Supporting Information

Fluorescent N-doped Graphene Quantum Dots Embedded in Transparent Polymer Films for Photon-Downconversion Applications

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Table S1. Solubility criteria of UV curable pristine NOA polymers in various solvents

Solvents	Solubility status	After 30 min sonication	Stay after 24h
Chloroform	Excellent	Excellent	Excellent
Toluene	Good	Good	Good
Dichloromethane (DCM)	Good	Good	Good
Chlorobenzene (CB)	Soluble	Soluble	Soluble
Ethanol	Partially soluble	Partially soluble	Partially soluble
Water	Insoluble	Insoluble	Insoluble

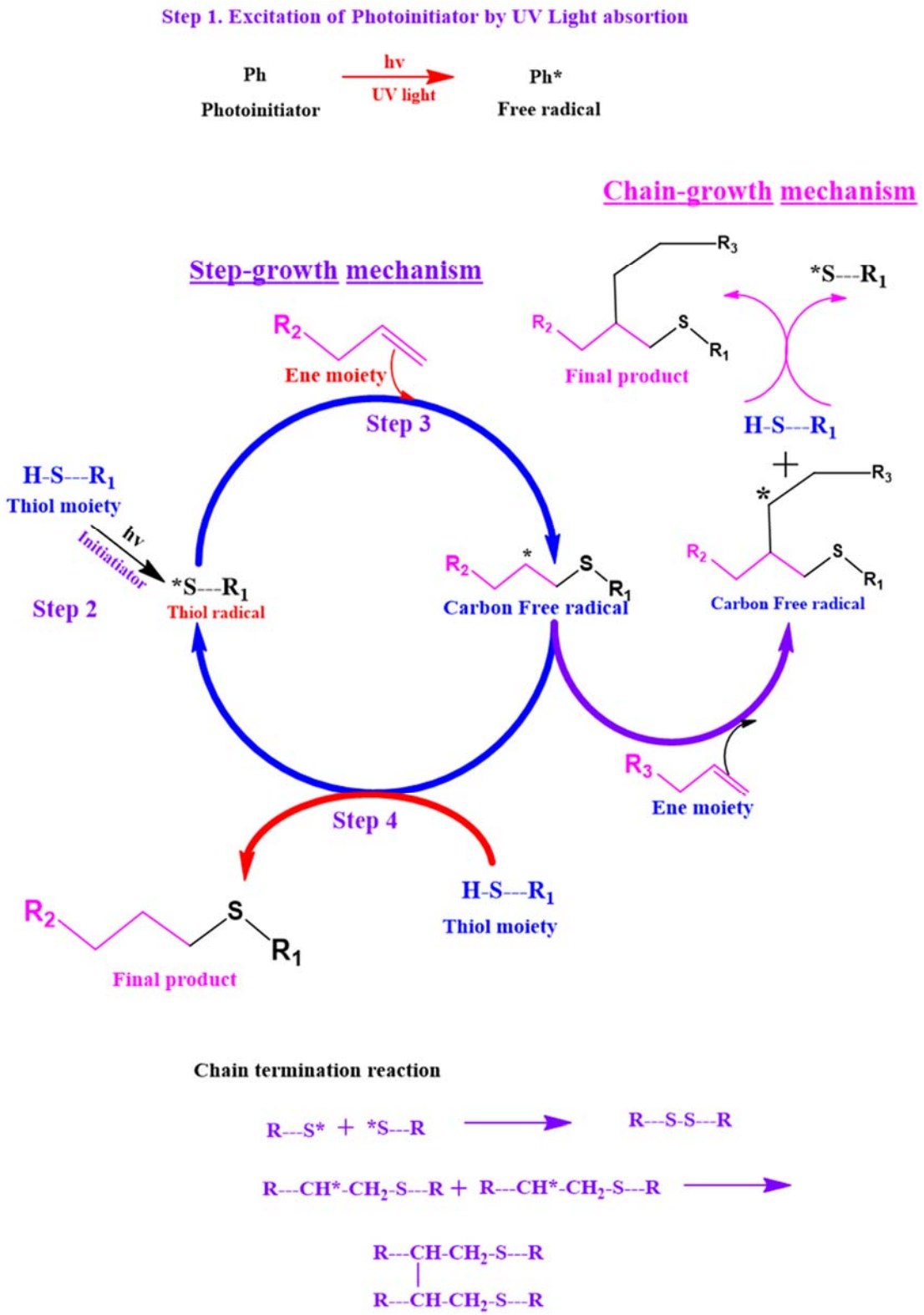

Fig. S1 Schematic diagram of UV initiated thiol-ene 'Click' reaction mechanism.

