Electronic Supplementary Material (ESI) for New Journal of Chemistry.

Electronic Supplementary Information (ESI)

Controllable fabrication of multifunctional 1D Ag-based coordination polymer@PVP nanowires

Bo Lv,[a] Xiaobo Shi,[c] Xiaoyan Ma,[b] Zhiyang Zhang,[b] and Kuaibing Wang*,[a]

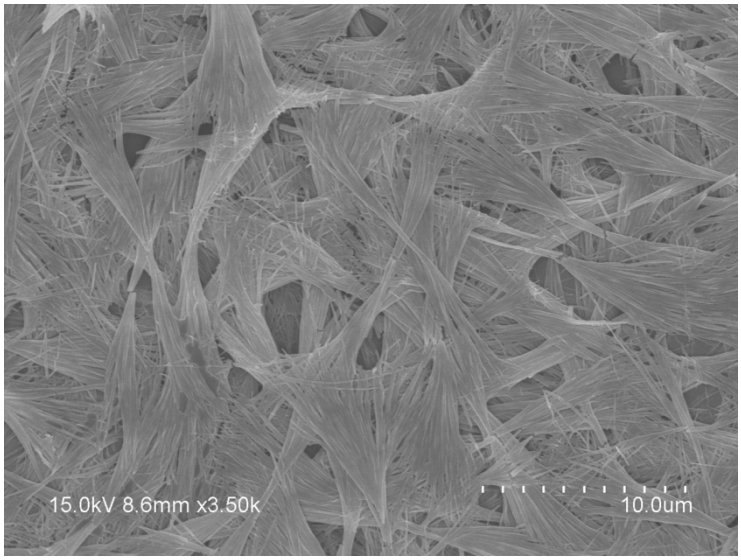

Fig. S1 SEM image of wires-like product obtained in pure water system.

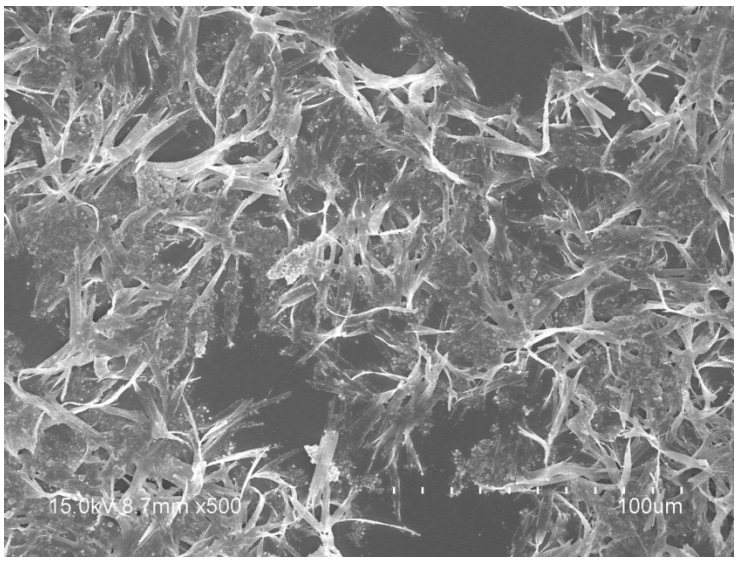

Fig. S2 SEM image of belts-like product generated in the presence of SDS (0.1 g).

