

## Supporting Information

### The Hofmeister Effect on Nanodiamonds: How Addition of Ions Provides Superior Drug Loading Platforms

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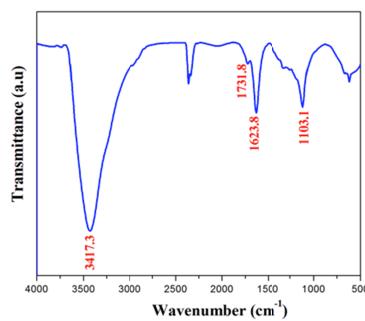


Figure. S1 FTIR spectra of pristine SND

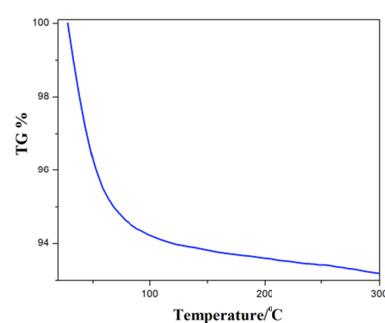


Figure.S2 TG results of SND

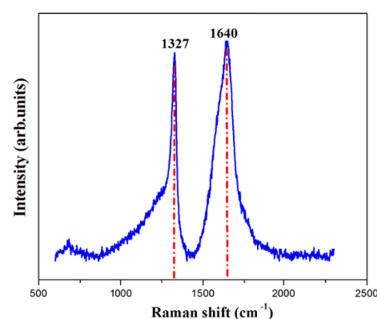


Figure. S3 Raman of pristine SND ( $\lambda=325\text{nm}$ )

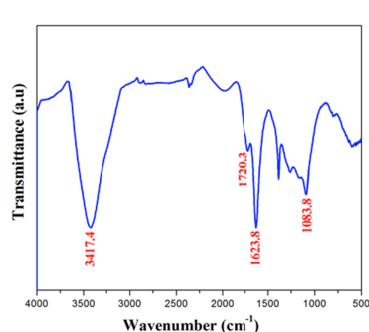


Figure. S4 FTIR spectra of pristine LND

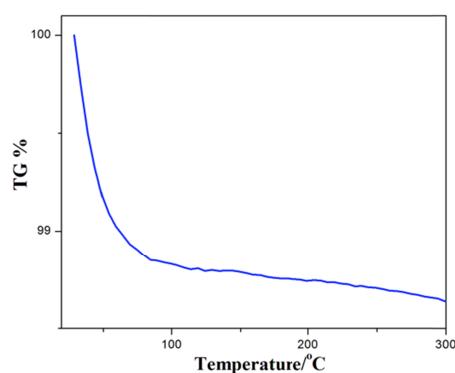


Figure.S5 TG results of SND

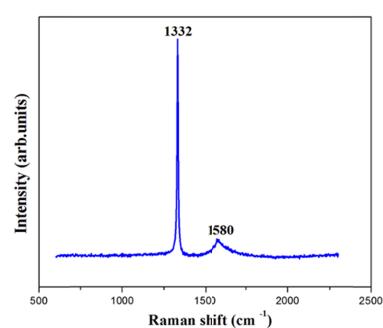


Figure. S6 Raman of pristine LND ( $\lambda=325\text{nm}$ )

