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

Supporting Information

For

One-Pot High Yield Harvest of Ag Nanoparticles Embedded Biochar Hybrid Materials from Waste Biomass for Catalytic Cr(VI) Reduction

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Table S1. The elemental compositions (C, H, N, O) of the pure biochar, Ag@biochar, and spent Ag@bichar

	C (wt.%)	H (wt.%)	N (wt.%)	O (wt.%)
Biochar	79.9	3.1	0.4	16.1
Ag@biochar	81.0	2.6	0.7	14.3
Spent Ag@bichar	77.0	2.8	0.3	16.2

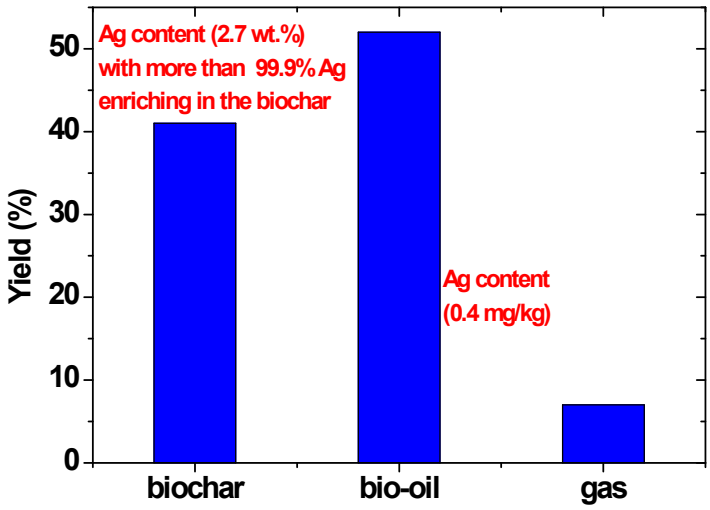

Fig. S1. The yields of biochar, bio-oil, and gas during the pyrolysis of the Ag polluted biomass, as well as the Ag contents in the biochar and bio-oil.

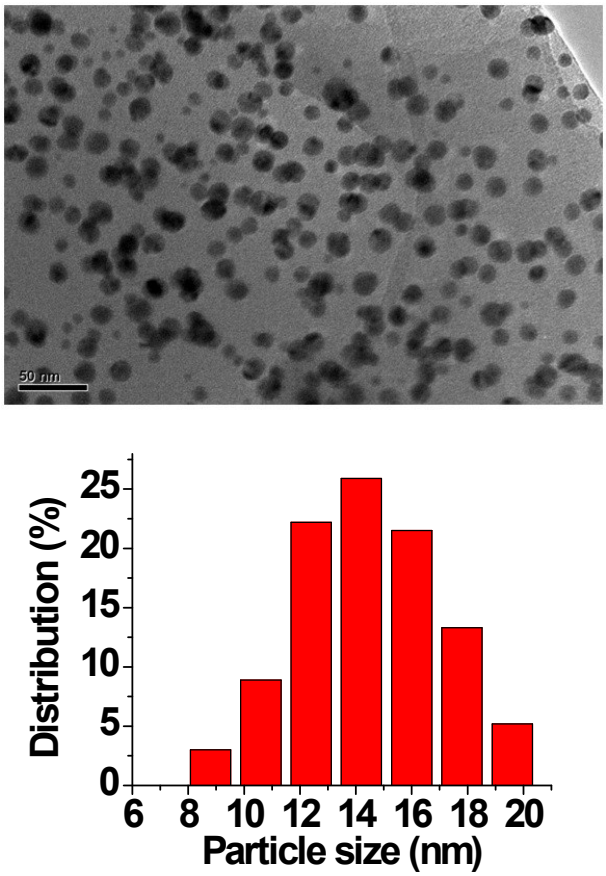

Fig. S2. The TEM image of the Ag@biochar synthesized from $NaBH_4$ reduction, and the Ag particle size distribution