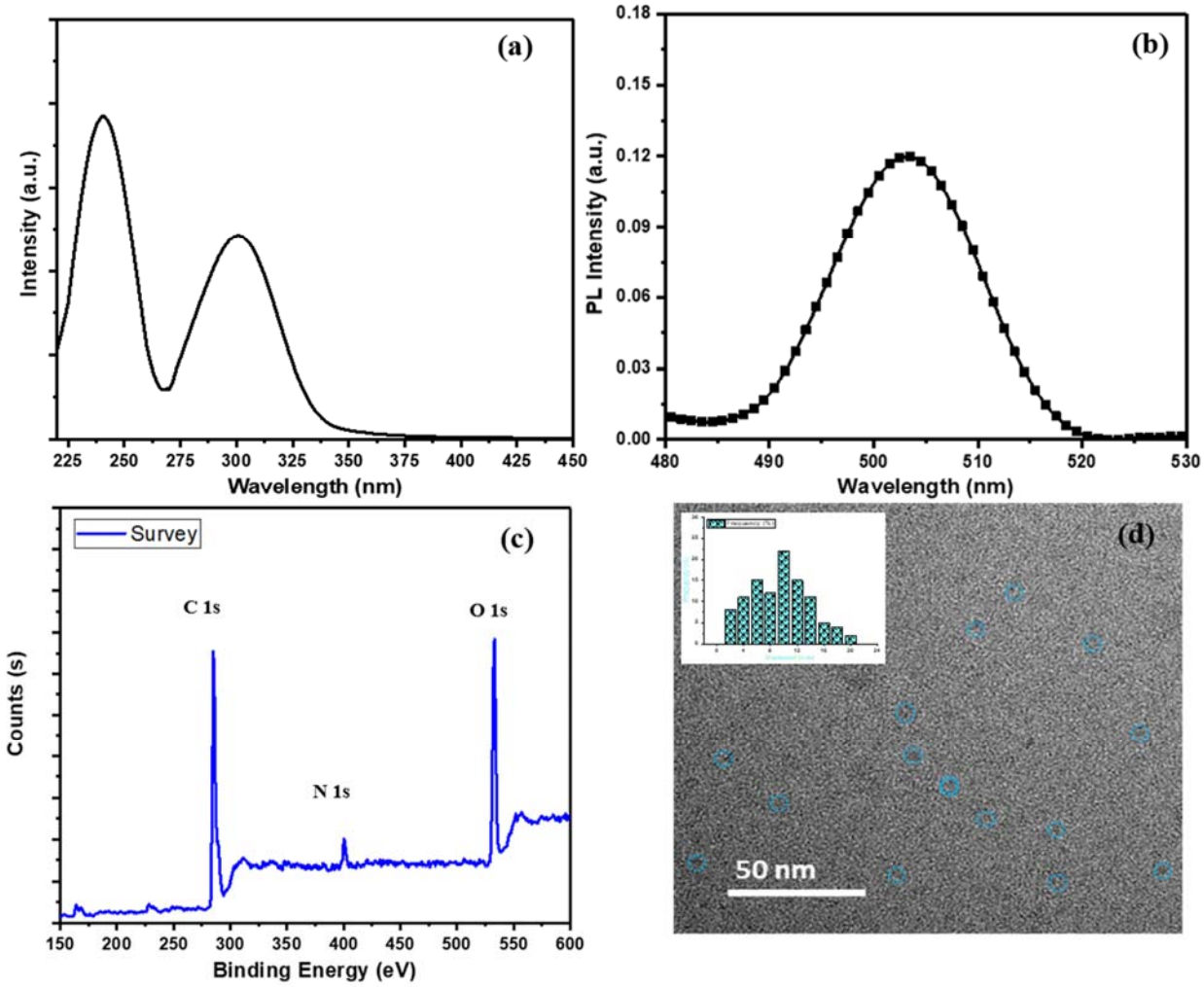

Fig. S2 (a) UV-visible spectra (b) Fluorescence spectra (c) XPS survey (d) TEM image of nitrogen-doped graphene quantum dots.

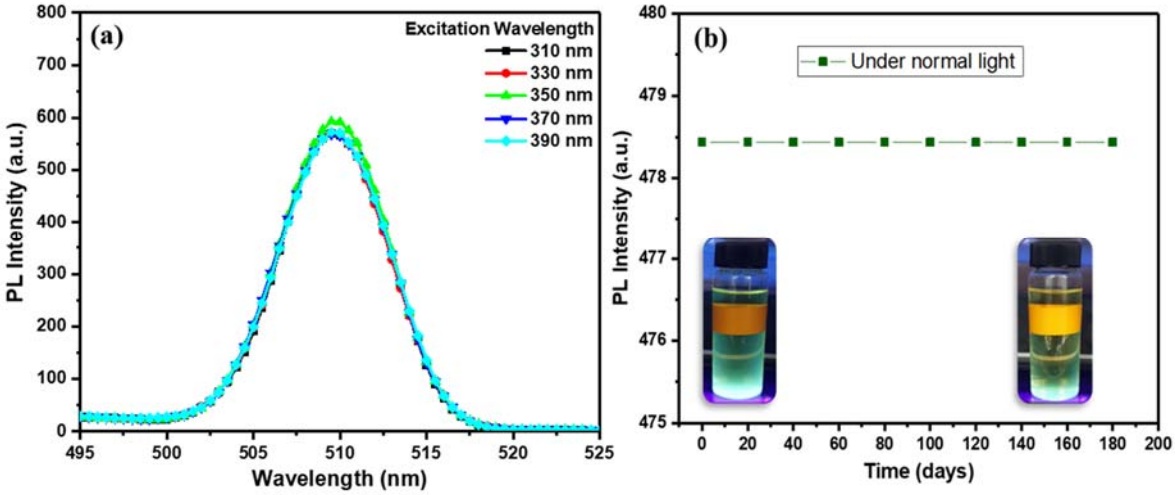

Fig. S3 (a) Fluorescence spectra at different excitation wavelengths (b) Stability plot of nitrogen-doped graphene quantum dots in aqueous solution under normal sunlight.

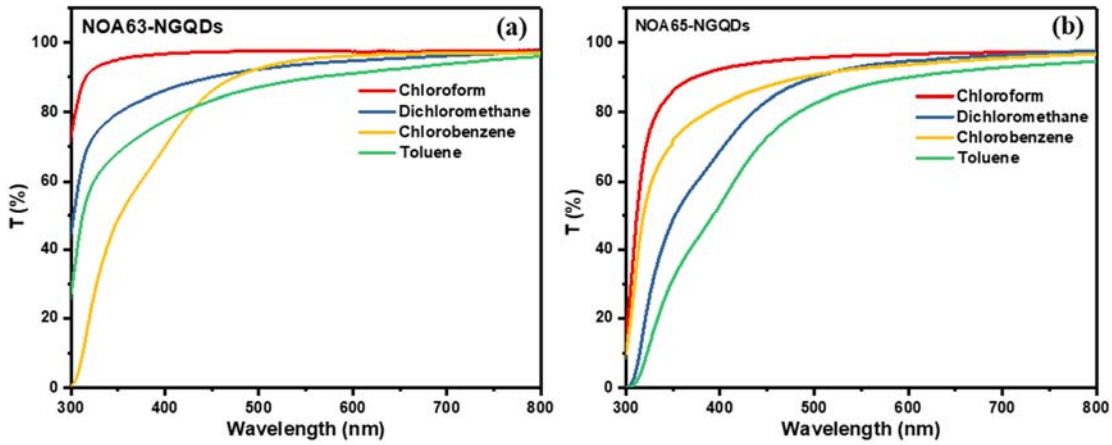

Fig. S4 Transparency curves of (a) NOA63-NGQD nanocomposite films and (b) NOA65-NGQD nanocomposite films in various solvents.

