

1 Supplementary information

2 1. Characteristic peaks and corresponding functional groups in the FTIR spectrums.

Sample	Wavenumber (cm ⁻¹)	Interpretation
Curcumin	3510	-OH groups
	1602 and 1510	C=C and C=O of benzene rings
	1429	olefinic C-H bending vibration
	1280	aromatic C-O stretching vibration
	1153	C-C-H stretching vibration
	962 and 812	C-O-C stretching vibration
BSA	1666 and 1532	amide I (-NH ₂) and II (-NH-)
Gelatin	1651 and 1540	amide I (-NH ₂) and II (-NH-)
Curcumin-BSA complex	3434	Curcumin (-OH groups)
	1414	Curcumin (olefinic C-H bending vibration)
	1642 and 1561	BSA (amide I and II)
Curcumin-gelatin complex	3436	Curcumin (-OH groups)
	1412	Curcumin (olefinic C-H bending vibration)
	1641 and 1561	Gelatin (amide I and II)