

Curcumin Loaded Ag-TiO₂-Halloysite Nanotubes Platform for Combined Chemo-Photodynamic Therapy Treatment of Cancer Cells.

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Supplementary Materials

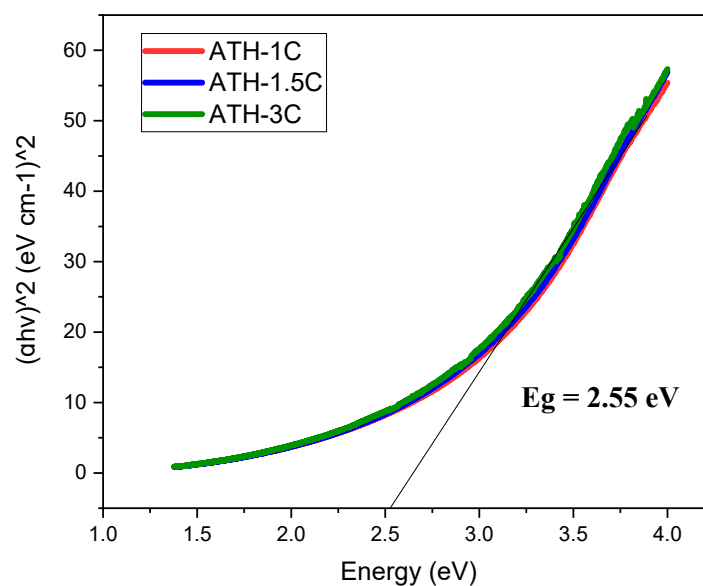


Figure 1S: Tauc plots of ATH-1C: 1wt.% Ag-TiO₂-90 wt.% HNTs, ATH-1.5C: 1.5wt.% Ag-TiO₂-90 wt.% HNTs and ATH-3C: 3wt.% Ag-TiO₂-90 wt.% HNTs

Table 1S: Curcumin content measured by TGA

Composite/curcumin loaded composite	% Weight loss (20–100 °C)	% Weight loss (100–800 °C)	% Curcumin loaded
1 wt.%Ag-TiO ₂ -90 wt.%HNT	2.4	13.9	-
Cur-1 wt.%Ag-TiO ₂ -90 wt.% HNT	2.8	16.7	2.8
1.5 wt.%Ag-TiO ₂ -90 wt.%HNT	2.5	13.5	-
Cur-1.5 wt.%Ag-TiO ₂ -90 wt.% HNT	2.6	16.6	3.7
3 wt.%Ag-TiO ₂ -90 wt.%HNT	6.9	12.7	-
Cur-3 wt.%Ag-TiO ₂ -90 wt.% HNT	3.6	16.3	3.6
HNT	4.5	15.6	-
HNT loaded curcumin	3.3	19.5	3.9

Table 2S: Percentage of cumulative drug release

Time	Samples			
	Cur- 90 wt.%HNT- 1wt.%Ag-TiO ₂	Cur- 90 wt.%HNT- 1.5wt.%Ag-TiO ₂	Cur- 90 wt.%HNT- 3wt.%Ag-TiO ₂	Cur- HNT
2	8.8434	6.401	8.240	7.353
4	19.020	17.036	16.975	15.582
6	26.882	24.099	24.681	22.692
8	37.465	33.061	31.678	29.958
10	41.377	39.042	36.320	36.760
24	72.167	69.211	55.312	68.144
48	81.715	80.382	51.916	85.907