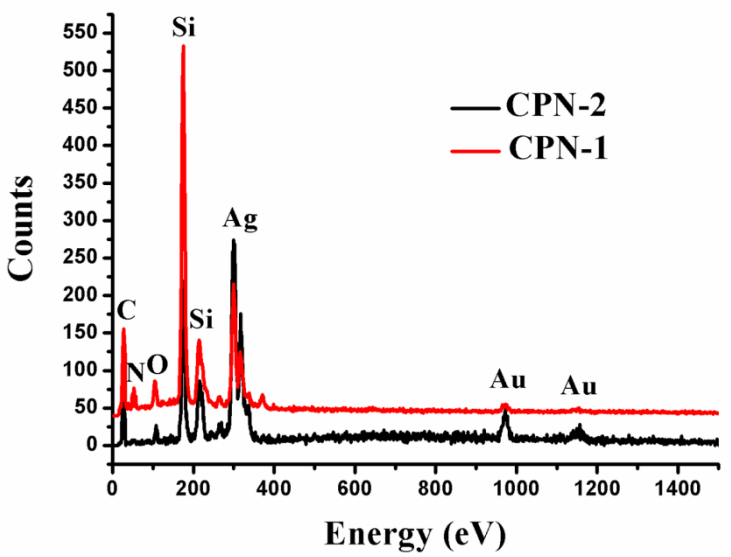

Fig. S3 EDX spectra of as-synthesized CPN-1 and CPN-2.

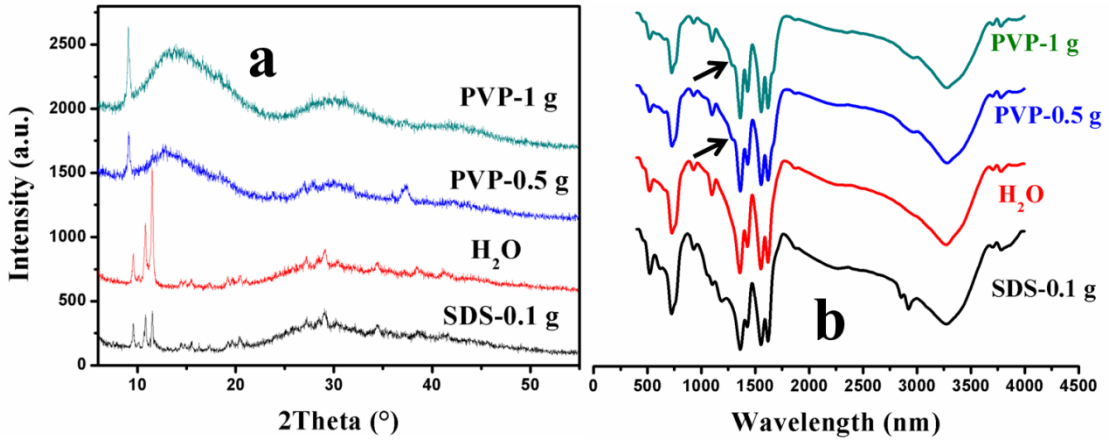

Fig. S4 (a) XRD patterns of as-synthesized coordination polymer products by adjusting the synthetic parameters. (b) IR spectra of as-obtained coordination polymer products by adjusting the synthetic parameters (the arrow points at 1288 cm^{-1})

