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Ultrafast Synthesis of Water-Soluble Nanocrystals by Chemical Aerosol Flow Method

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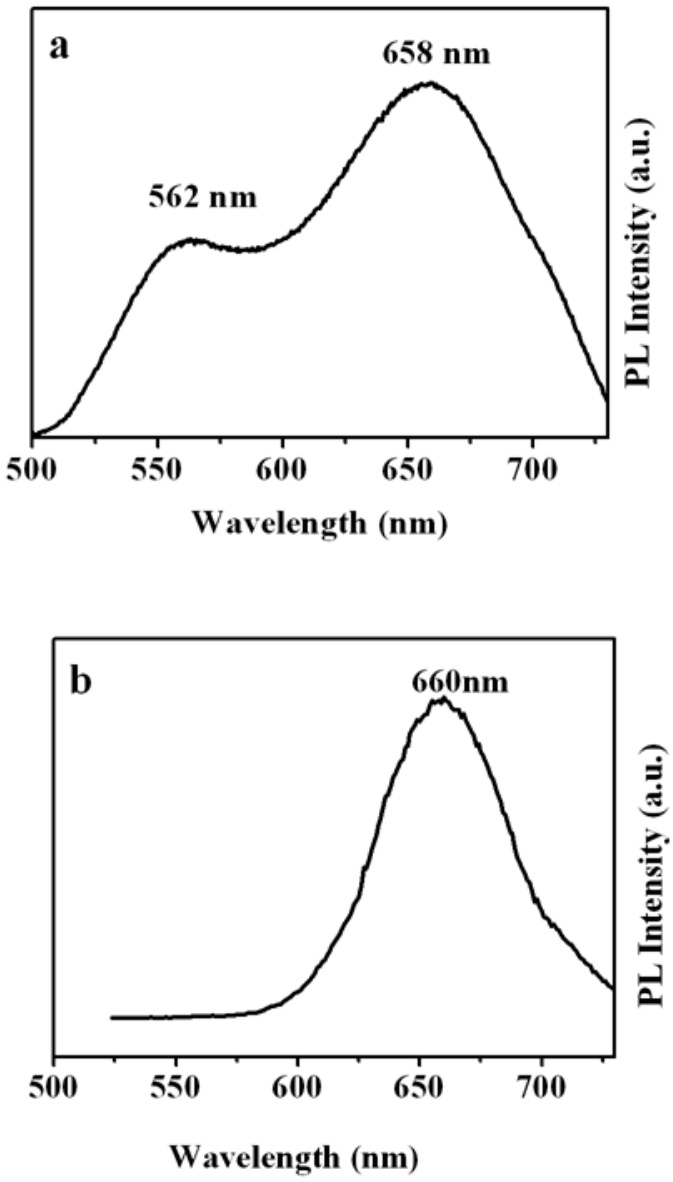

Fig S1 (a) PL of NCs obtained a 300 ℃ with a folw rate 3L/min without size-selective precipitation (top) (b) PL of NCs with large size precipitated by 2-propanol (bottom).

