

FIG. 1. The energy band structures of SnSTe (Left) and SnSeTe (Right) monolayers with GGA+SOC.

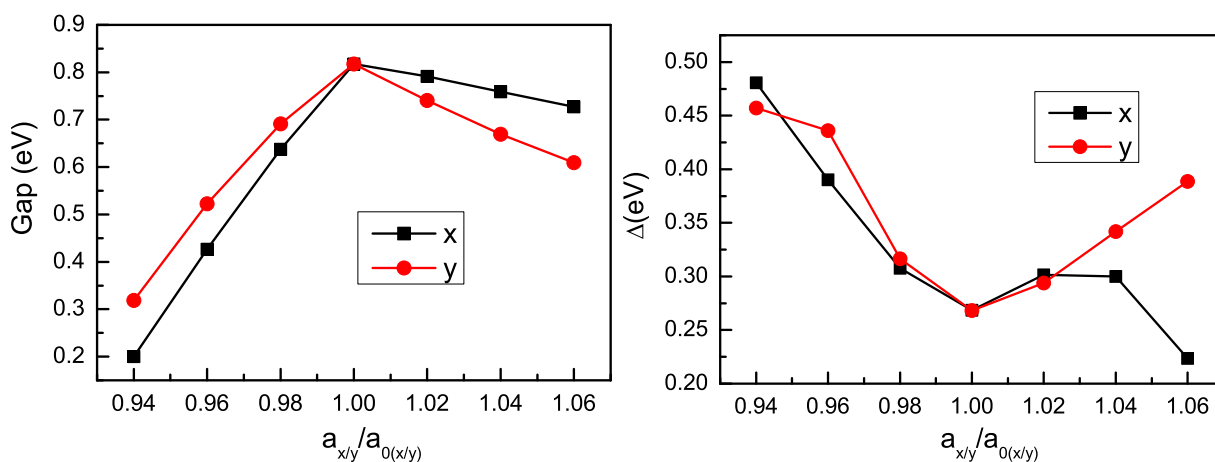


FIG. 2. (Color online) The energy band gap (Gap) and spin-orbit splitting value (Δ) at high symmetry Γ point under uniaxial strain from 0.94 to 1.06 along x and y directions by using GGA+SOC.

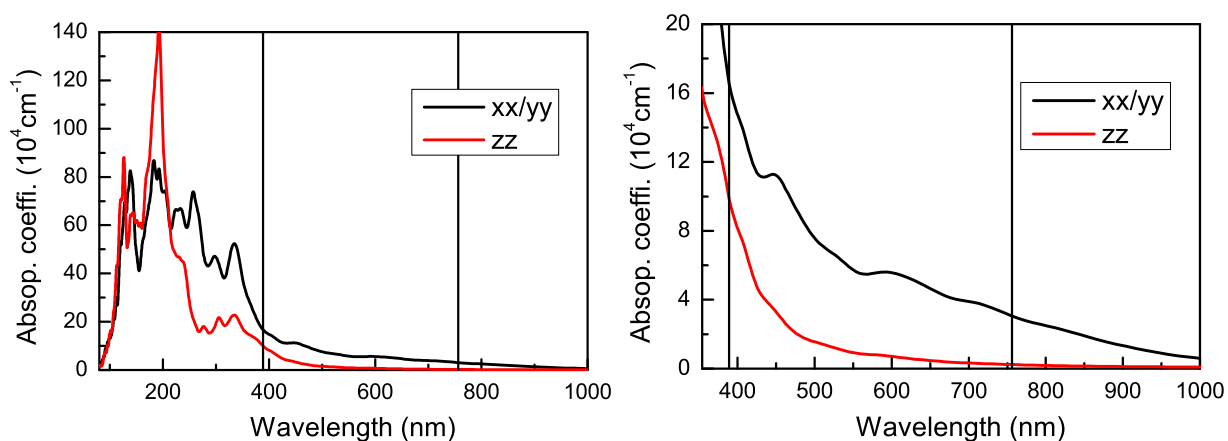


FIG. 3. (Color online) Using GGA+SOC, the optical absorption coefficients of SnSSe monolayer along xx/yy and zz directions from 80 nm to 1000 nm (Left) and from 350 nm to 1000 nm (Right), and the visible light region is shown.

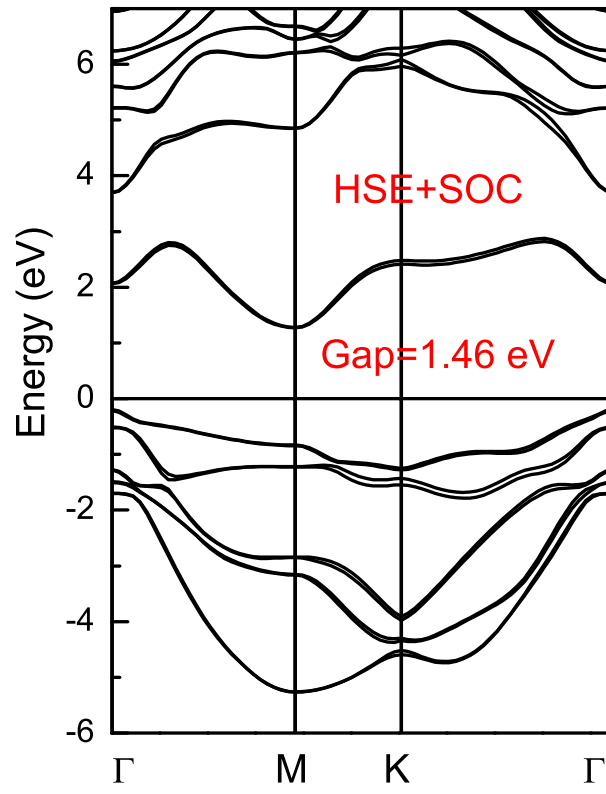


FIG. 4. (Color online) The energy band structures of SnSSe monolayer with HSE+SOC.