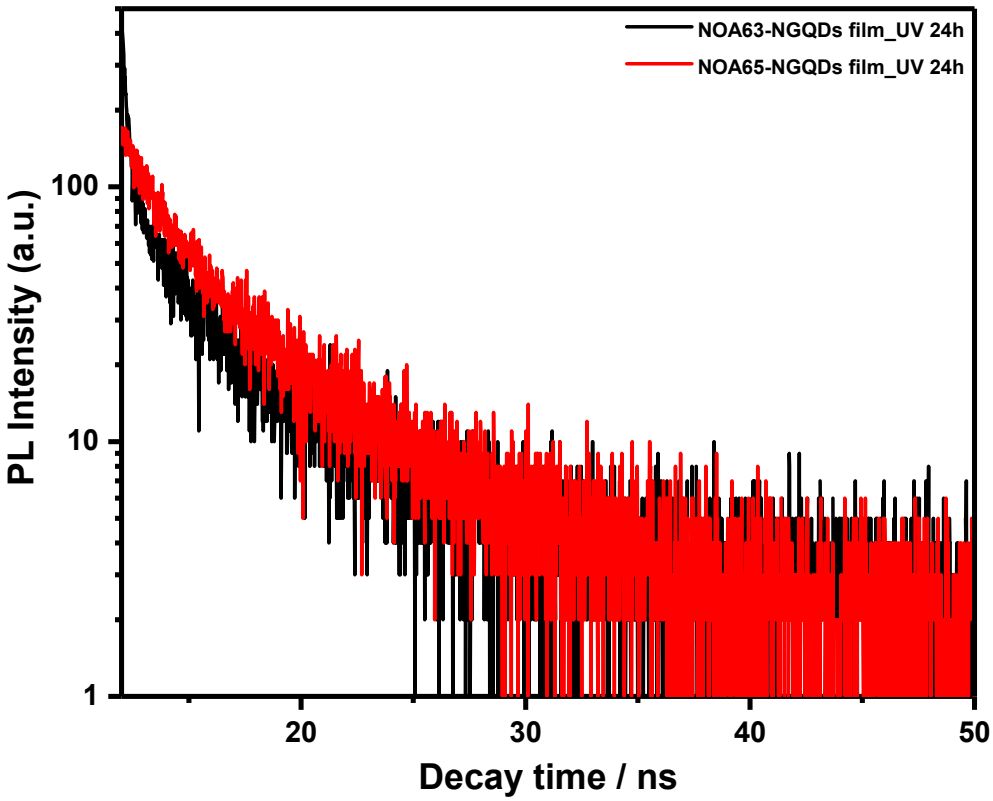

Fig. S5 Time-resolved PL spectra of NOA-NGQD nanocomposite films.

