

## **Supporting Information**

### **A Comparative Account of the Kinetics of Light induced E-Z Isomerization of an Anthracene based organogelator in Sol, Gel, Xerogel and Powder States: Fibre to Crystal Transformation**

Sanjoy Mondal, Priyadarshi Chakraborty, Sujoy Das, Partha Bairi and Arun K. Nandi\*

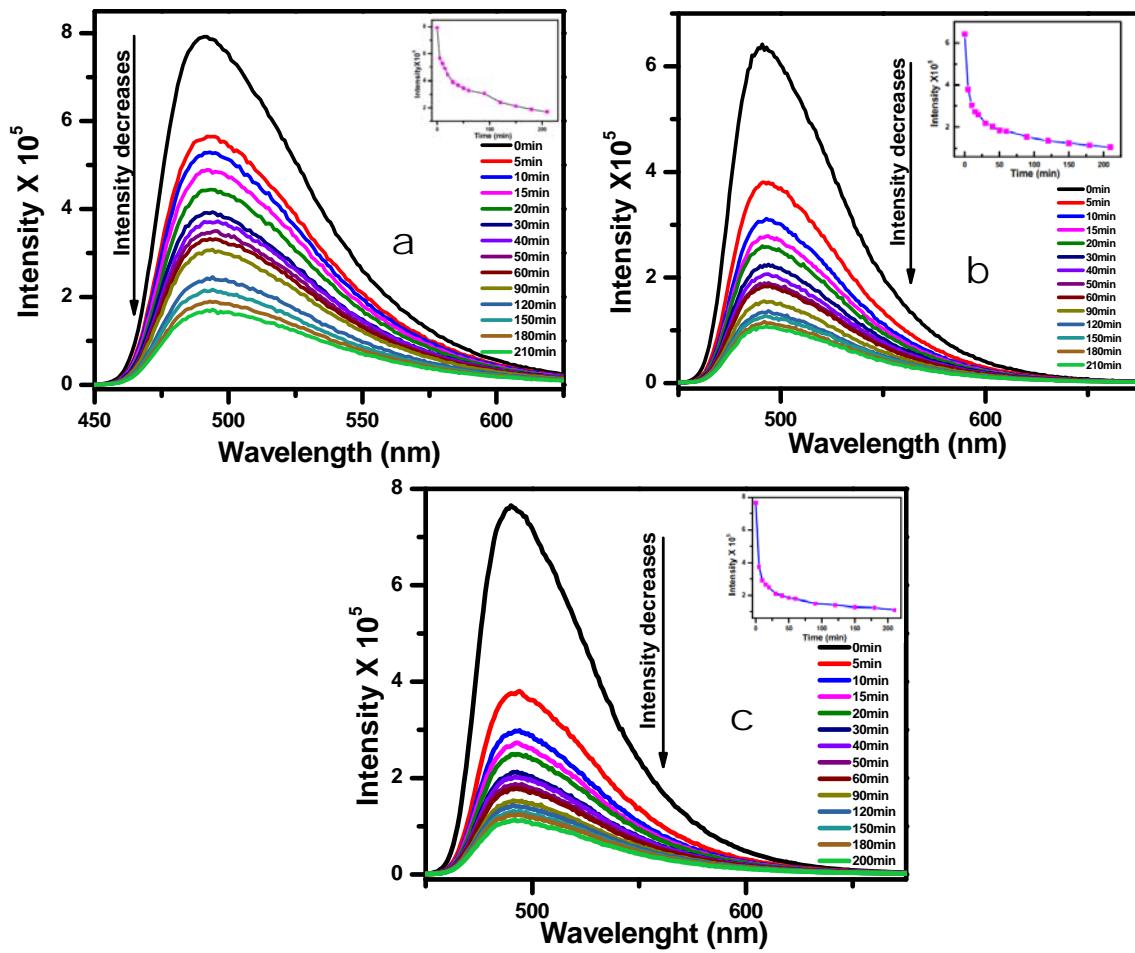
Polymer Science Unit, Indian Association for the Cultivation of Science, Jadavpur,  
Kolkata-700 032, India

\*For Correspondance: A.K.Nandi, email: psuakn@iacs.res.in, Telephone No. 913324734971

