

Supplementary Information

**Preparation and Characterization of Ciprofloxacin-loaded
Nanoparticles Incorporated Polymeric Films Dressing**

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Table S1: Optimization of the AX-PC Films Formulations/Composition

Formulation Code	AX:PC*	GL (% v/v)	CP (% v/v)	Peelable	Foldable	Transparency
AXPC01	1:1	1	-	☒	☒	✓
AXPC1**	1:1	2	-	✓	✓	✓
AXPC2	2:1	2	-	✓	☒	✓
AXPC3	1:2	2	-	✓	☒	✓
AXPC-CP1**	1:1	2	0.05	✓	✓	✓
AXPC-CP2	2:1	2	0.05	✓	☒	✓
AXPC-CP3	1:2	2	0.05	✓	☒	✓

* Ratios of mixing 4% (w/v) AX and 4% (w/v) PC dispersions

** Films compositions selected for incorporation of blank and CP-loaded NPs.

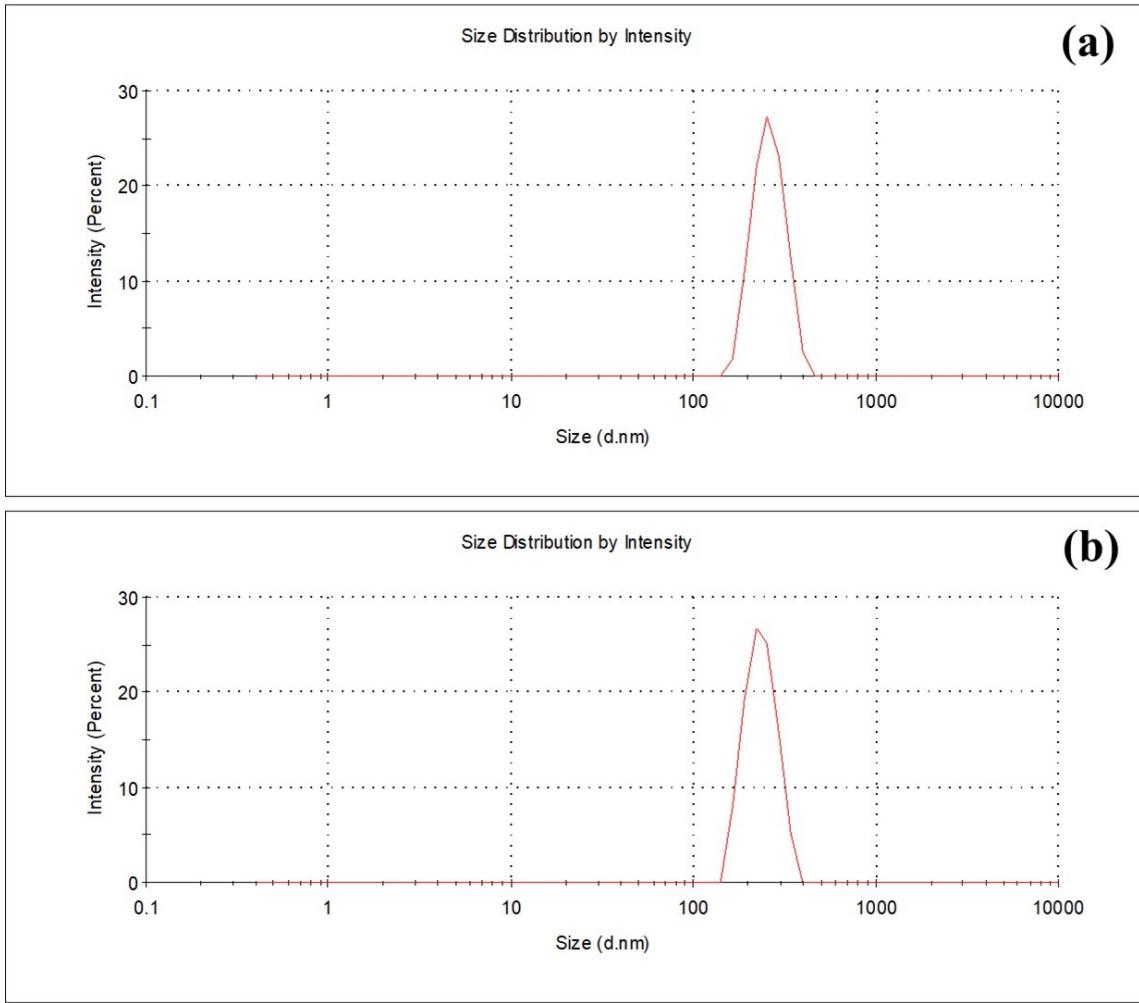


