Figure S1: (a) The HOMO-LUMO gap calculated from SiC QDs for the surface terminations of C-H rich and Si-H rich, respectively. These QD models were constructed by cutting C or Si atom at the corner of tetrahedron-shaped basic SiC models; (a) The lying of corresponding HOMO and LUMO energies. Fig. S1 shows that the gap and the corresponding HOMO levels exhibit the trend of QC effect; in contrary, the LUMO levels are obvious affected by the surface environment and show no QC effect.