



(a) Topography of  $\text{Al}_2\text{O}_3$  / CdSe-CdS quantum nanplatelets (NP) on Au. (b) Near-field (Contact PL – tapping PL) and (c) tapping mode tip-enhanced photoluminescence map at NP emission wavelength. (d) Finite element electromagnetic wave simulation of  $\text{Al}_2\text{O}_3/\text{NP}/\text{Au}$  with plasmonic Au tip. Scale bars indicate 500 nm.