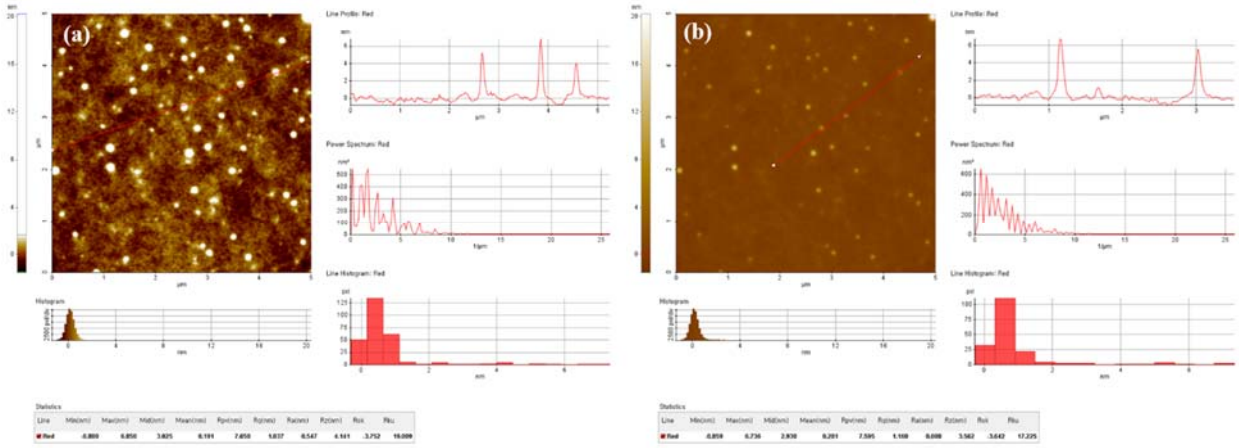

Fig. S6 AFM images with particle-size parameter and roughness analysis of (a) NOA63-NGQD nanocomposite film and (b) NOA65-NGQD nanocomposite film.

