

Supporting Information

One-step *in situ* assembly of size-controlled silver nanoparticles on polyphenol-grafted collagen fiber with enhanced antibacterial property

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Table S1. Effects of EGCG grafting degree on the load and particle size of Ag on CF

Samples	Amount of EGCG used (g)	Grafted quantity of EGCG on CF (g)	Ag load (wt.%)	Ag particles ^b	
				Size (nm)	SD (nm)
Ag-CF	0	0	0.83	-	-
Ag-EGCG_{0.01}-CF^a	0.05	0.048	1.22	22.3	10.1
Ag-EGCG_{0.1}-CF	0.5	0.485	1.45	12.4	6.3
Ag-EGCG_{0.3}-CF	1.5	1.412	1.57	6.1	2.5
Ag-EGCG_{1.0}-CF	5.0	2.135	1.85	5.2	1.4

^a Subscript number stands for initial mass ratio of EGCG to CF. ^b The size and distribution of Ag particles were measured by TEM images.

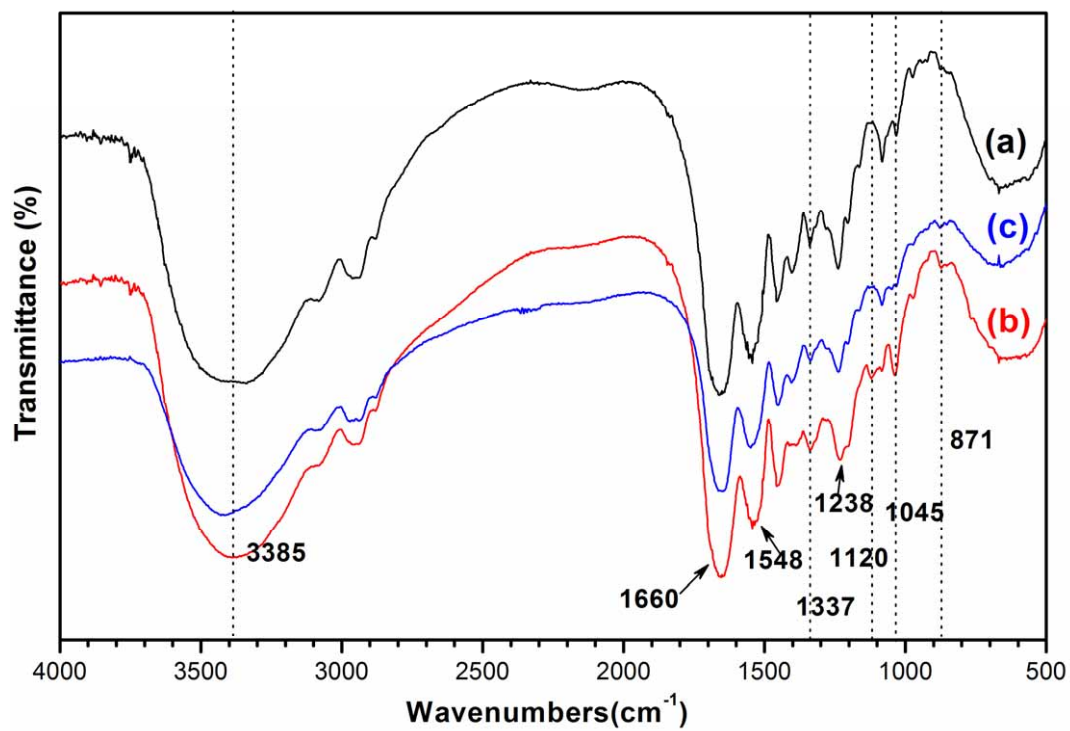


Figure S1. FT-IR spectra of (a) CF, (b) EGCG-CF and (c) Ag-EGCG_{0.3}-CF