

Time-Dependent Density Functional Study of UV-Visible Absorption Spectra of Small Noble Metal Clusters (Cu_n , Ag_n , Au_n , $n = 2 - 9, 20$)

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November 21, 2013

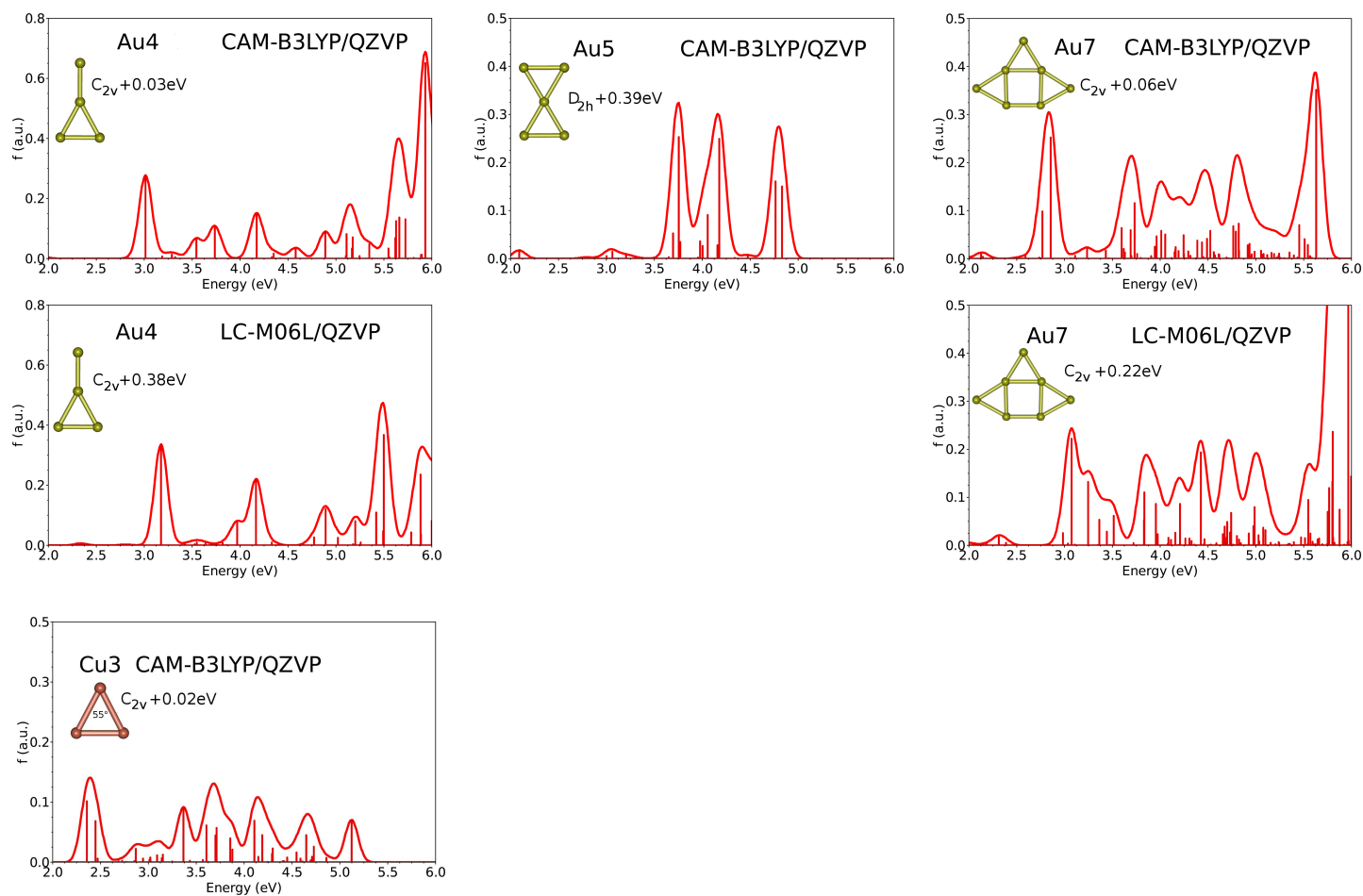


Figure 7: Absorption spectra of gold and copper clusters.