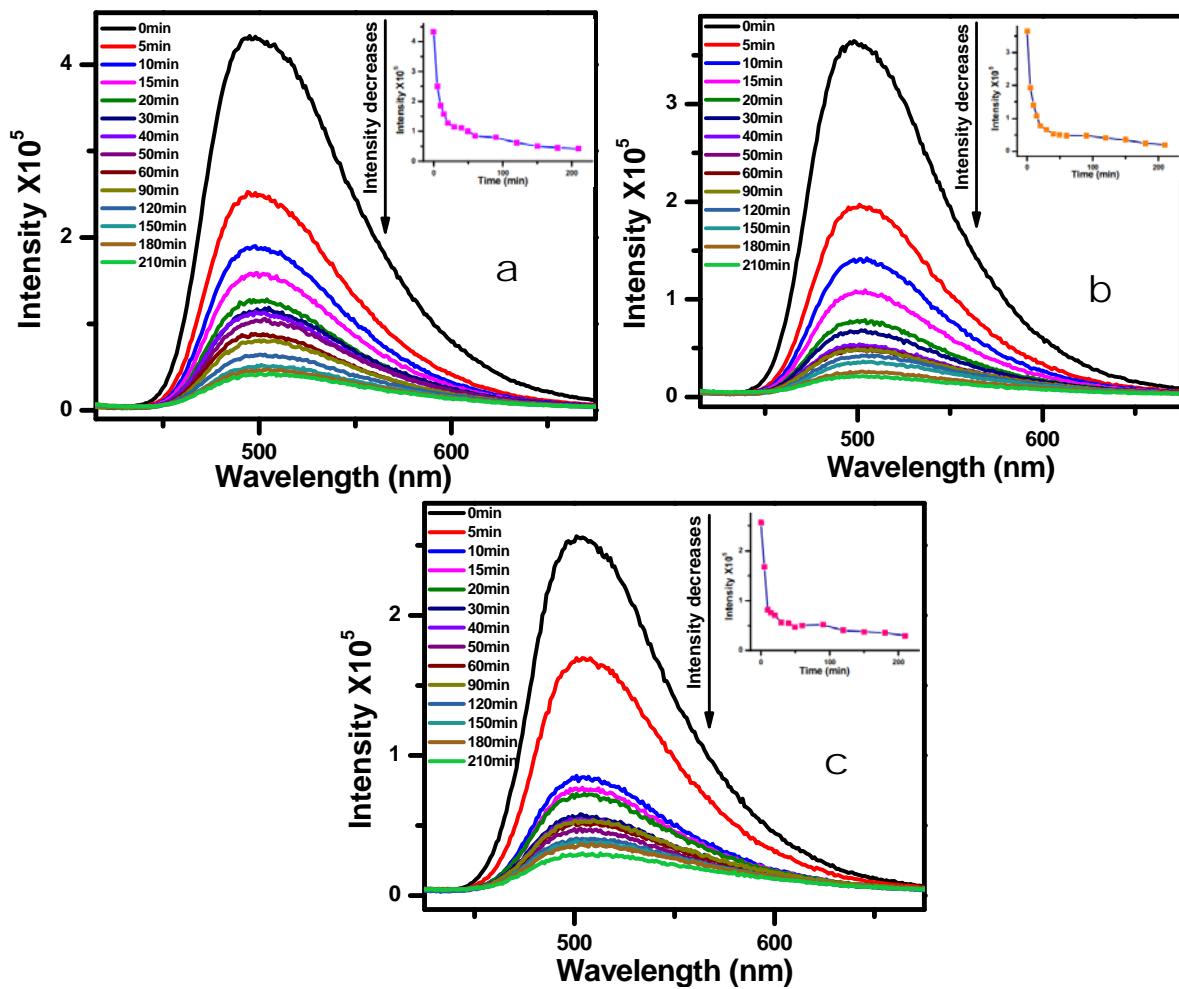
**Table S1:** Thermal parameters obtained from DSC thermograms of gel, powder and xerogel of **I** before and after photo-irradiation for the first heating.

