

Green synthesis of engineered CdS nanoparticles with reduced cytotoxicity for enhanced bio-imaging application

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Supporting Information

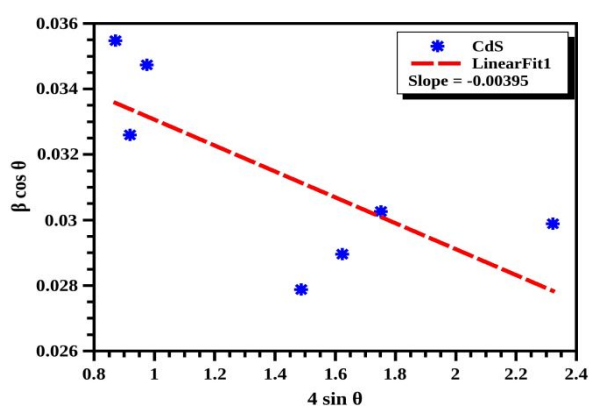


Figure S1: W-H plot of CdS nanoparticle.

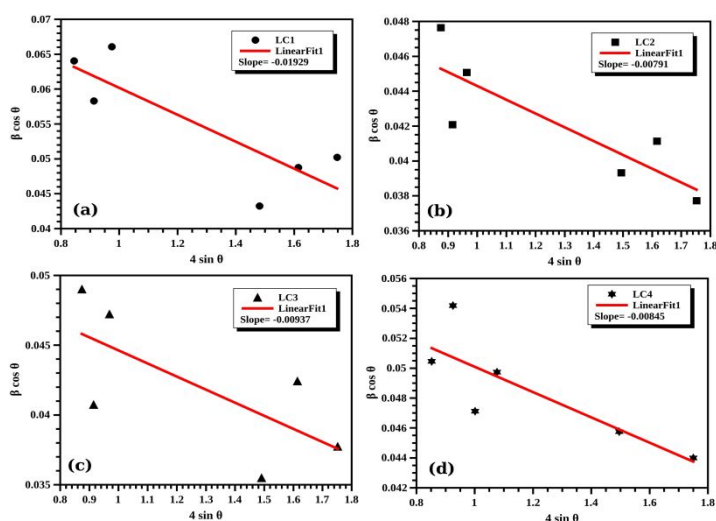


Figure S2: W-H plot of CdS-C. Odorata hybrid structures (a) LC1, (b) LC2, (c) LC3 and (d) LC4

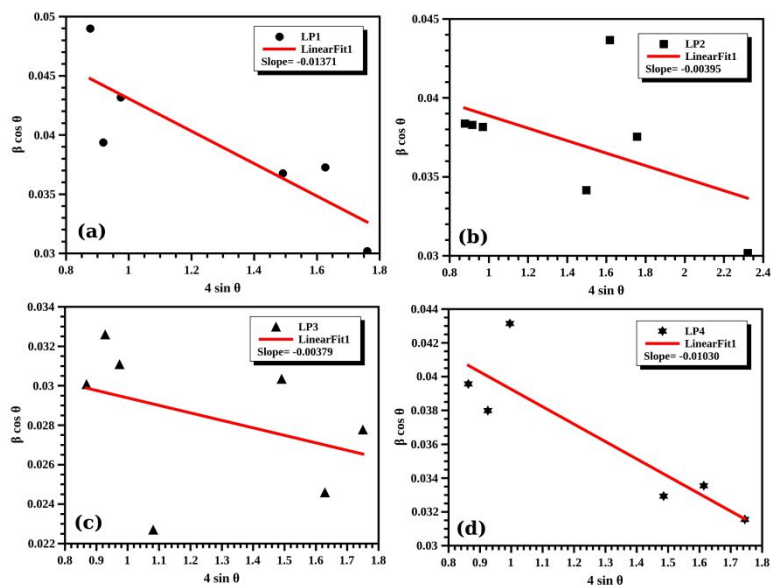


Figure S3: W-H plot of CdS-*P. Amboinicus* hybrid structures, (a) LP1, (b) LP2, (c) LP3 and (d) LP4

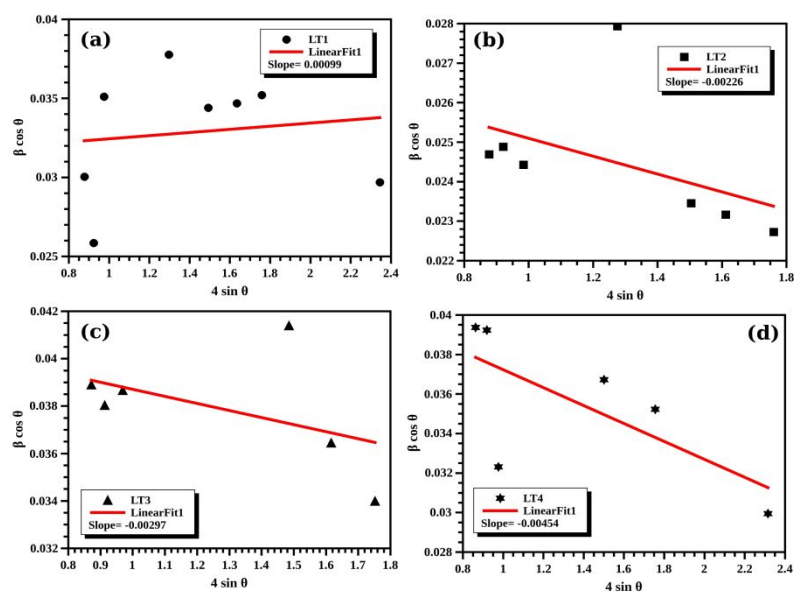


Figure S4: W-H plot of CdS-*O. Tenuiflorum* hybrid structures, (a) LT1, (b) LT2, (c) LT3 and (d) LT4.