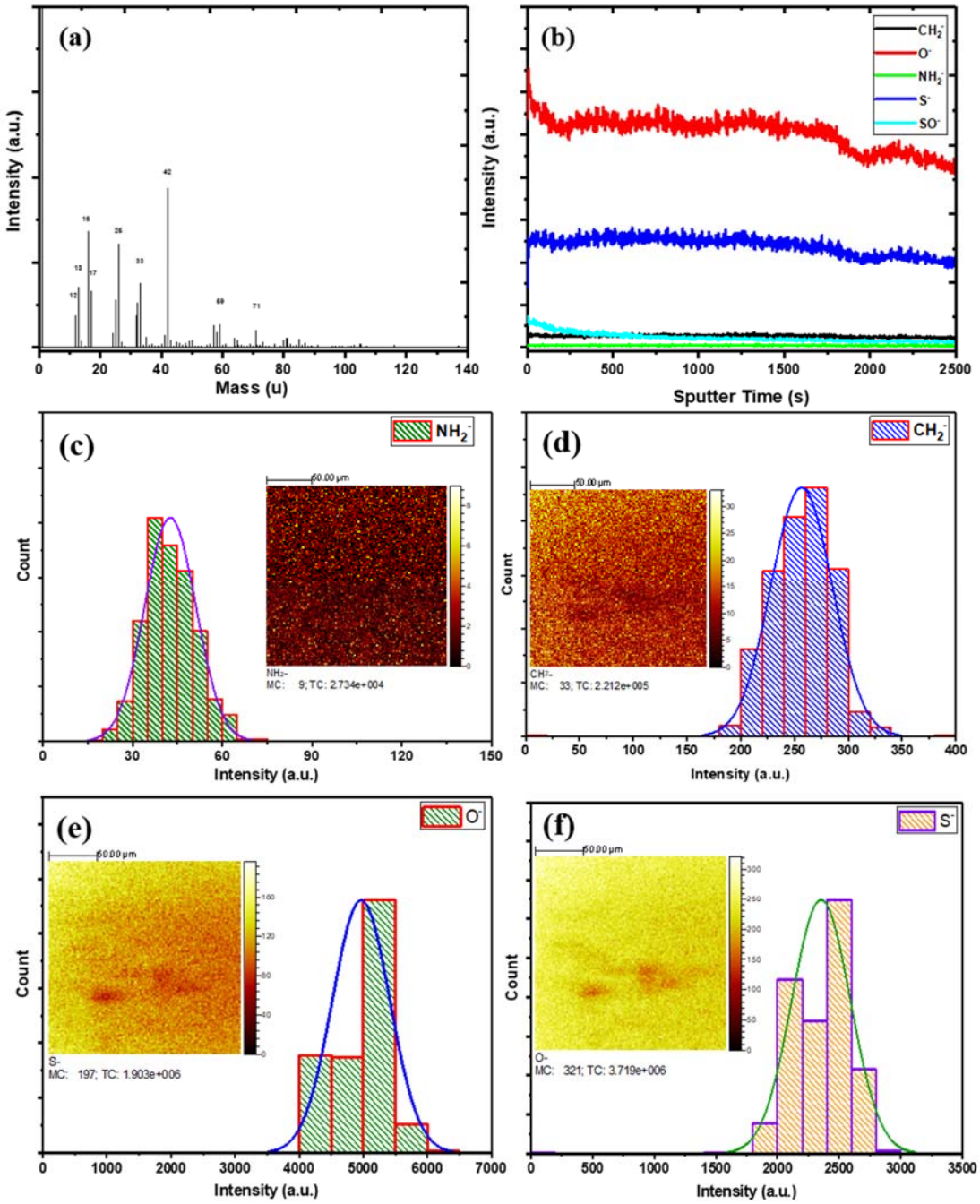

Fig. S7 Time of flight secondary ion mass spectrometry (ToF-SIMS) of negative ions of the NOA63-NGQD nanocomposite (a) spectrum, (b) depth profile of NOA-NGQD film spun-cast on glass plotted against sputter time (c-f) secondary negative ions images with their histogram profile.

