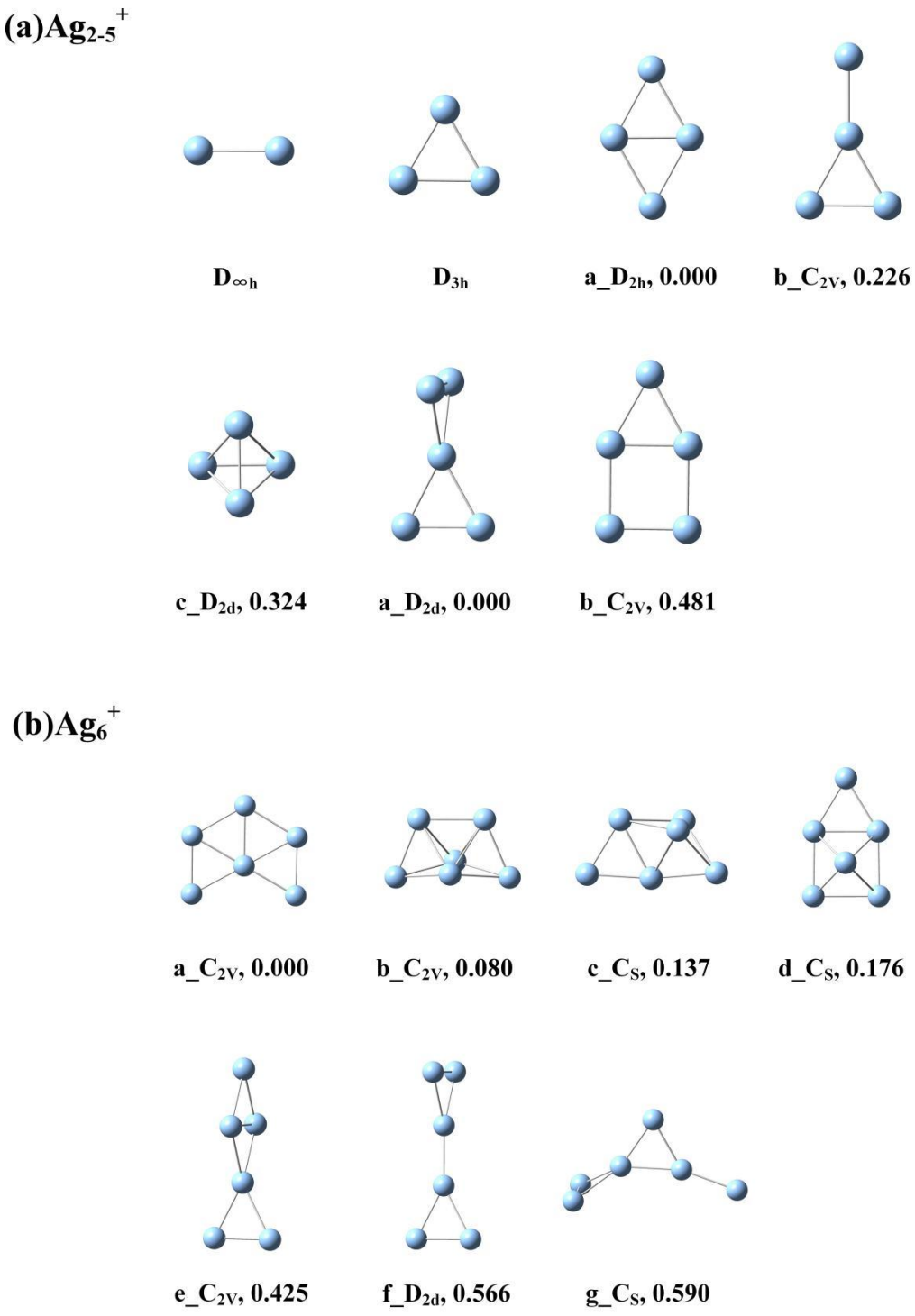

Figure S2. The low-lying structures of Ag_n^+ (n = 2-6) determined by the calculations at the PBE/def2-SVP level of theory. The even sizes are in their doublet state and the odd sizes are in their singlet state. The geometry of each structure and its energy (in eV) relative to the lowest-lying one was indicated.

