

Fig. S1 TEM image of AuNPs-E2-scale bare 500 nm (a); Histograms of gold nanoparticles obtained with E1 /E2 (b); prepared nanomaterials (c)

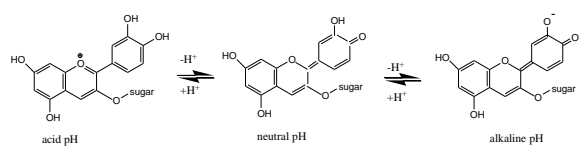


Fig. S2 Formulas for major compounds (anthocyanins) from the natural extracts at different pHs

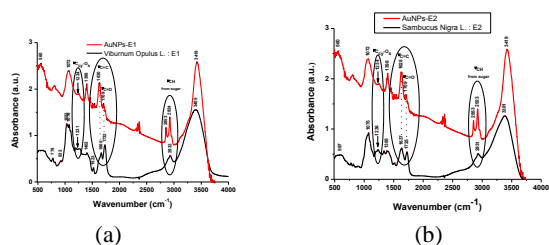


Fig. S3 FT-IR spectra of nanomaterials (a, b)

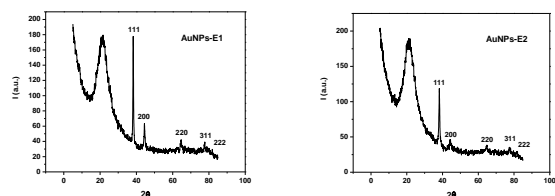


Fig. S4 X-ray spectra of nanomaterials based on gold and natural extract (E1/E2).

Element	Weight%	Atomic%
C K	8.96	53.62
O K	3.19	14.32
Au M	87.85	32.06
Totals	100.00	

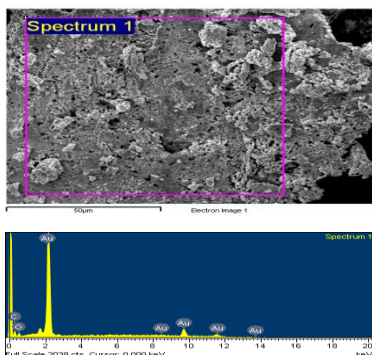


Fig. S5 EDX of AuNPs-E1

Element	Weight%	Atomic%
C K	10.22	65.12
Au M	89.78	34.88
Totals	100.00	

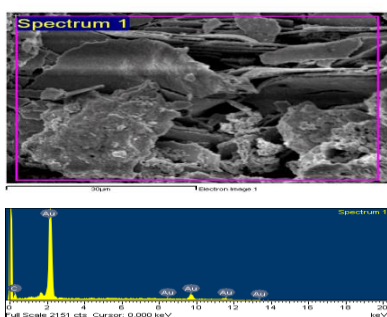


Fig. S6 EDX of AuNPs-E2

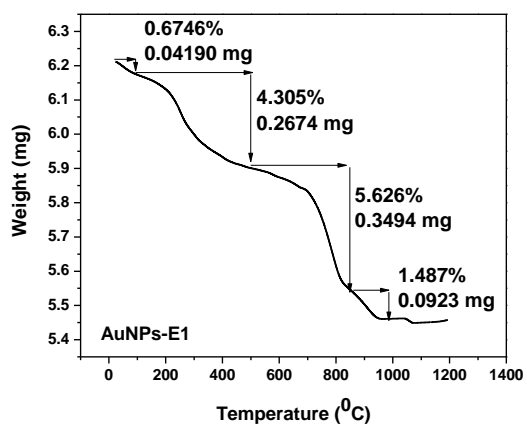


Fig. S7 TGA profile of AuNPs-E1 decomposition.