

Supporting Information:

Table SI-1: Interaction energy (kcal/mol) of pristine and doped gold clusters with CO, obtained by M06 method, for different cluster sizes.

Cluster size (n)	Au_nCO	$\text{Au}_{n-1}\text{HCO}$	$\text{Au}_{n-1}\text{LiCO}$	$\text{Au}_{n-1}\text{NaCO}$
2	-23.30	-24.88	-7.35	-3.82
3	-28.31	-21.80	-9.86	-6.66
4	-24.00	-24.17	-9.92	-6.91
5	-16.29	-20.87	-9.55	-6.76
6	-13.27	-11.15	-9.89	-9.54
7	-15.93	-22.84	-13.64	-8.99
8	-11.82	-21.12	-10.91	-10.26

FIGURE CAPTIONS

Figure SI-1: Optimized geometries of pristine and doped gold clusters obtained by using M06 method.

Figure SI-2: Optimized geometries of CO-adsorbed pristine and doped gold clusters obtained with M06 method.

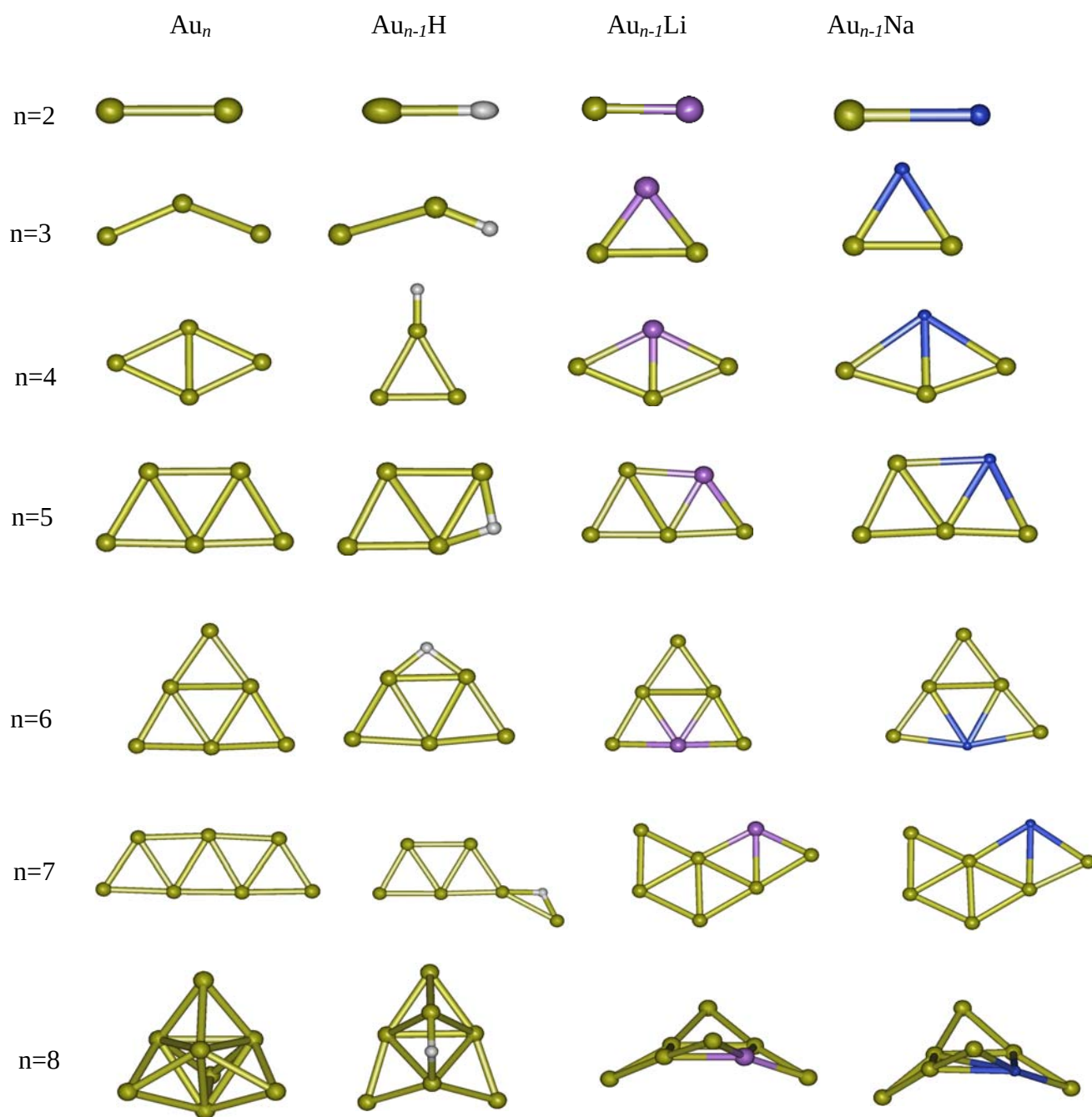


Figure SI-1

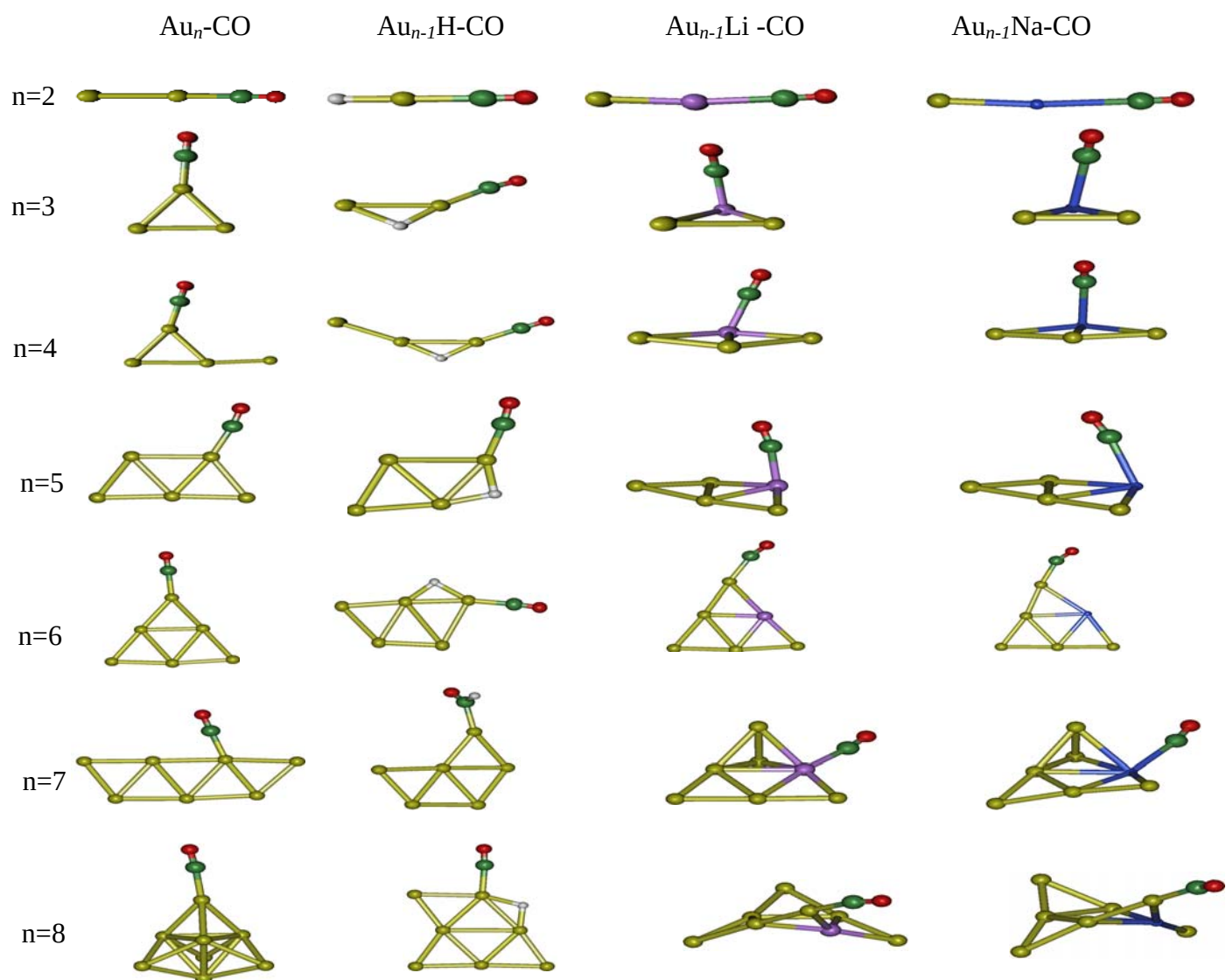


Figure SI-2