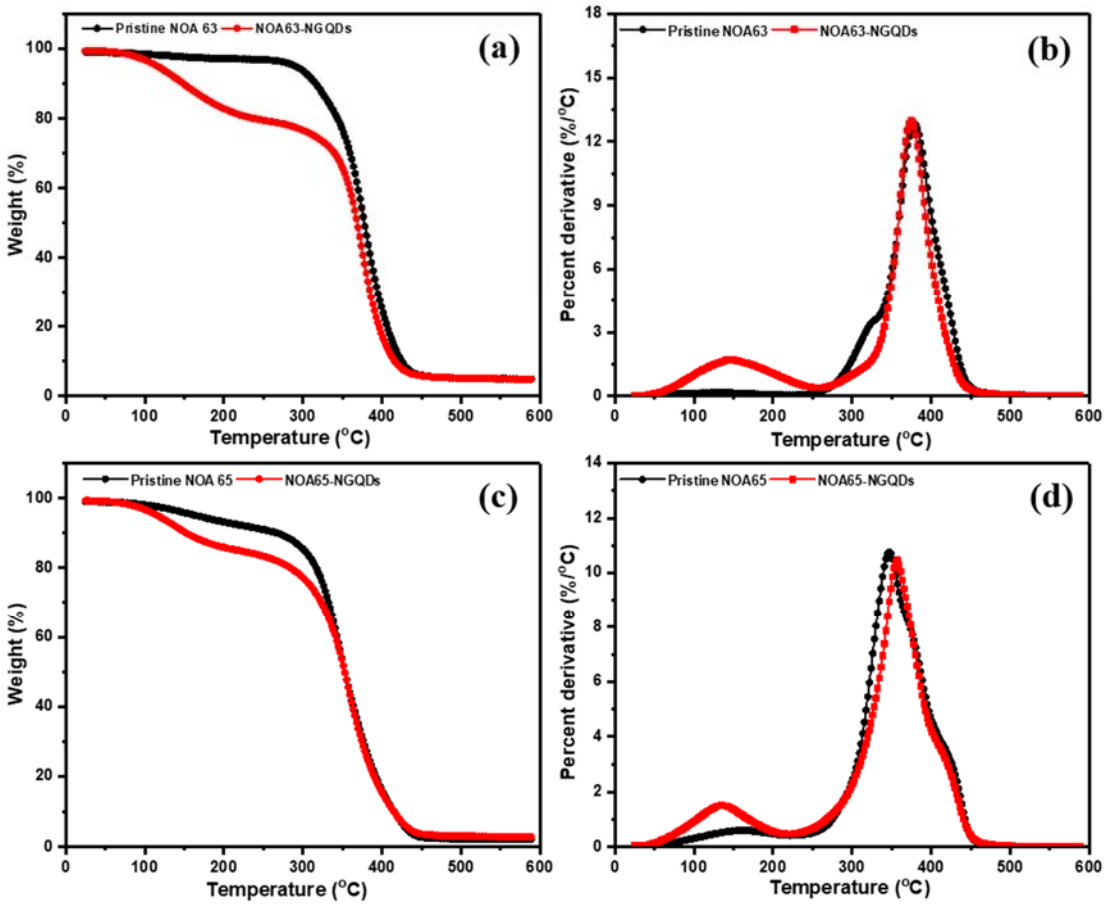

Fig. S8 (a) TGA and (b) percentage derivative curve of pristine NOA 63 polymer & NOA63-NGQD nanocomposite, (c) TGA and (d) percentage derivative curve of pristine NOA 65 polymer & NOA65-NGQD nanocomposite

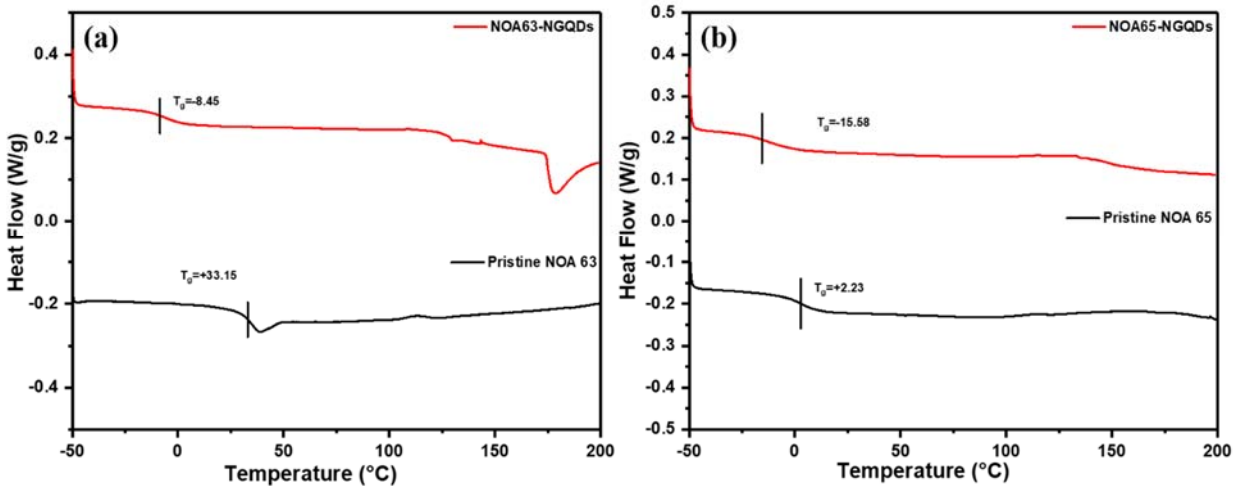

Fig. S9 Differential scanning calorimetry plots of the pristine NOA polymers and nitrogen-doped graphene quantum dots-NOA nanocomposites.