	Melting temperature °C		Enthalpy ( $\Delta H$ ) J/g	
	Before UV-irradiation	After UV-irradiation	Before UV-irradiation	After UV-irradiation
Gel	96.7	98.5, 152.7 <sup>†</sup>	33.3	8.8, 19.6 <sup>†</sup>
Xerogel	96.7	46.9, 83.8, 94.8, 106.8, 141.3 <sup>#</sup>	33.3	6.3, 7.7, 10.9 <sup>#</sup>
Powder	101.6	97.8, 159.4 <sup>*</sup>	25.5	3.2, 27.4 <sup>*</sup>

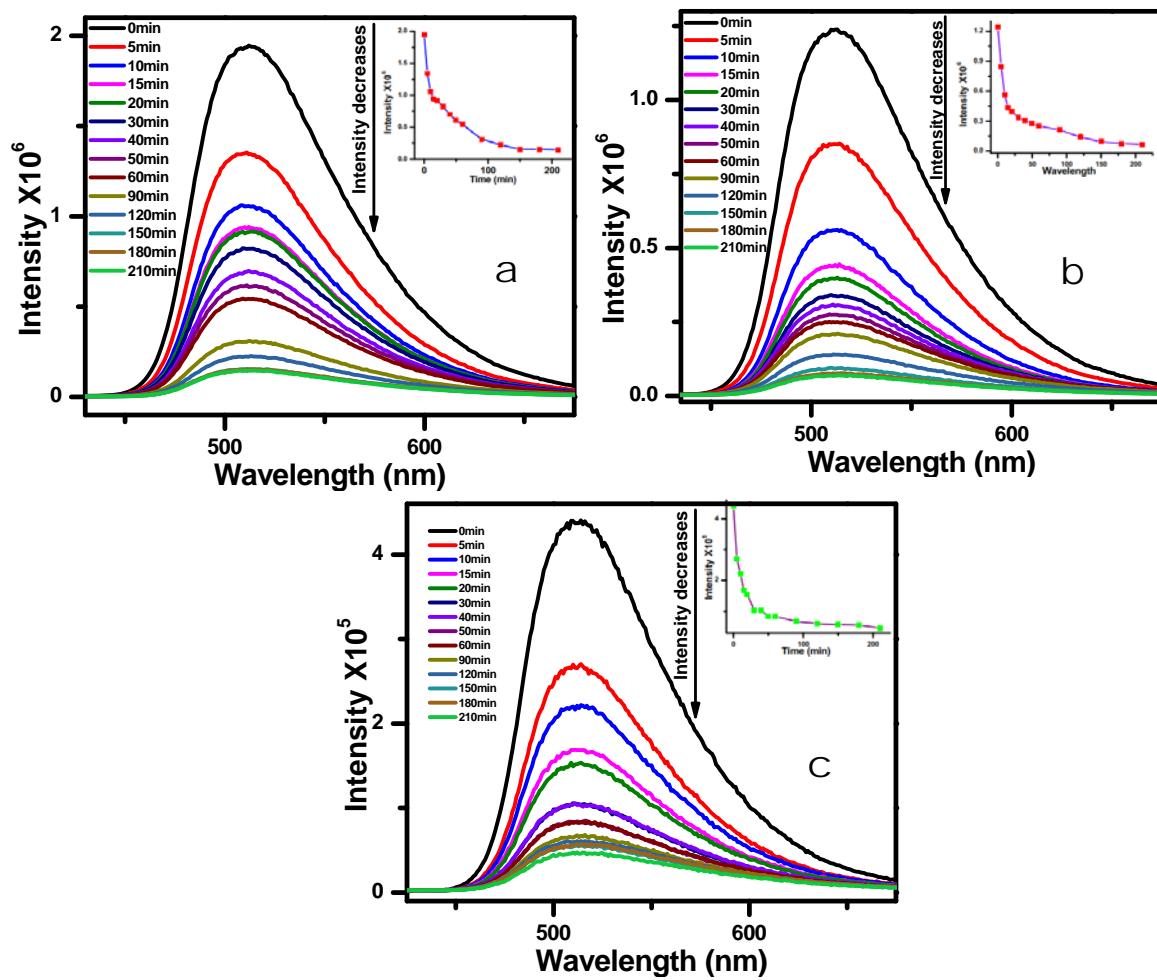
<sup>†</sup> = 7 days UV-irradiated gel, <sup>#</sup> = 12 hr UV-irradiated xerogel, <sup>\*</sup> = 24 hr UV-irradiated powder.