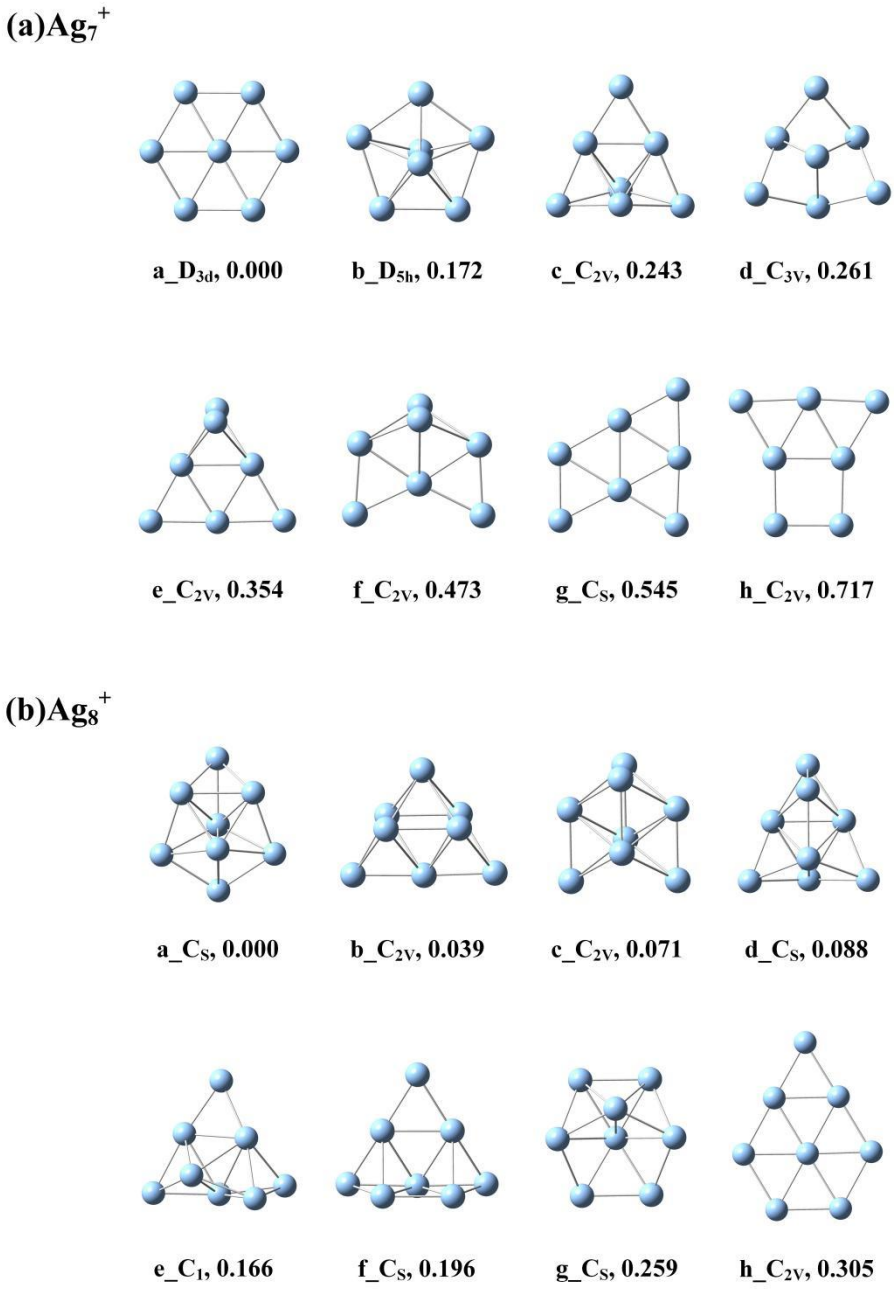

Figure S3. The low-lying eight structures of Ag_7^+ and Ag_8^+ determined by the calculations at the PBE/def2-SVP level of theory. The Ag_7^+ is in its singlet state and the Ag_8^+ is in its doublet state. The geometry of each structure and its energy (in eV) relative to the lowest-lying one was indicated.