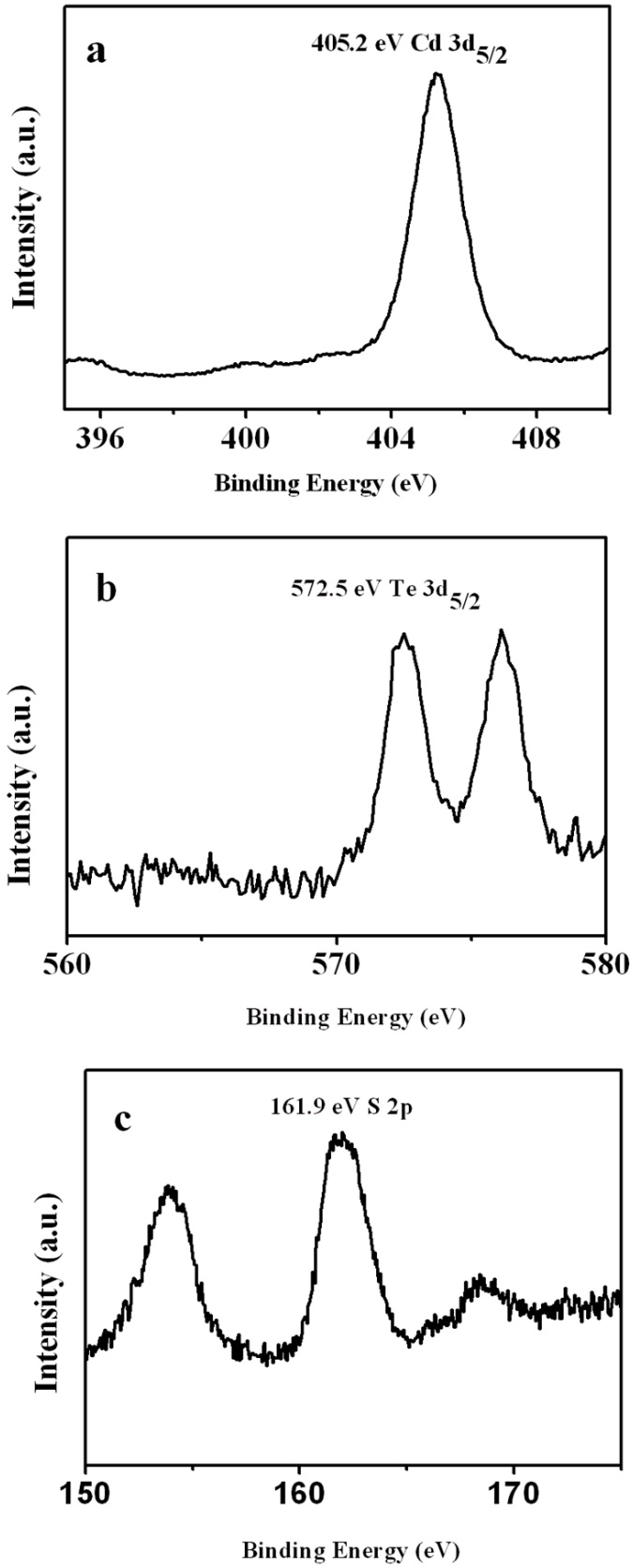

Fig S2. (a), (b) and (c) are XPS of the Cd,Te and S atom showing in Fig 4 respectively.

Cell labeling Experimental

A375 human melanoma cells were maintained with Eagle's minimum essential medium supplemented with 10% fetal bovine serum in a humid incubator (37 °C and 5% CO_2). The cells were plated onto multiple glass-bottom tissue culture plates at an initial confluency of 20%. After 20 hr, CdTe NCs (1 nM) were added. The cells were washed with fresh culture medium after being incubated with CdTe NCs for 1 h. Then, fluorescent images of cells were examined with confocal microscope. CdTe NCs with emission peaks of 554 nm (green), 584 nm (yellow) and 614 nm (red) were used respectively to image the cells.

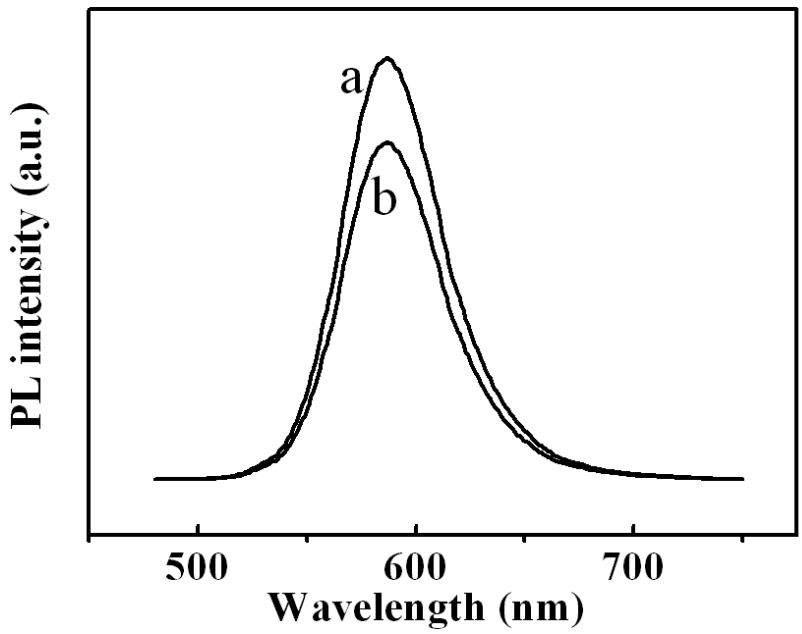

Fig S3. PL of (a) CdTe NCs and (b) CdTe NCs after incubated with the cells for 1 hour.