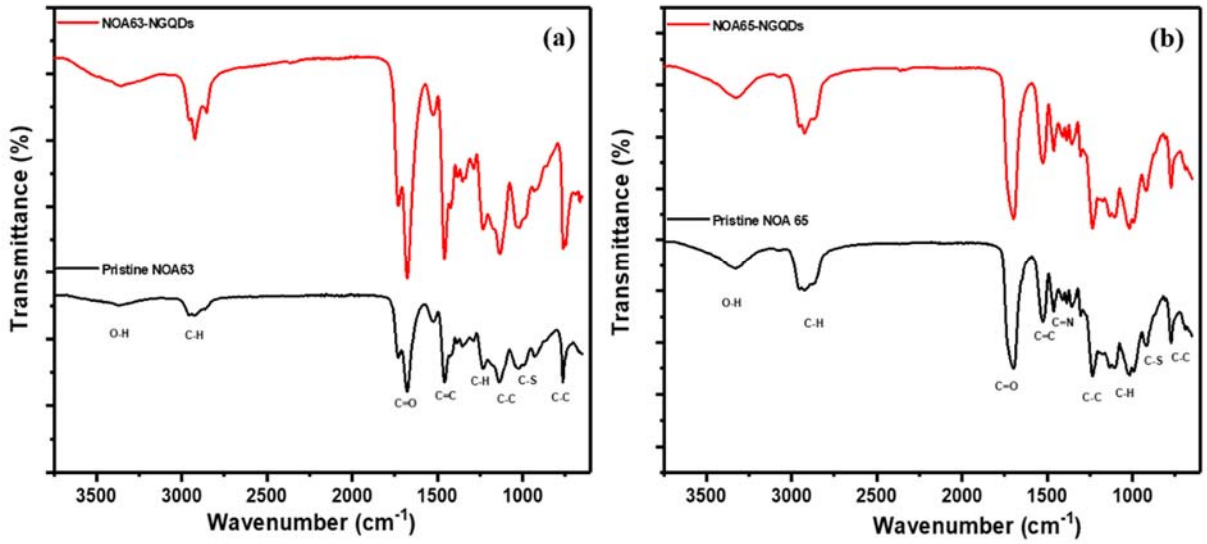

Fig. S10 FT-IR spectra of (a) pristine NOA 63 polymer & NOA63-NGQD nanocomposite and (b) pristine NOA 65 polymer & NOA65-NGQD nanocomposite.

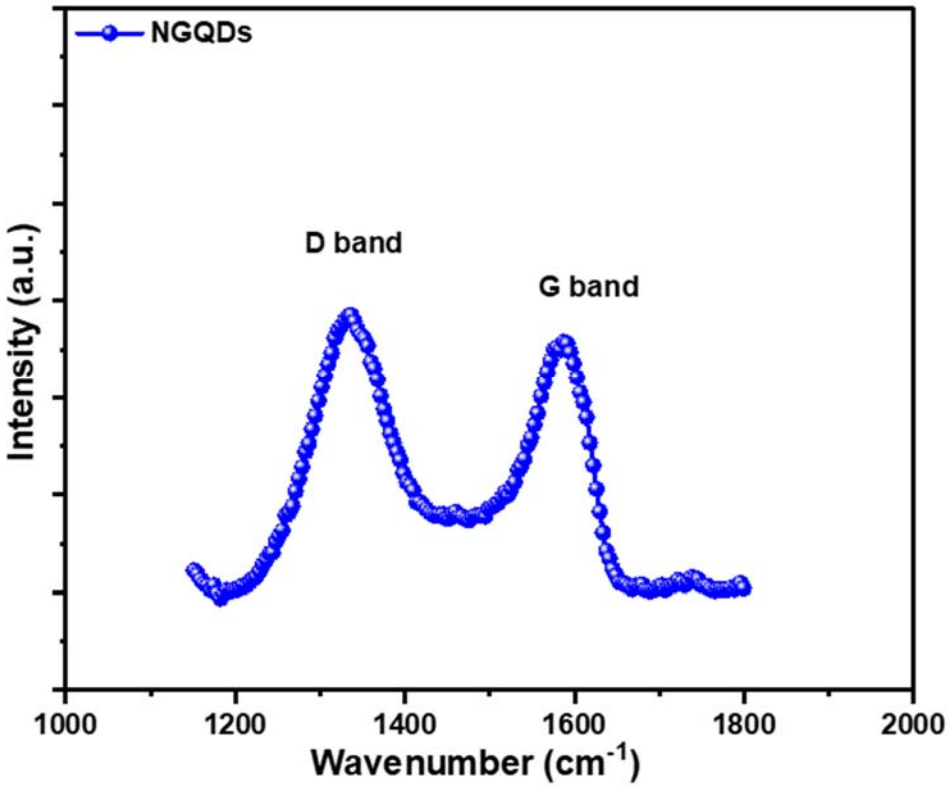

Fig. S11 FT-Raman spectra of pristine N-GQDs.