Table S1: Sample details with % of leaf extract solution(*C. Odorata* (C), *P. amboinicus* (P) and *O. tenuiflorum* (T)), calculated lattice parameters and the crystallite size from XRD and W-H analysis

Sample Name	Total volume of leaf extract (%)	Crystallite size (Å)	Strain	Size from W-H Analysis (Å)	a (Å)	c (Å)
CdS	0	45	-0.00395	37	4.09	6.70
LC1	6	26	-0.01929	18	4.14	6.75
LC2	10	33	-0.00791	27	4.08	6.73
LC3	20	33	-0.00937	26	4.08	6.70
LC4	50	29	-0.00845	24	4.11	6.65
LP1	6	36	-0.01317	24	4.07	6.71
LP2	10	38	-0.00395	32	4.07	6.73
LP3	20	49	-0.00379	42	4.09	6.63
LP4	50	38	-0.01030	28	4.11	6.65
LT1	6	43	0.00099	45	4.07	6.67
LT2	10	57	-0.00226	51	4.06	6.69
LT3	20	37	-0.00297	34	4.11	6.76
LT4	50	39	-0.00454	33	4.09	6.69

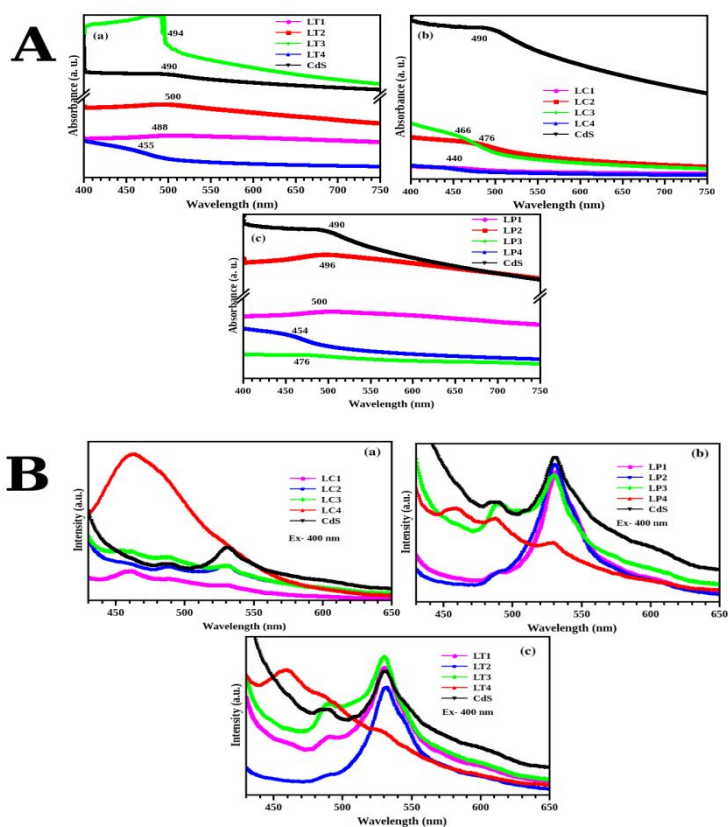


Figure S5: (A) Absorption spectra of the (a) CdS-C. odorata (b) CdS-P. amboinicus and (c) CdS-O. tenuiflorum hybrid structures in comparison with the CdS nanoparticles (B) Emission spectra of all the CdS-GS extract hybrid at an excitation of 400 nm (a) LC series (b) LP series and (c) LT series.

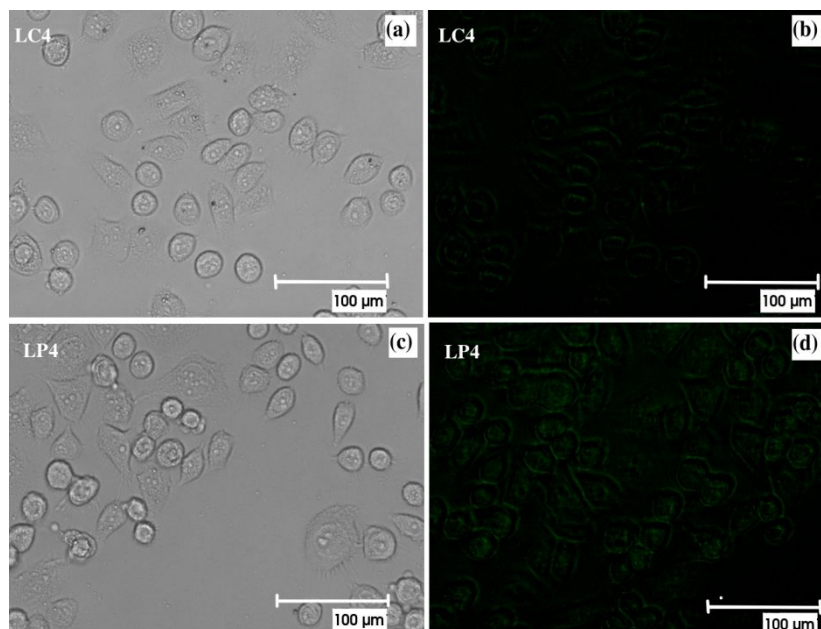


Figure S6: Bright field and fluorescent images of the cell with the presence of CdS- *C.Odorata* (a,b) and that of CdS- *P. Amboinicus* (c,d).