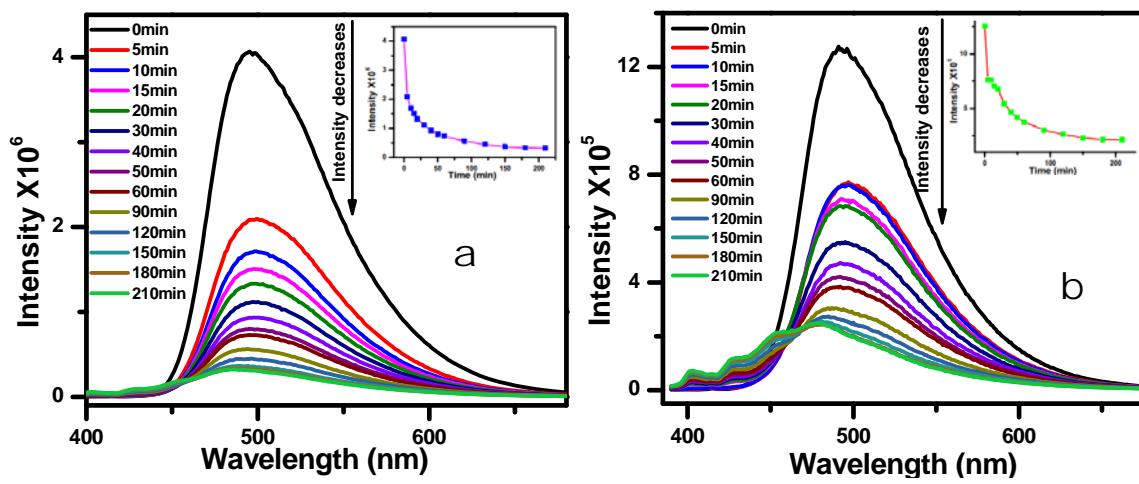
**Figure S1.** Intensity vs. wavelength plot of 0.2% (w/v) gel at (a) 10, (b) 30 and (c) 40 °C after UV-irradiation at 365 nm wavelength at different time intervals. [Inset: intensity vs. UV-irradiation time plot].



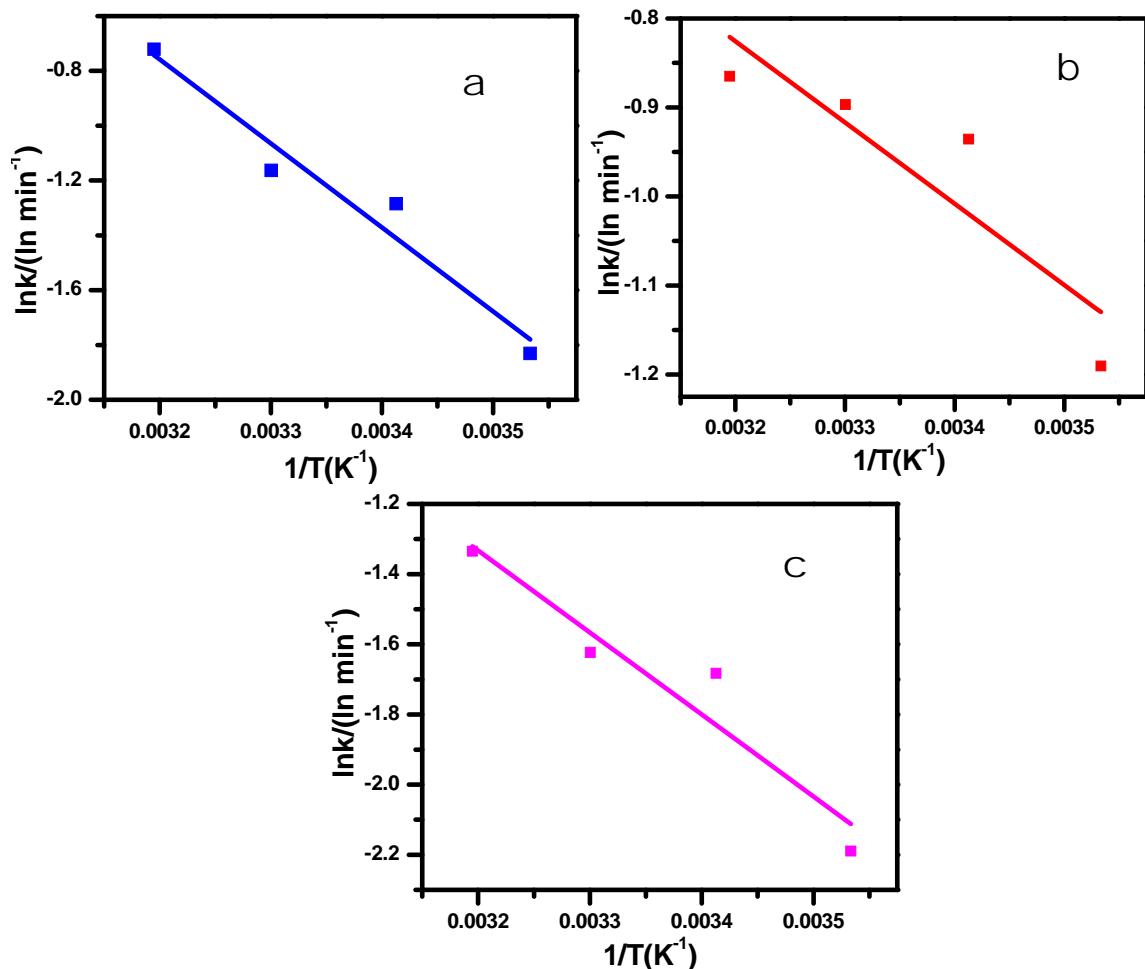
**Figure S2.** Intensity vs. wavelength plot of I xerogel at (a) 10, (b) 30 and (c) 40 °C after UV-irradiation under 365 nm at different time intervals. [Inset: intensity vs. UV-irradiation time plot].



