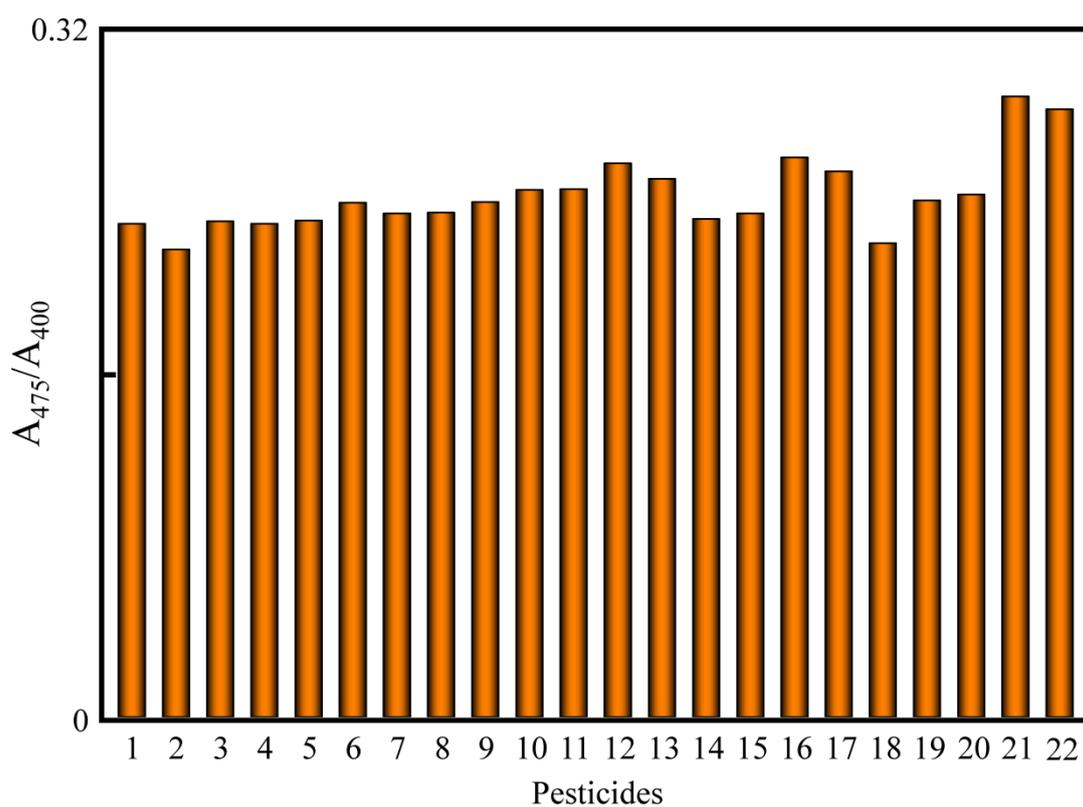


Figure S6. The absorption ratio (A_{475}/A_{400}) of the SA-AgNPs towards dimethoate with other pesticides in the lake water samples. The peak identifies are the same as Figure 5.

Table S1. XPS results of elemental analysis.

Sample	Atomic concentration of element (%)					
	Ag 3d	C 1s	N 1s	O 1s	S 2p	P 2P
SA-AgNPs	0.04	54.19	5.43	40.33	–	–
SA-AgNPs with dimethoate	0.11	63.82	4.61	31.15	0.17	0.13