

**Supporting Information**

**In depth understanding of nano-bio interface between lysozyme and Au NPs immobilized N-doped reduced graphene oxide 2-D scaffolds.**

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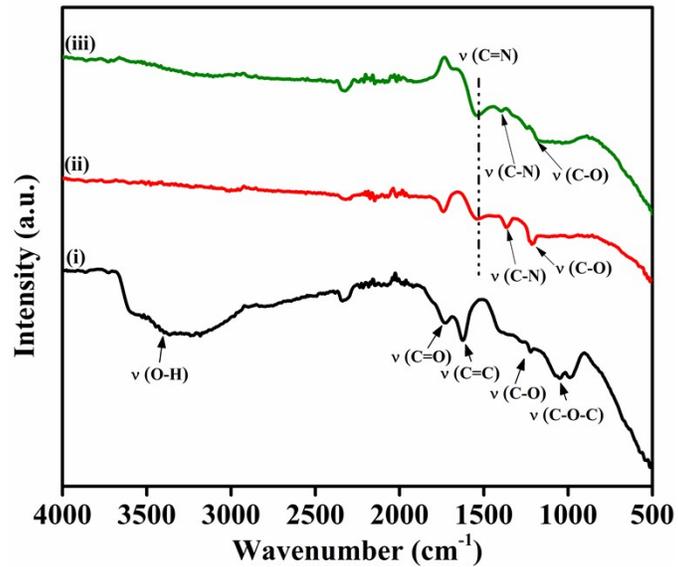
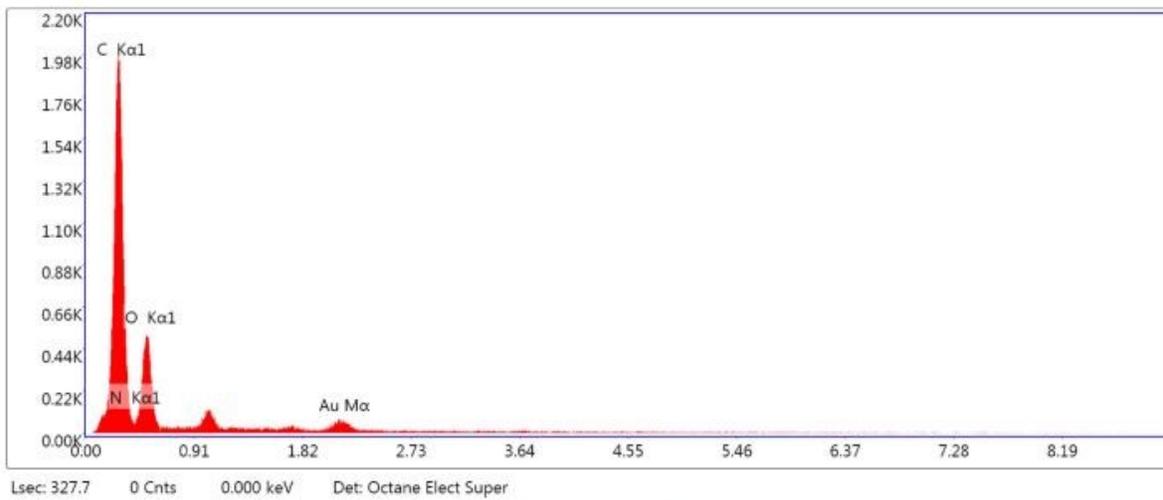


Fig. S1 FTIR spectrum of (i) GO, (ii) N-rGO, and (iii) Au(0)-NrGO.



Lsec: 327.7 0 Cnts 0.000 keV Det: Octane Elect Super

**eZAF Smart Quant Results**

Element	Weight %	Atomic %	Net Int.	Error %	Kratio	Z	A	F
C K	62.77	70.64	114.70	4.15	0.5353	1.0380	0.8215	1.0000
N K	11.73	11.32	5.90	18.70	0.0239	1.0068	0.2024	1.0000
O K	20.99	17.74	22.80	11.75	0.0664	0.9801	0.3226	1.0000
AuM	4.51	0.31	2.90	15.17	0.0281	0.5124	1.2180	0.9977

Fig. S2 EDX analysis indicating the elemental composition for Au(0)-NrGO.

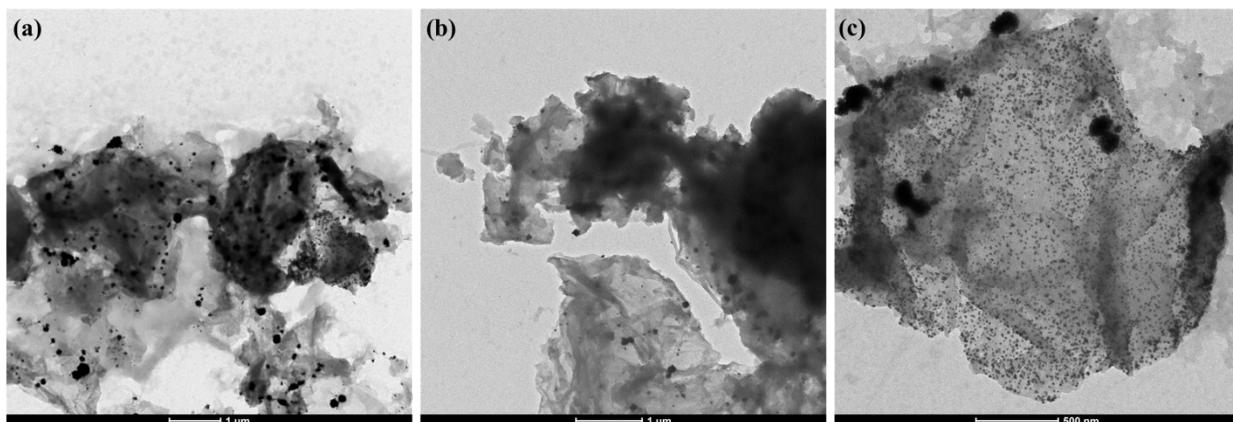


Fig. S3 TEM images for samples of Lys with various concentration of Au(0)-NrGO (a) 50 µg/mL, (b) 200 µg/mL (c) 800 µg/mL.

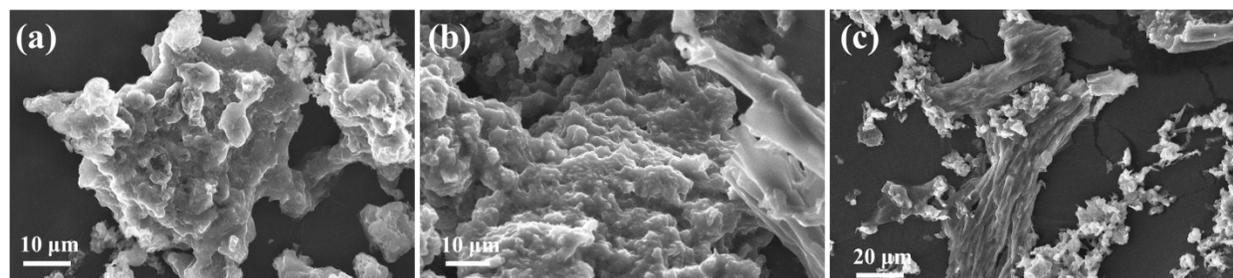


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