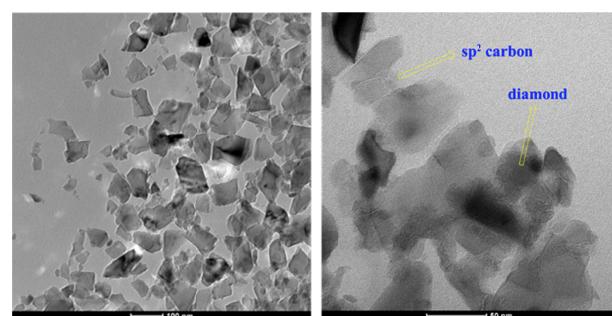


Figure. S7 TEM images of pristine LND

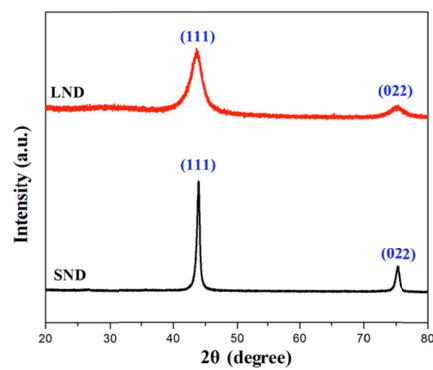


Figure. S8 XRD spectra of SND and LND

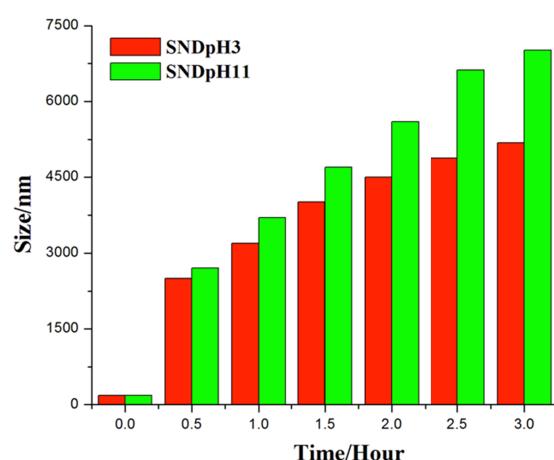


Figure. S9 Size change of SND in acid and basic conditions with time increase

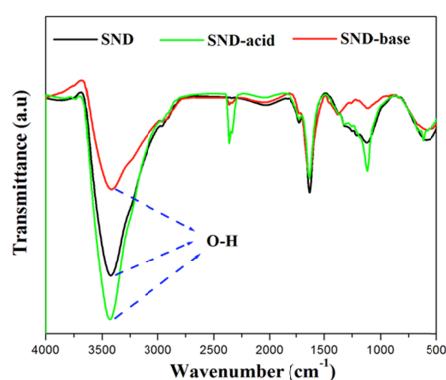


Figure. S10. IR spectra of SND at different pH values

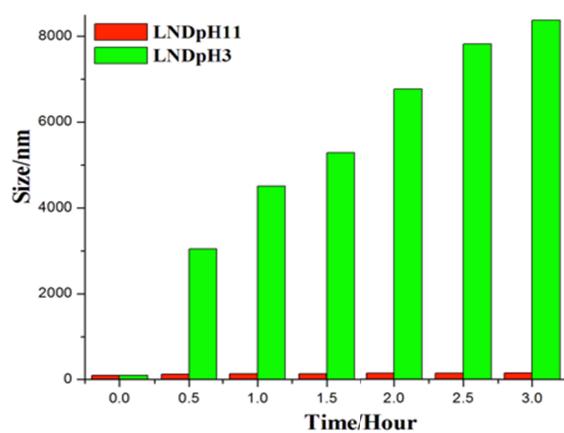


Figure. S11 Size distribution of LND at different pH values

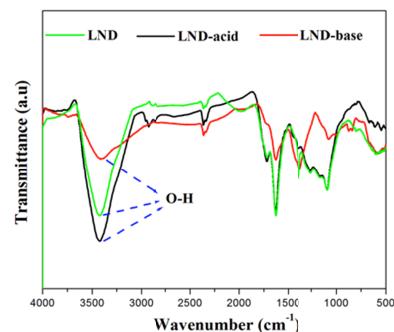


Figure. S12 IR spectra of LND at different pH value

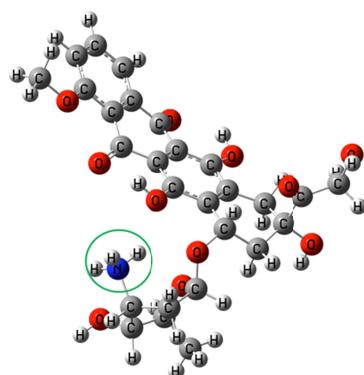


Figure. S13 The structure of  $\text{DOXH}^+$

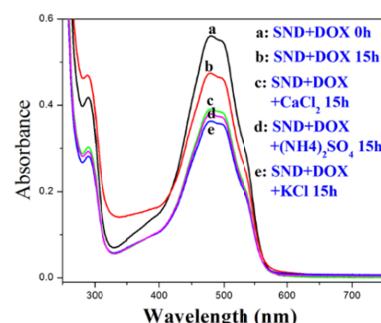


Figure. S14 UV-Vis spectra of KCl,  $\text{CaCl}_2$  and  $(\text{NH}_4)_2\text{SO}_4$  effect on  $\text{DOXH}^+$  loading on SND

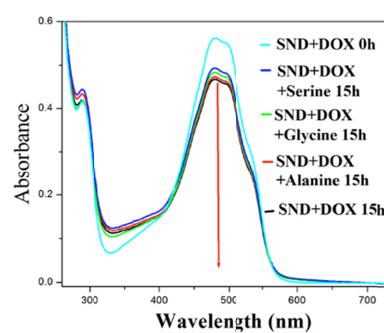


Figure. S15 UV-Vis spectra of serine, glycine and alanine effect on  $\text{DOXH}^+$  loading on SND