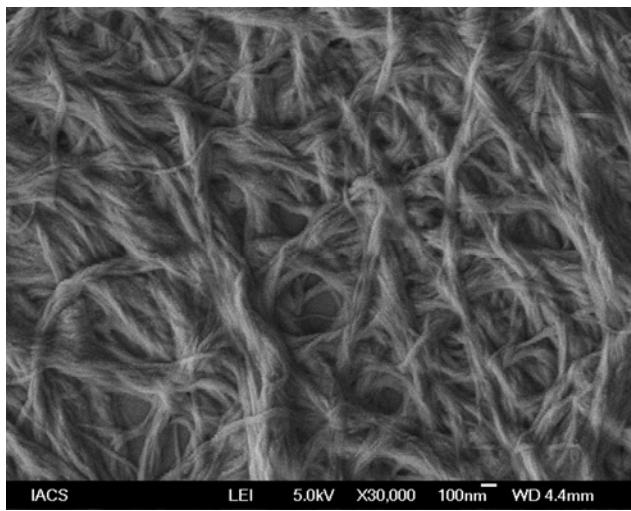
**Figure S3.** Intensity vs. wavelength plot of I powder at (a) 10, (b) 30 and (c) 40 °C after UV-irradiation under 365 nm at different time intervals. [Inset: intensity vs. UV-irradiation time plot].



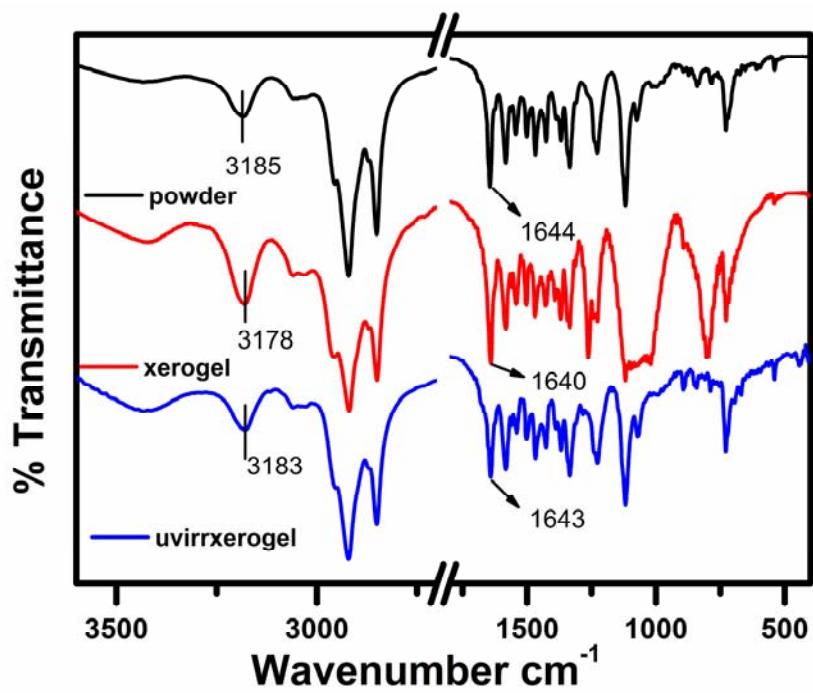
**Figure S4.** Intensity vs. wavelength plot of **I** sol ( $10^{-4}$  M) at (a) 10 and (b) 30 °C after UV-irradiation under 365 nm at different time intervals. [Inset: intensity vs. UV-irradiation time plot].