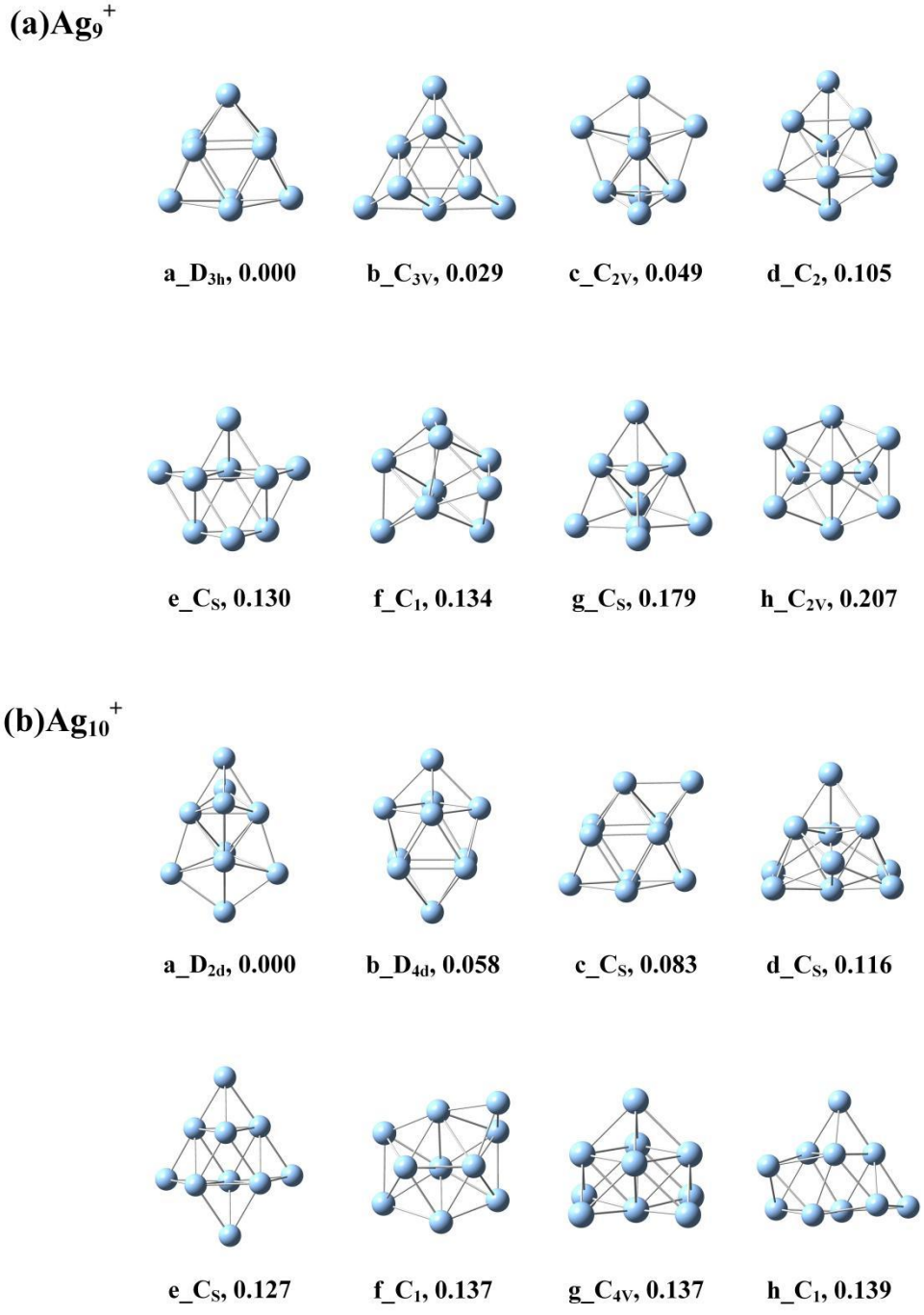

Figure S4. The low-lying eight structures of Ag_9^+ and Ag_{10}^+ determined by the calculations at the PBE/def2-SVP level of theory. The Ag_9^+ is in its singlet state and the Ag_{10}^+ is in its doublet state. The geometry of each structure and its energy (in eV) relative to the lowest-lying one was indicated.

