

Supplemental Information

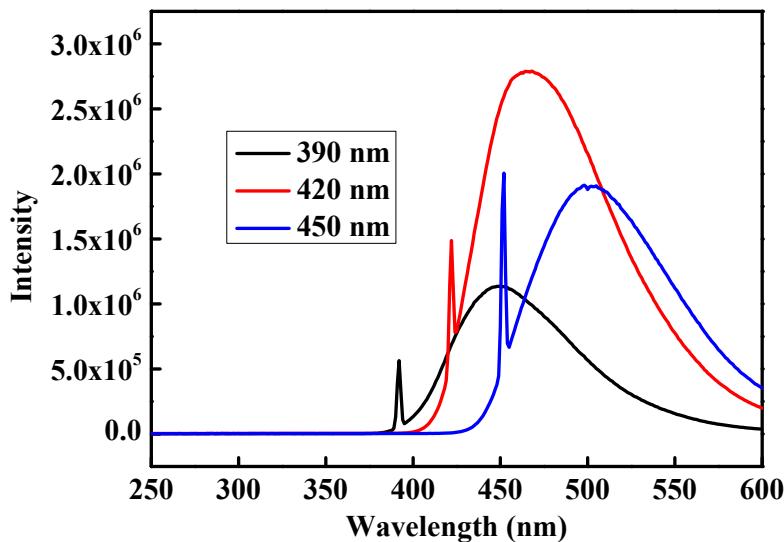


Fig. S1 The fluorescence spectra of 5 wt% CDs (Emission wavelength shifted from 250 nm to 600 nm when the excitation wavelength escalated 390 nm, 420 nm and 430 nm).

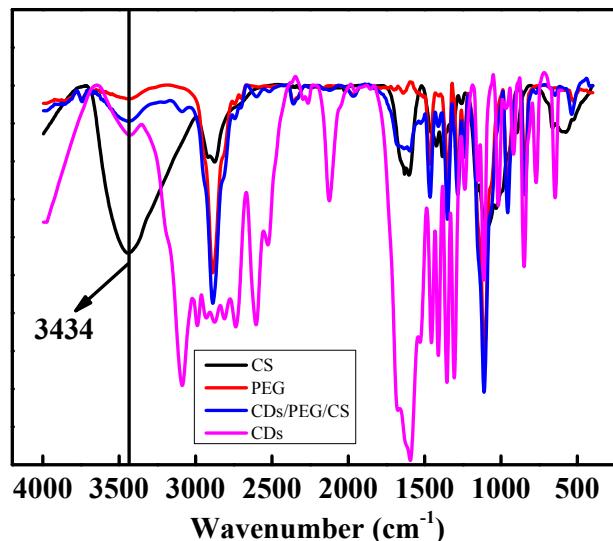


Fig. S2 The FT-IR spectra of PEG, CS and CS/PEG.

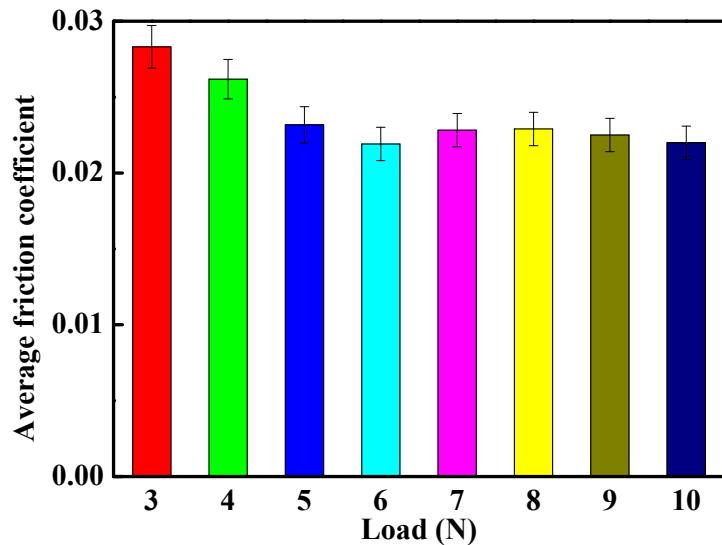


Fig. S3 Average friction coefficient of CDs/PEG/CS sol under different load.

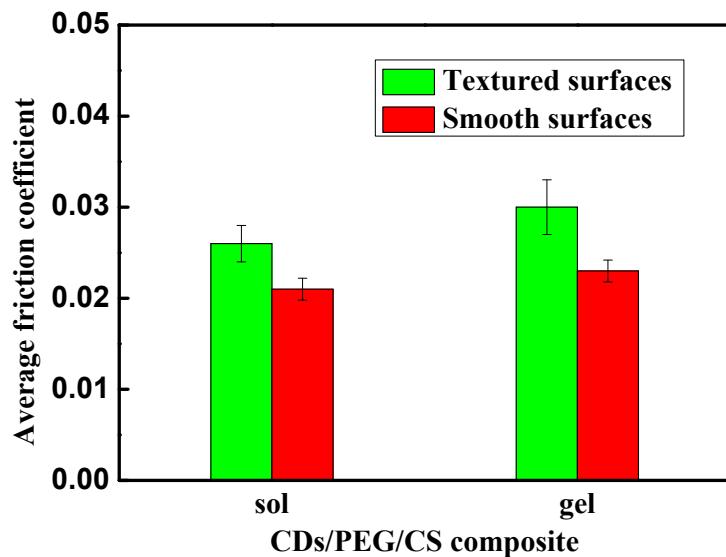


Fig. S4 The average friction coefficient of sol and gel on different surfaces.