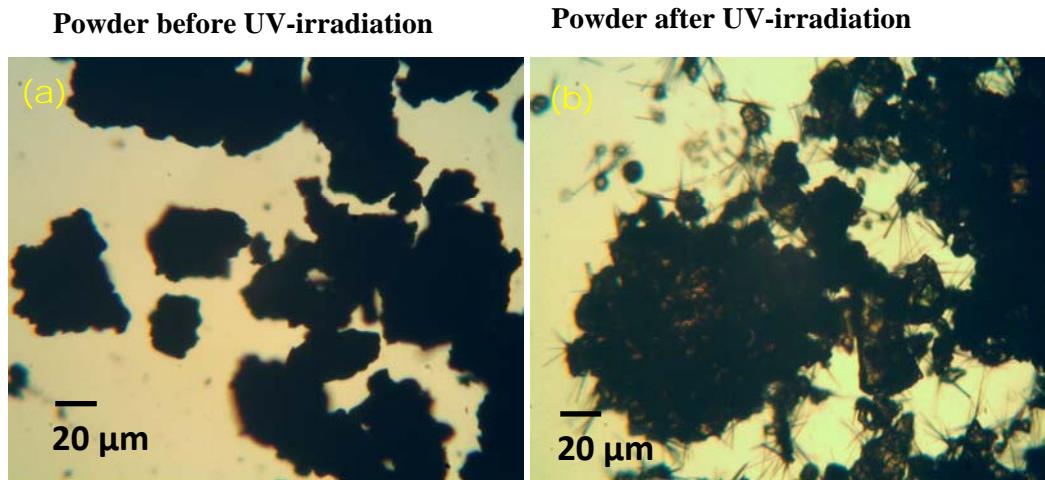
**Figure S5.** Arrhenius plots of  $\ln k$  vs.  $1/T$  of (a) gel (b) xerogel and (c) powder state of **I**.



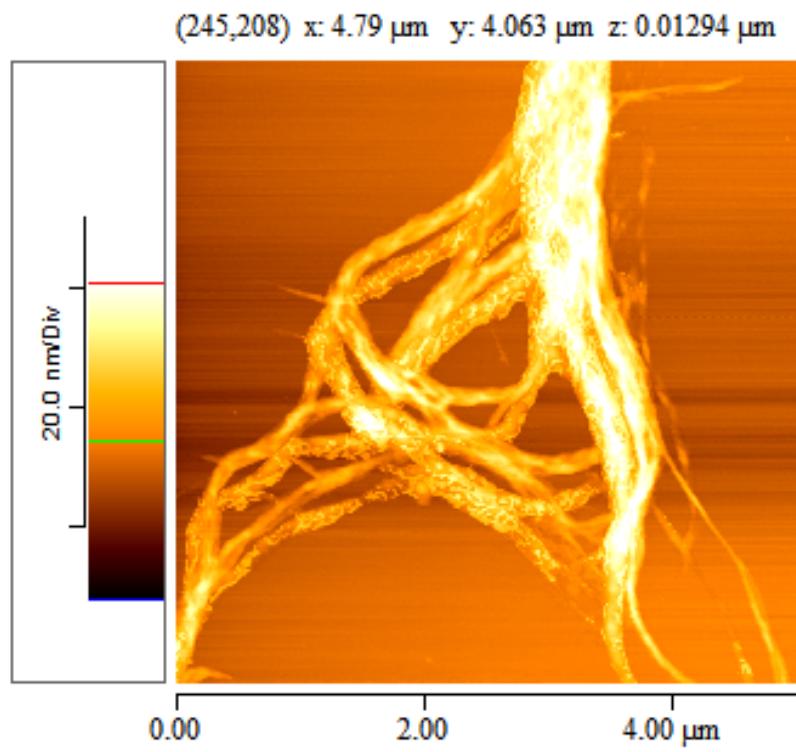
**Figure S6.** FESEM images of **I** xerogel at 0.3% (w/v).



**Figure S7.** FTIR spectra of **I** powder, xerogel and UV-irradiated xerogel.



**Figure S8.** Polarized optical micrographs of I in powder phase (a) before and (b) after UV-irradiation.



**Figure S9.** AFM image of I gel after UV irradiation at  $\lambda=365$  nm for 24 hrs at 30  $^{\circ}\text{C}$ .