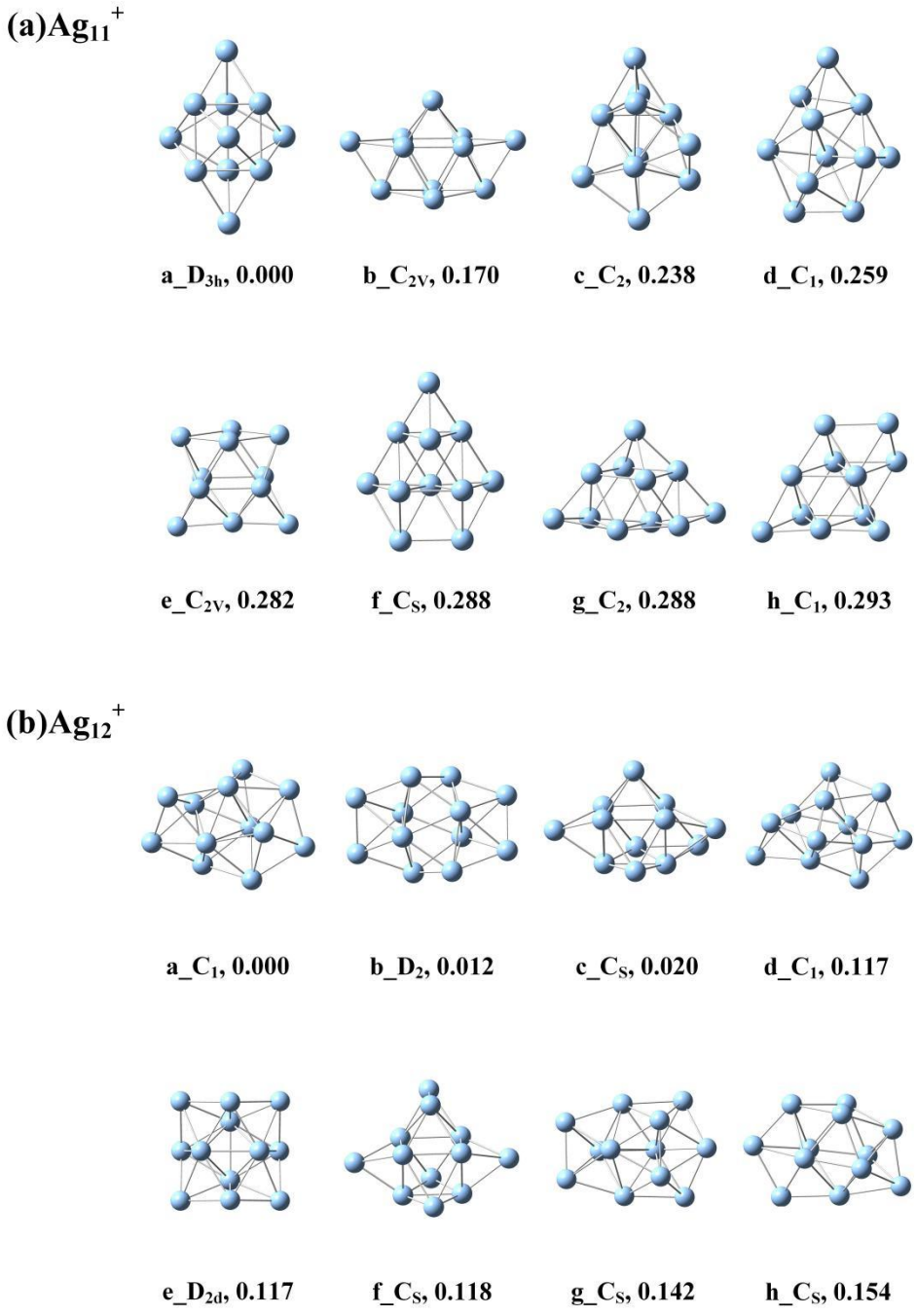

Figure S5. The low-lying eight structures of Ag_{11}^+ and Ag_{12}^+ determined by the calculations at the PBE/def2-SVP level of theory. The Ag_{11}^+ is in its singlet state and the Ag_{12}^+ is in its doublet state. The geometry of each structure and its energy (in eV) relative to the lowest-lying one was indicated.