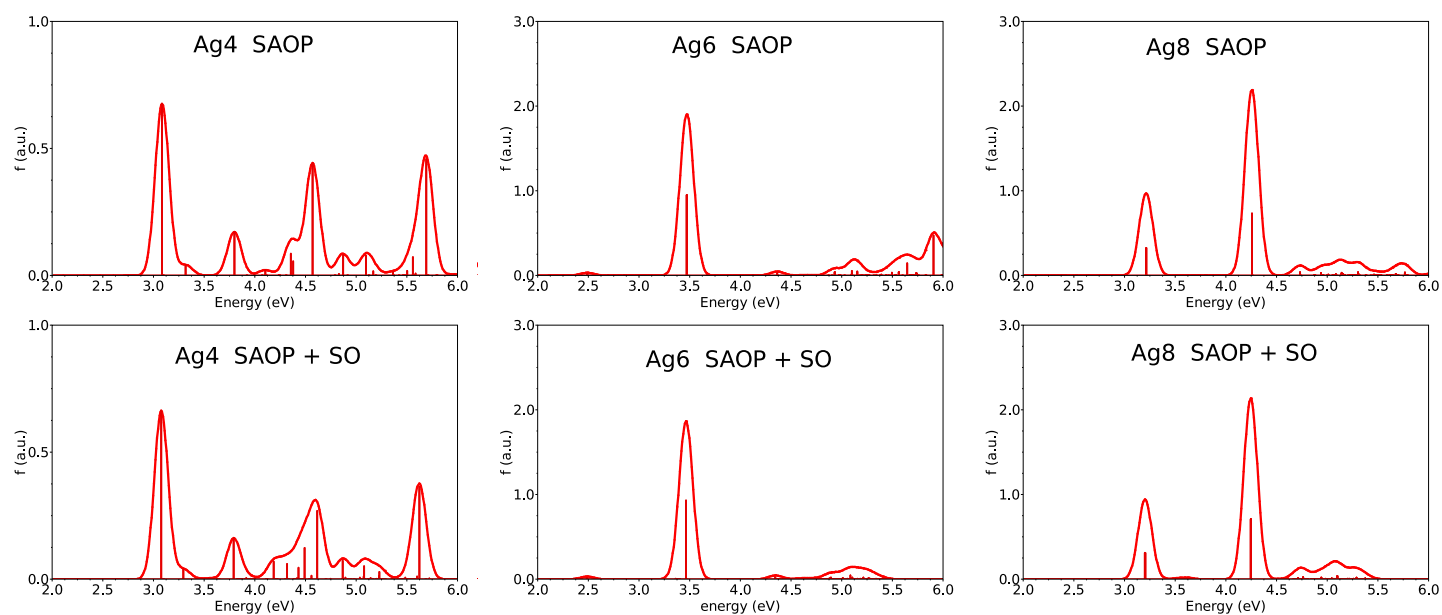


Figure 8: Absorption spectra of Ag_4 (D_{2h}), Ag_6 (D_{3h}) and Ag_8 (T_d) clusters using the SAOP method with or without the spin-orbit (SO) coupling.

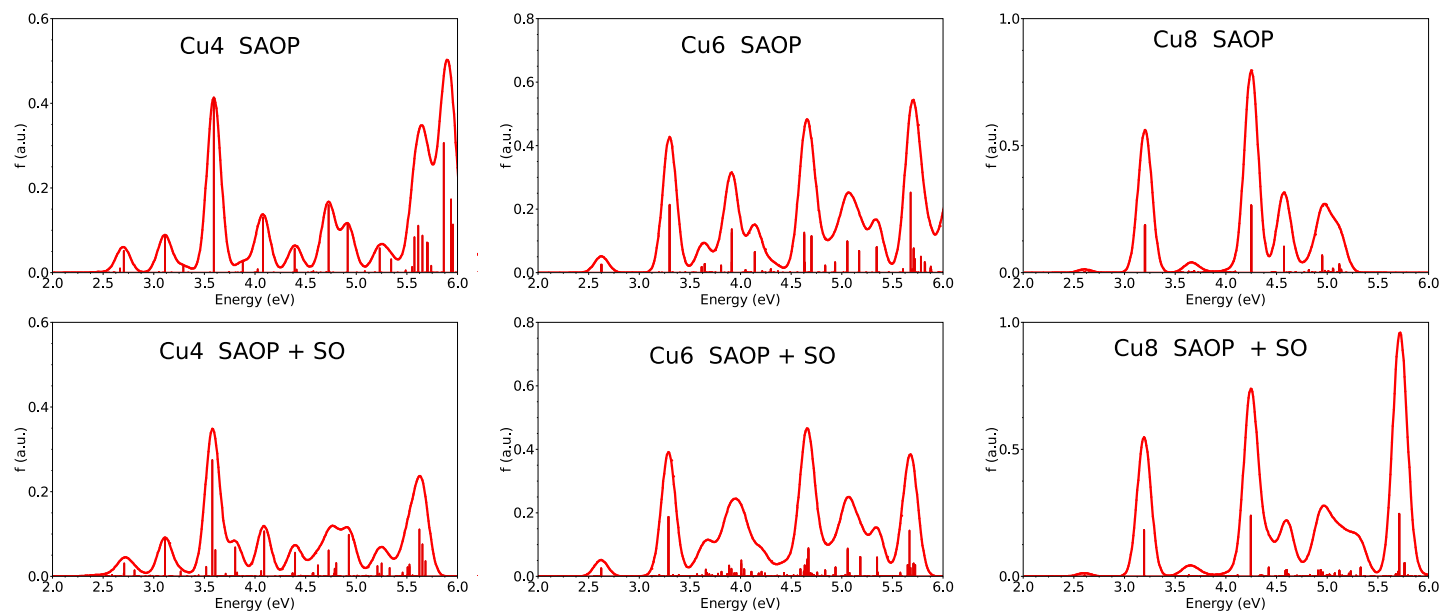


Figure 9: Absorption spectra of Cu_4 (D_{2h}), Cu_6 (D_{3h}) and Cu_8 (T_d) clusters using the SAOP method with or without the spin-orbit (SO) coupling.