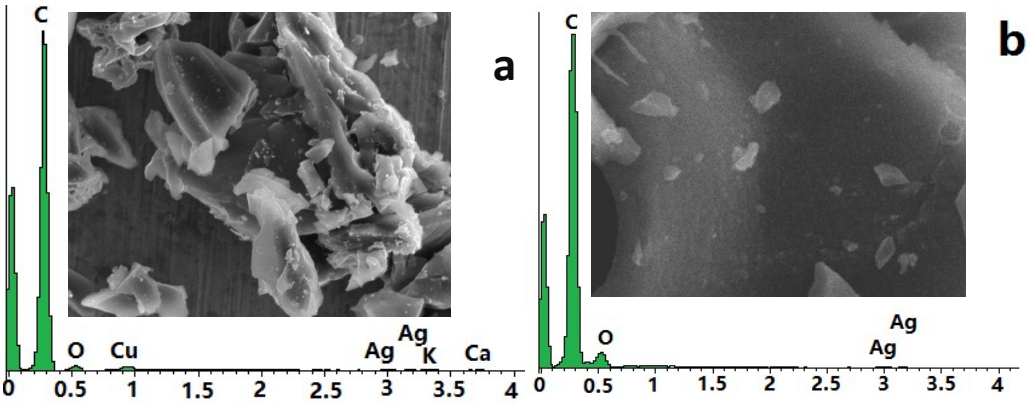

Fig. S3. The SEM-EDS of the Ag@biochar-600 and Ag@cellulose-biochar-600 samples

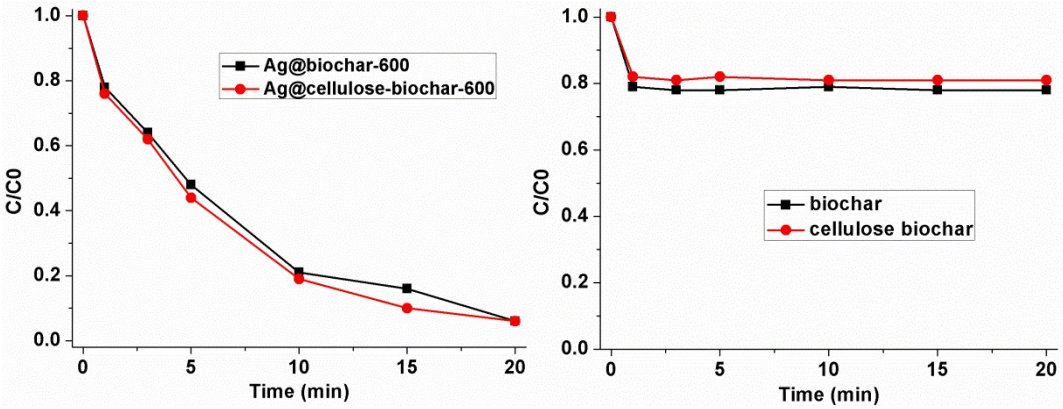

Fig. S4. Comparison of the catalytic performance of the biochar derived from biomass and cellulose and biochar supported Ag NPs.

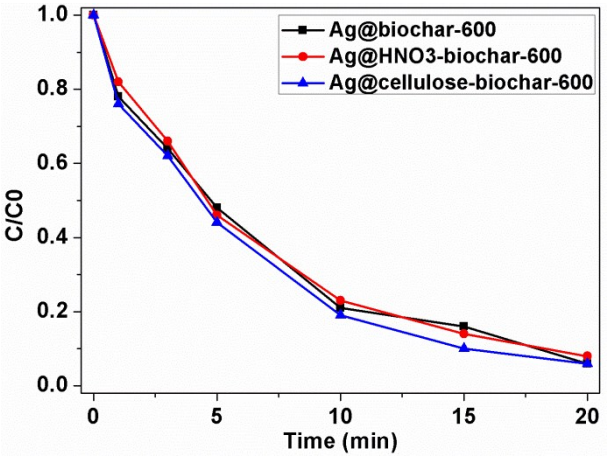

Fig. S5. Comparison of the catalytic performance of different biochar support Ag NPs.