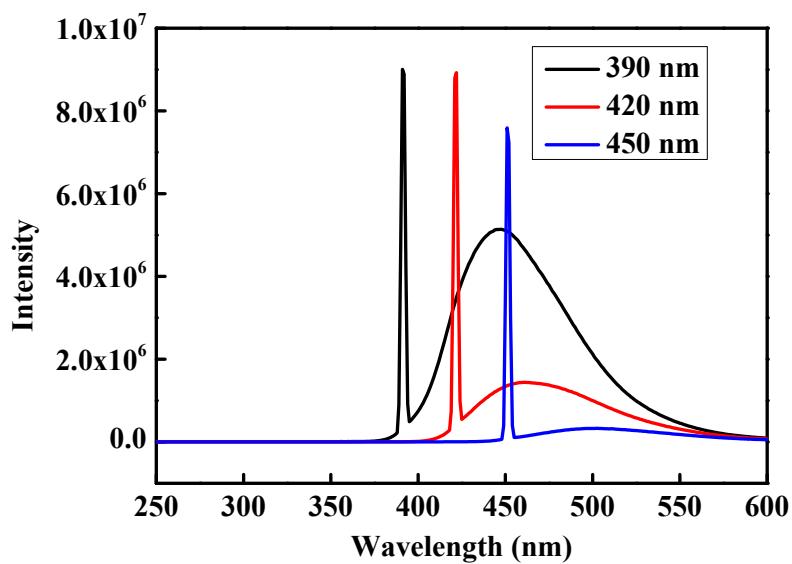


Fig. S5 The fluorescence spectra of release solution from the CDs/PEG/CS gel (Emission wavelength shifted from 250 nm to 600 nm when the excitation wavelength escalated 390 nm, 420 nm and 430 nm).

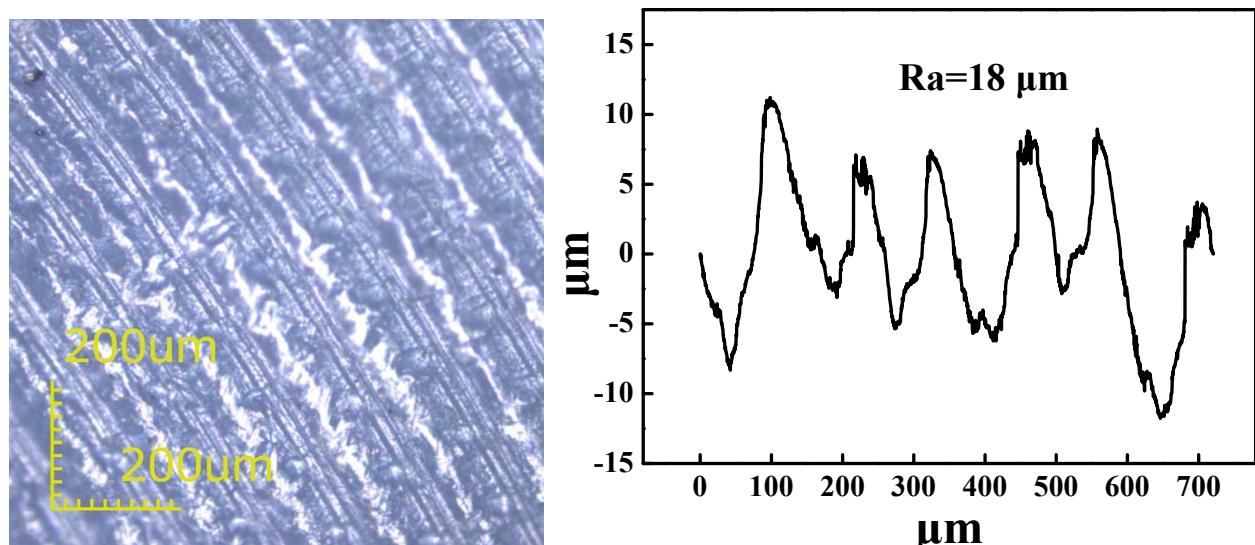


Fig. S6 The surfaces of UHMWPE ball.

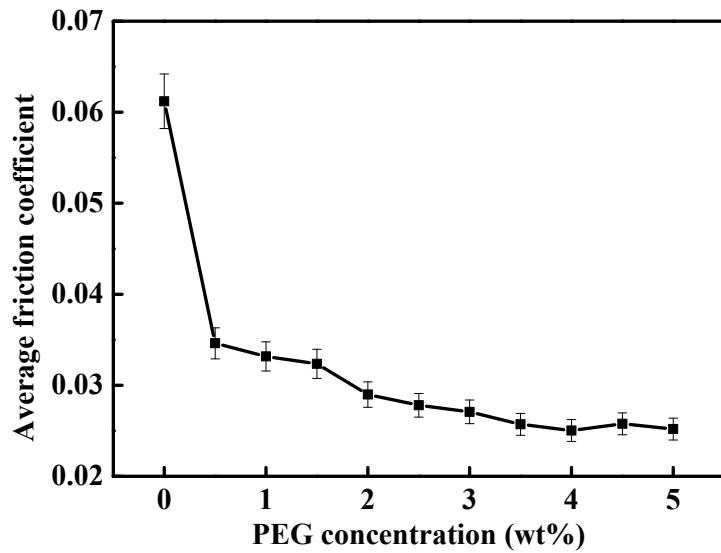


Fig. S7 The average friction coefficient of different PEG concentration.