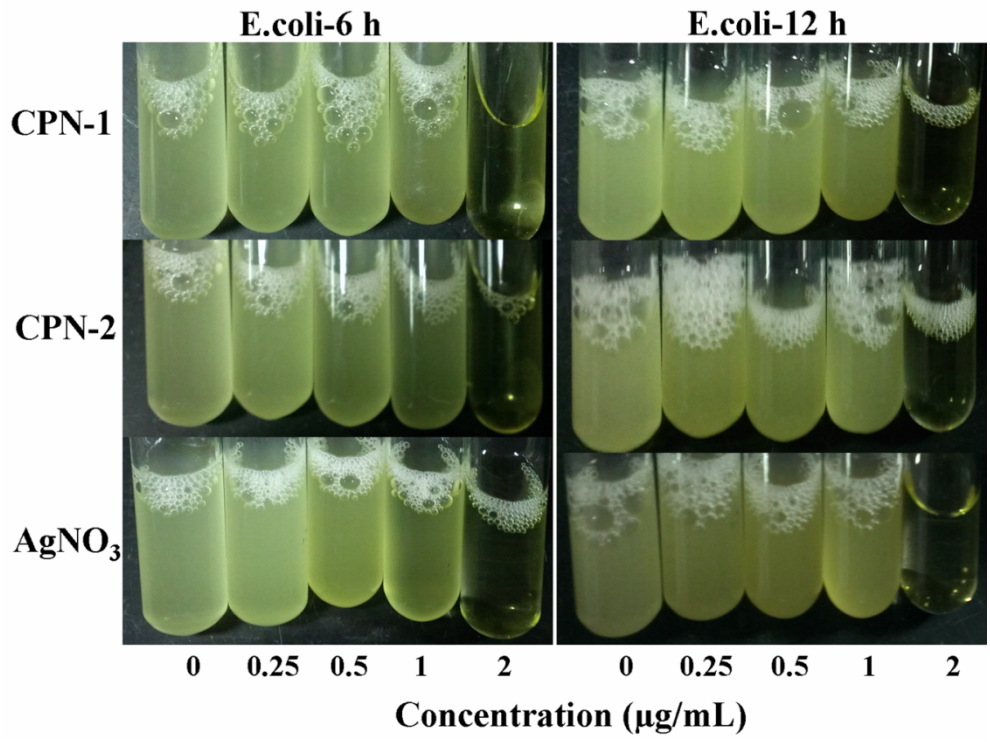

Fig. S5 The photographs of antibacterial activities against *E. coli* of as-synthesized samples and compared $AgNO_3$.

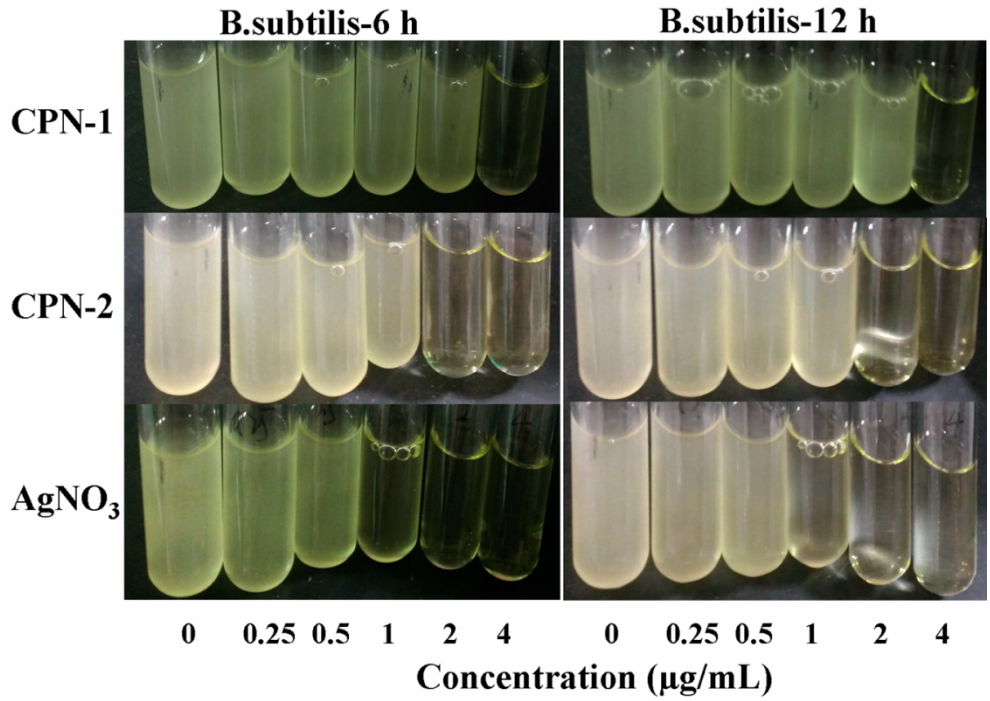

Fig. S6 The photographs of antibacterial activities against *B. subtilis* of as-synthesized samples and compared $AgNO_3$.

Table S1 Elemental analyses of as-obtained coordination polymer samples using different synthetic procedures.

Sample	C%	H%	N%
SDS-0.1 g	17.37	1.936	0.11
H_2O	19.31	3.048	1.10
PVP-0.5 g	20.50	3.187	1.73
PVP-1 g	21.46	3.546	2.78