

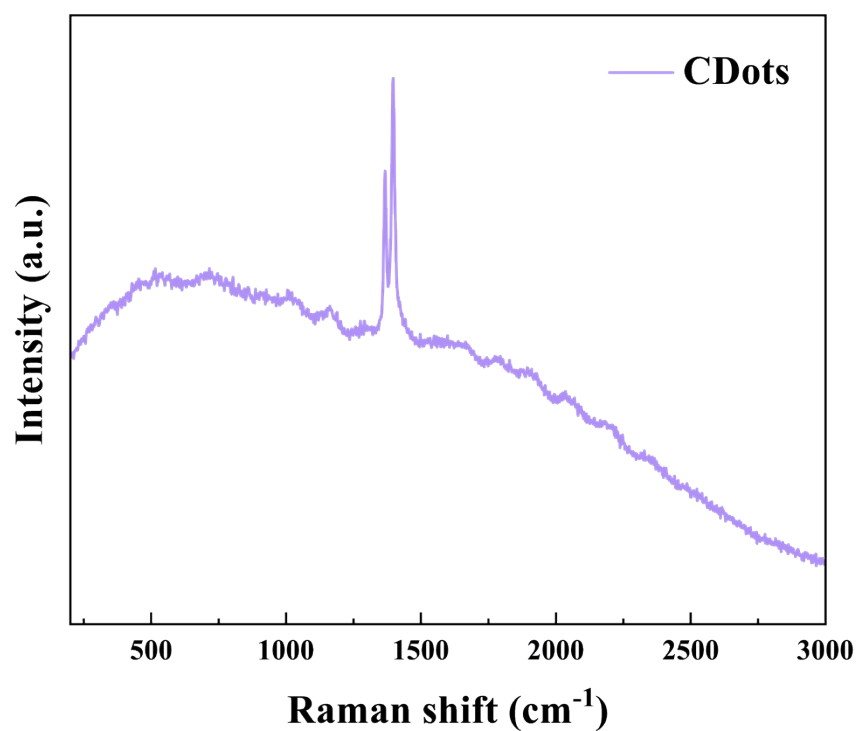


Fig. S1 Raman spectrum of CDots (excitation wavelength is 633nm)

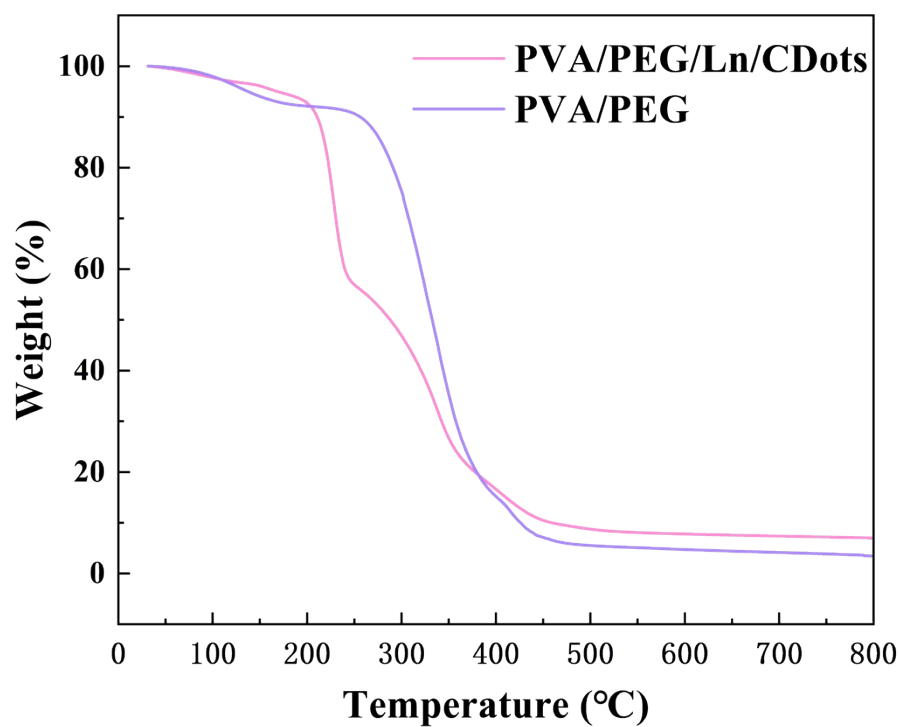


Fig. S2 Thermogravimetric analysis of PVA/PEG/Ln/CDots and PVA/PEG hydrogel

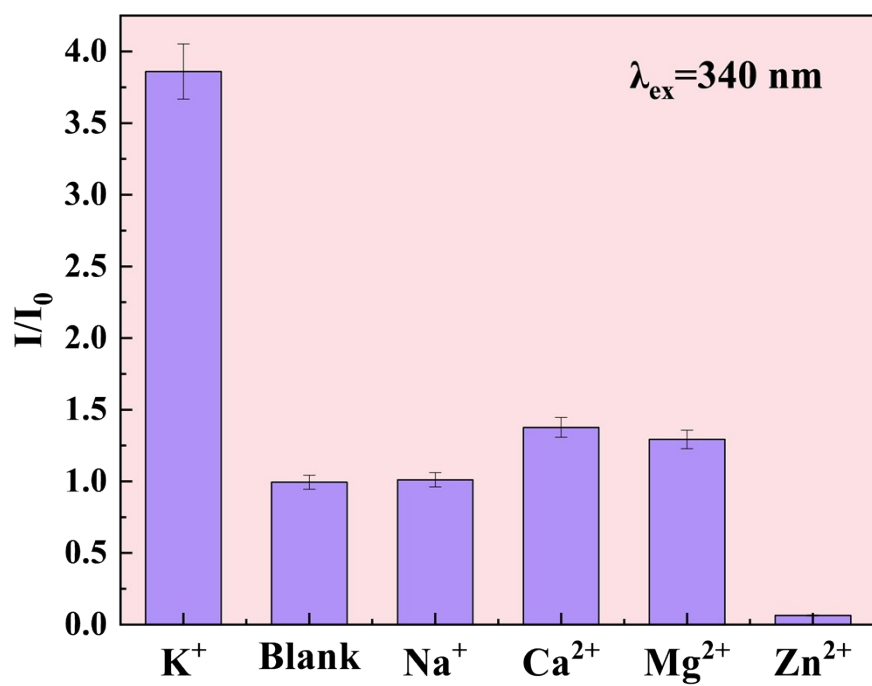


Fig. S3 Selectivity of PVA/PEG/Ln/CDots composite hydrogel for detection of various ions