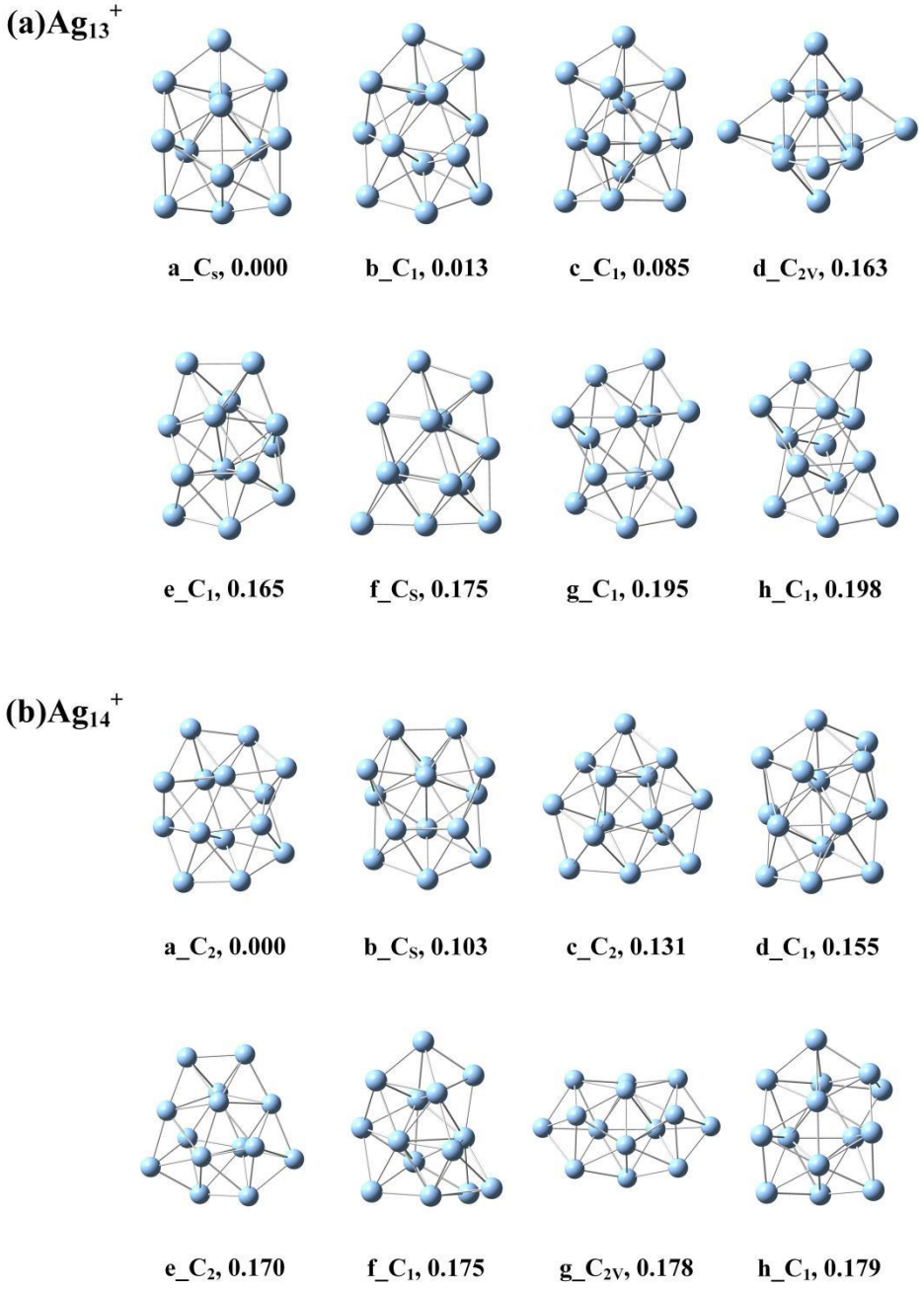

Figure S6. The low-lying eight structures of Ag_{13}^{+} and Ag_{14}^{+} determined by the calculations at the PBE/def2-SVP level of theory. The Ag_{13}^{+} is in its singlet state and the Ag_{14}^{+} is in its doublet state. The geometry of each structure and its energy (in eV) relative to the lowest-lying one was indicated.