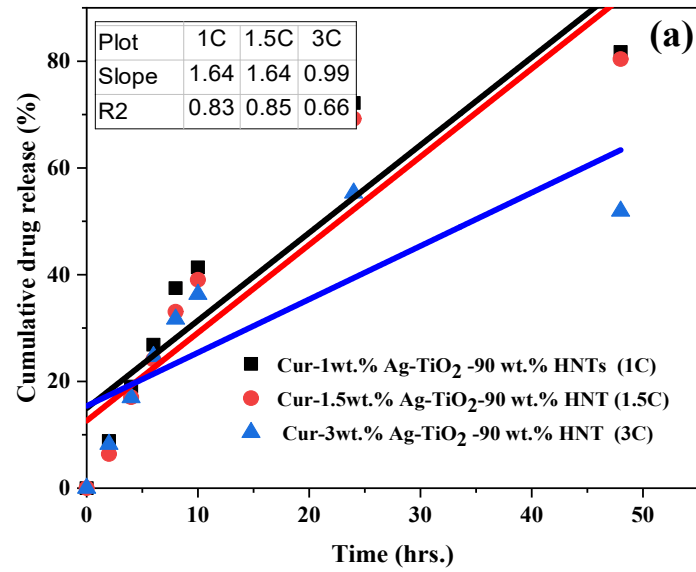


Figure 2S. Zero order kinetic model for Curcumin loaded HNT- Ag-TiO₂ samples

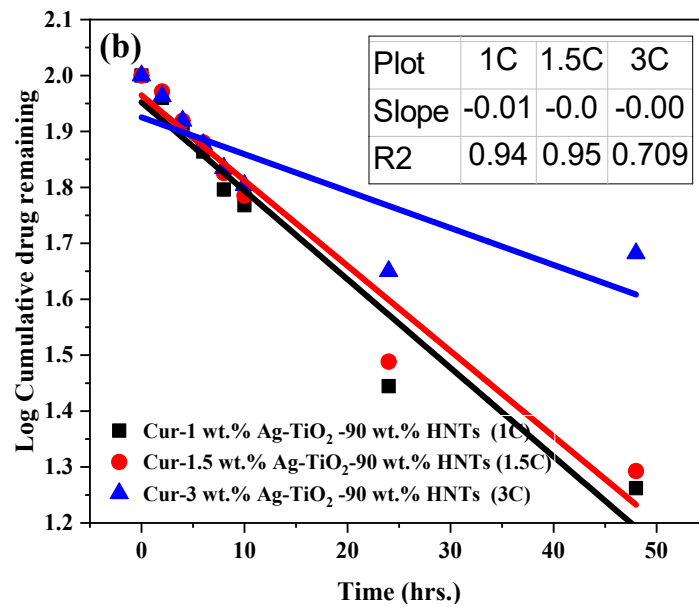


Figure 3S. First order kinetic model Curcumin loaded HNT- Ag-TiO₂ samples

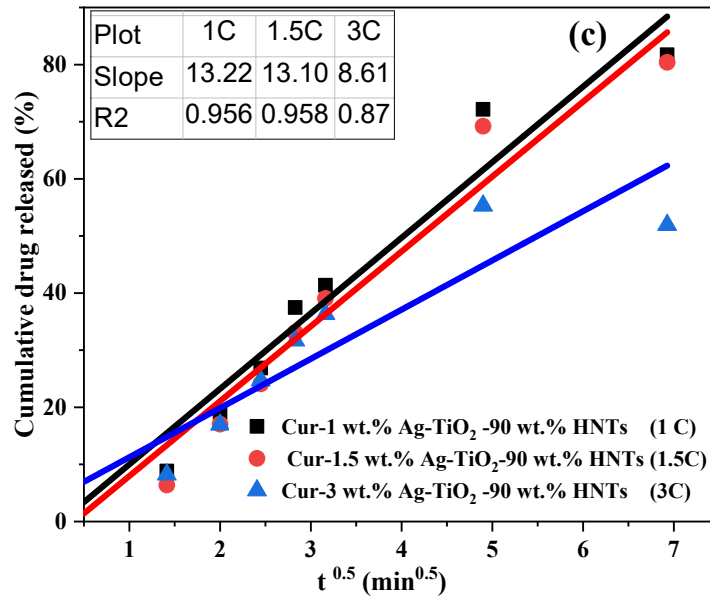


Figure 4S. Higuchi model for (Curcumin loaded HNT- Ag-TiO₂ samples

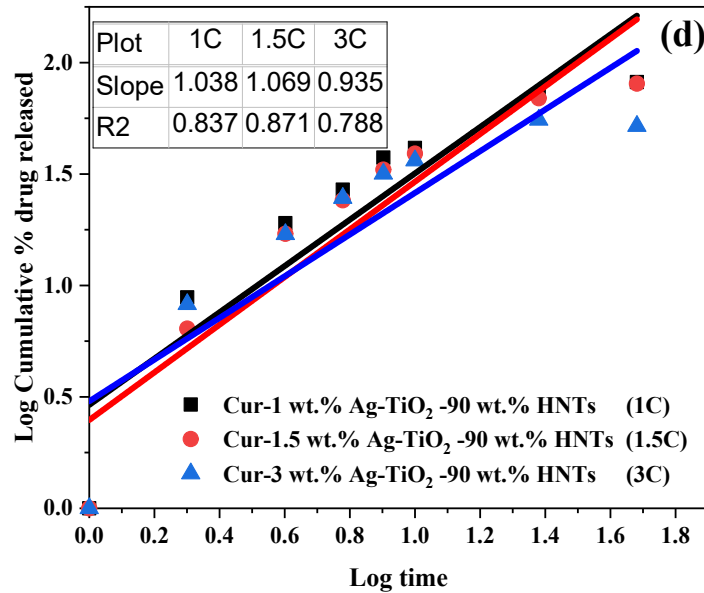


Figure 5S. Korsmeyer-Peppas model for Curcumin loaded HNT- Ag-TiO₂ samples

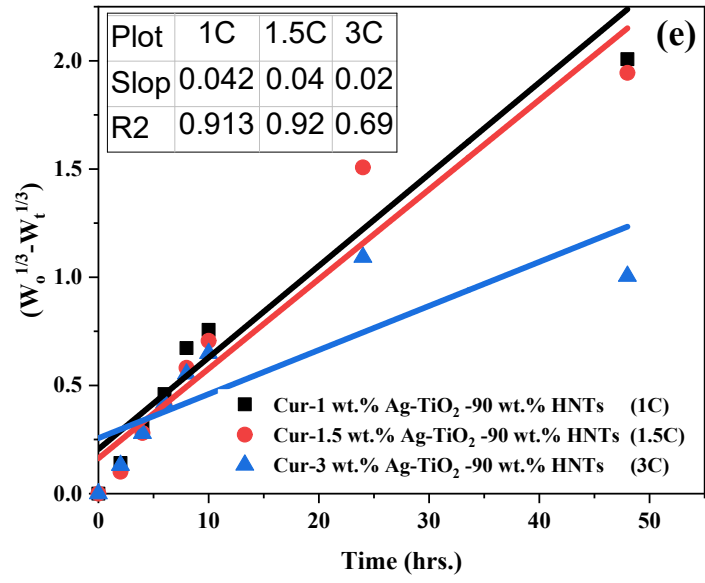


Figure 6S. Hixson Crowell model for Curcumin loaded HNT- Ag-TiO₂ samples