Electronic Supplementary Material (ESI) for Environmental Science: Nano.

Supplementary Information

Ligand-Dependent Ag_2S Formation: Changes in Deposition of Silver Nanoparticles with Sulfidation

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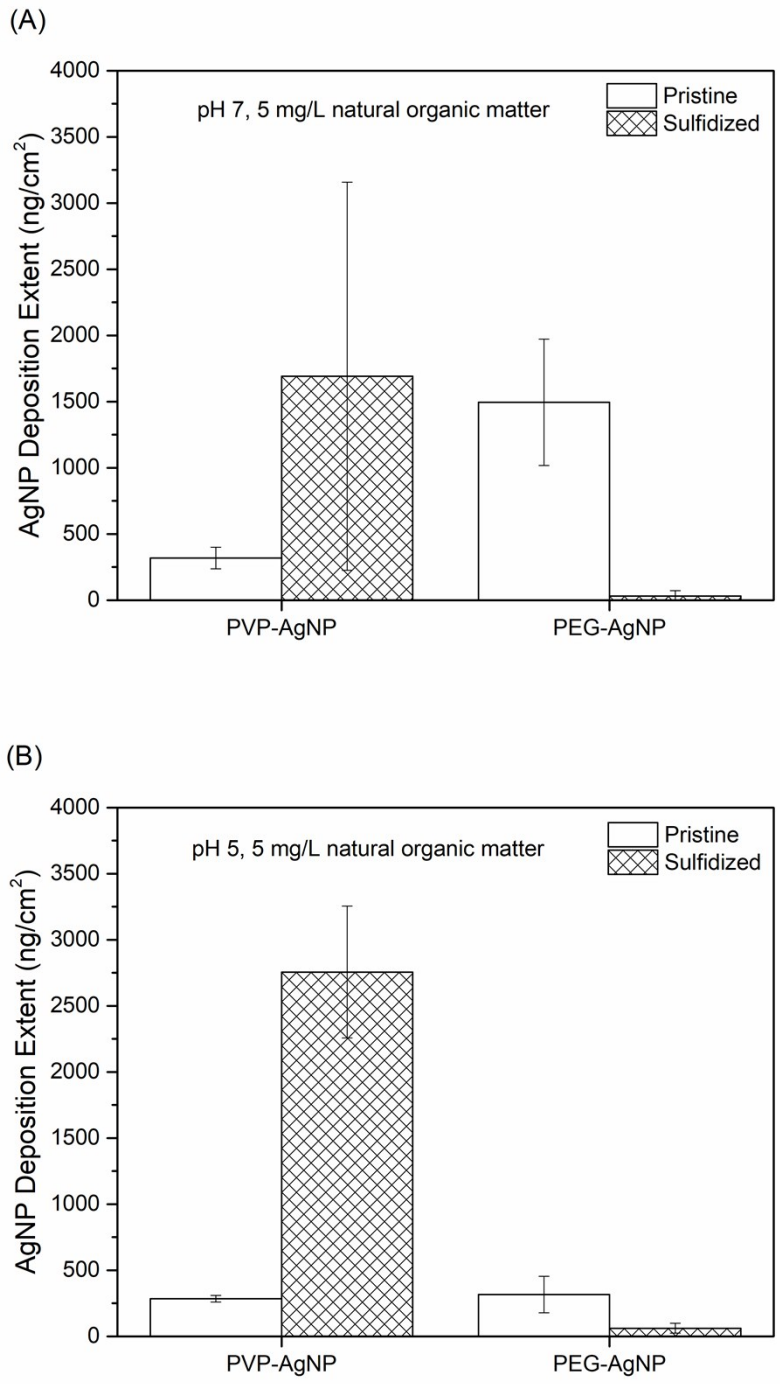

Figure S1. The deposition of PVP- and PEG-capped AgNPs in the pristine and sulfidized states onto QCM silica sensors in 5 mM $NaNO_3$ and 5 mg/L natural organic matter at (A) pH 7 and (B) pH 5.

Treatment	Ligand-NPs	C %	N %
Pristine	PEG-AgNPs	63.8	0.10
Sulfidized		19.3	0.10
Pristine	PVP-AgNPs	71.3	10.5
Sulfidized		32.6	2.30

Table S1. The atomic C and N% of PVP- and PEG-capped AgNPs in the pristine and sulfidized states determined through XPS.

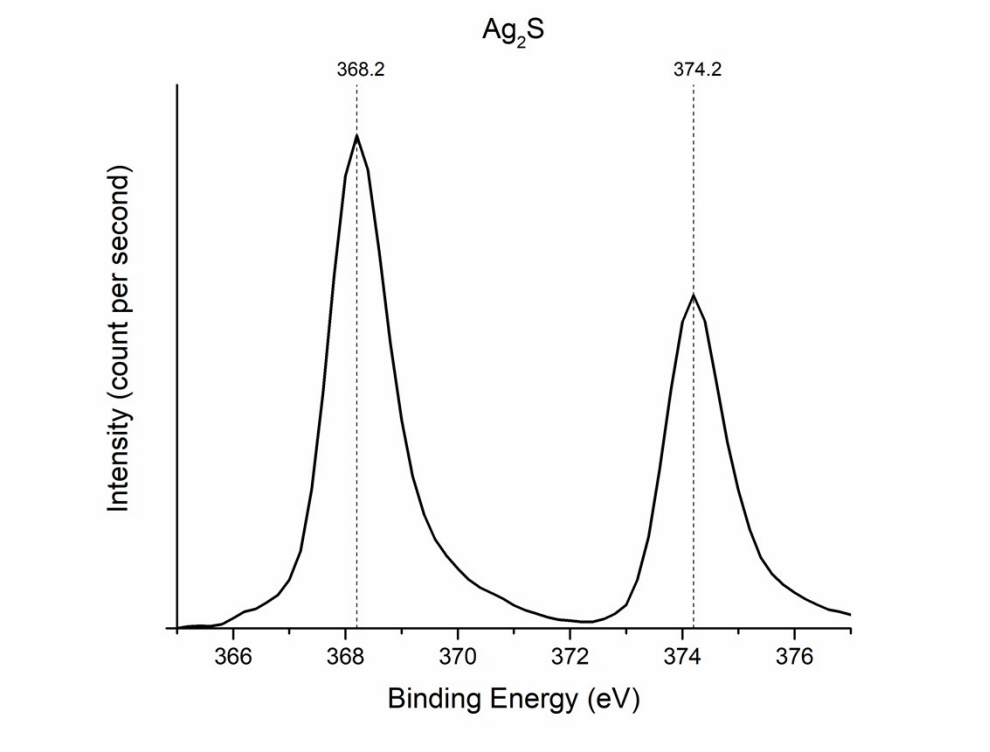

Figure S2. The $Ag_{3d5/2}$ and $Ag_{3d3/2}$ XPS spectra of Ag_2S.