Figure S1. Particle size of blank (a) and CP-loaded (b) SA-CS NPs

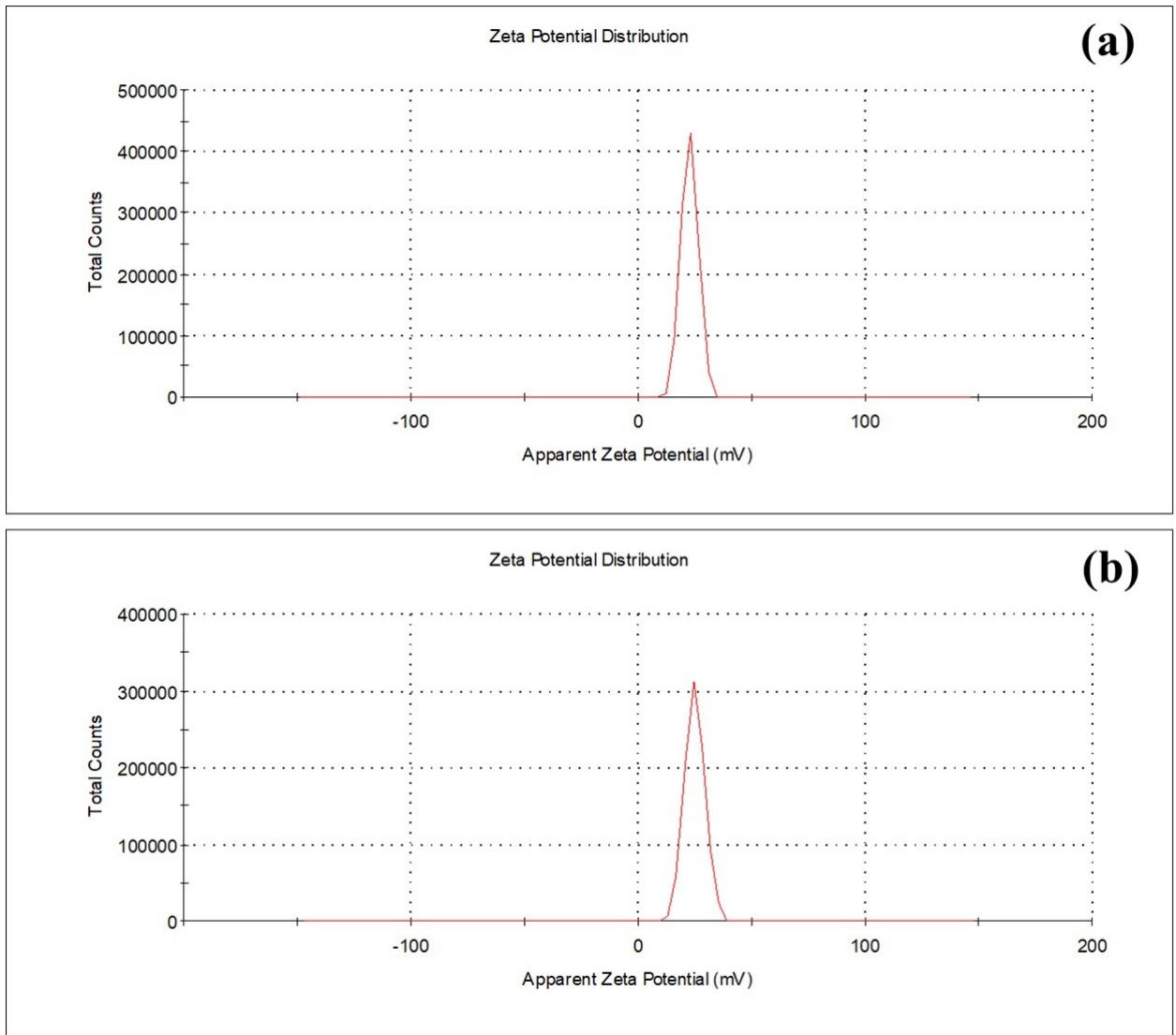


Figure S2. Zeta potential of blank (a) and CP-loaded (b) SA-CS NPs



Figure S3: Optical images of the AX-PC films, BF (a), CF (b), NF (c), and NCF (d).

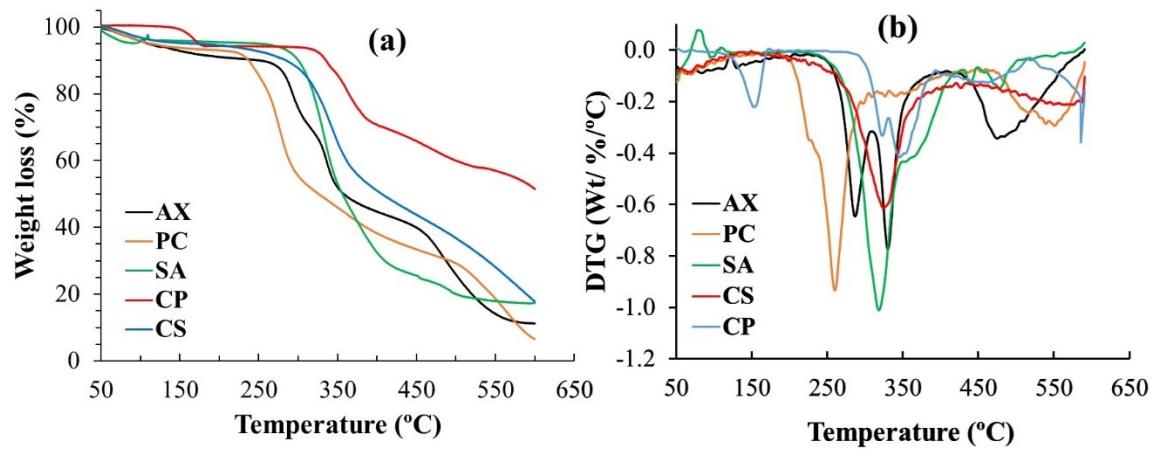


Figure S4: TGA (a) and DTG (b) curves of AX, PC, SA, CS, and CP

Table S2: Release kinetics of CP from CF and NCF (AX-PC) polymeric films

Model	Zero-order		First order		Higuchi		Korsmeyer-Peppas		
	R^2	K_0	R^2	K_I	R^2	K_H	R^2	K_K	n
CF	0.8791	2.8962	0.6568	- 0.0396	0.7013	12.54	0.9896	1.6417	0.4603
NCF	0.4827	1.5597	0.9762	- 0.0353	0.9519	14.596	0.9884	1.3898	0.4524