**2) The idea behind the scissor operator is to shift all the conduction**

**bands of the same amount. While I can believe that this approximation**

**is justified in a bulk material, why it should be in case for a**

**surface? The shape and localization of surface states is different**

**from the one of the bulk. There are cases where this approximation has**

**been tested or compared with a full GW calculation for a surface?**

As noted by the referee, the scissors operator is commonly used for bulk materials.

GW calculations have been performed in the case of the Si(001)2x1 surface, see [PRB 52 1905 (1995)]. It shows that the surface states “shift nearly rigidly in energy with respect to the LDA results so that their dispersion remains almost unchanged”. Thus shifting this states rigidly appears as a good approximation. Moreover the GW correction to the surface gap (0.5eV Ref 65, 0.65eV Ref 66) is close to the Si bulk correction and we have assumed the same value for the shift for all the states.

On the other hand, this approximation has already been used in linear optical calculations for surfaces, see [PRL 76 2810 (1996)], thus improving the agreement with experimental results.

We have modified the introduction consequently.