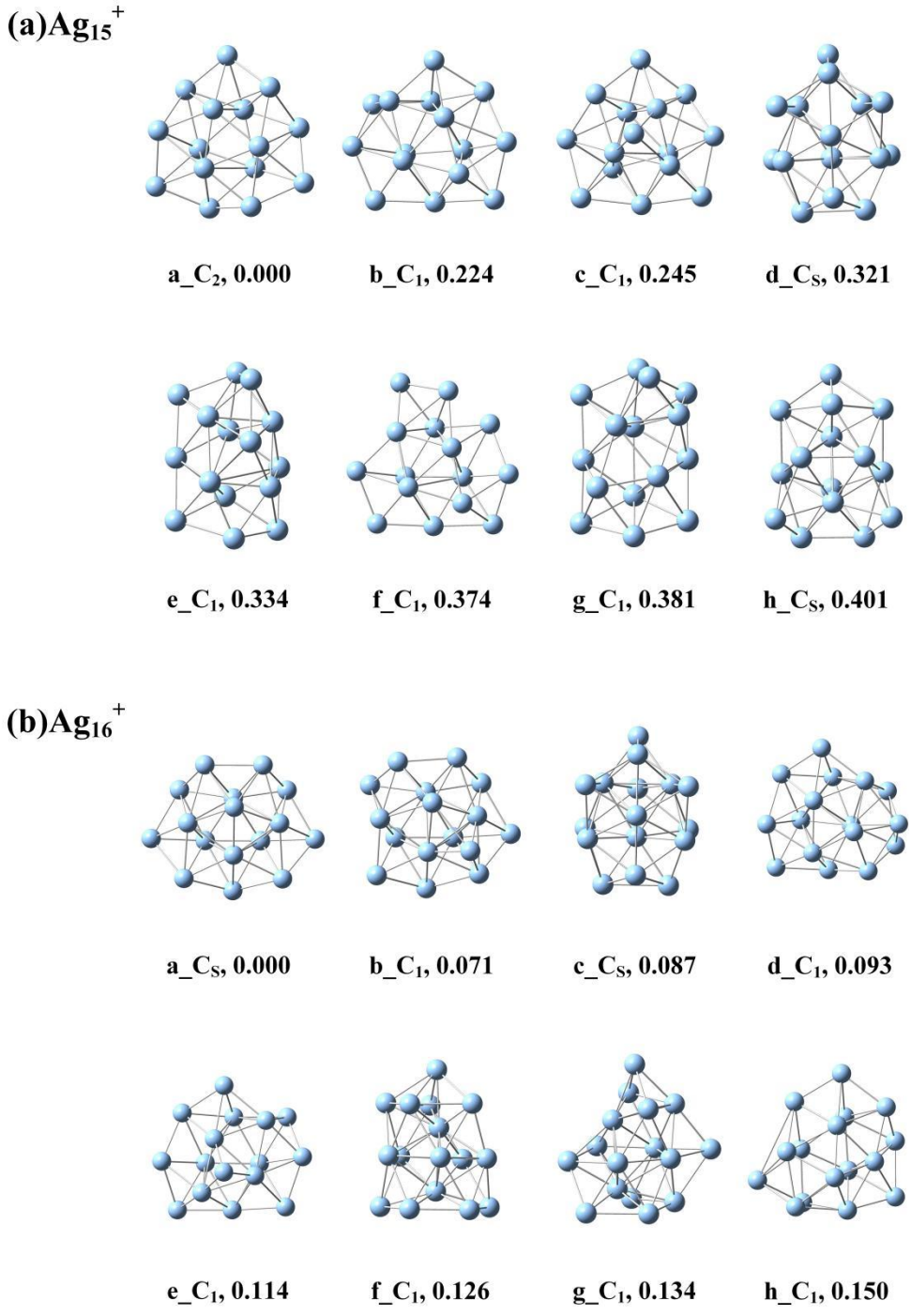

Figure S7. The low-lying eight structures of Ag_{15}^{+} and Ag_{16}^{+} determined by the calculations at the PBE/def2-SVP level of theory. The Ag_{15}^{+} is in its singlet state and the Ag_{16}^{+} is in its doublet state. The geometry of each structure and its energy (in eV) relative to the lowest-lying one was indicated.

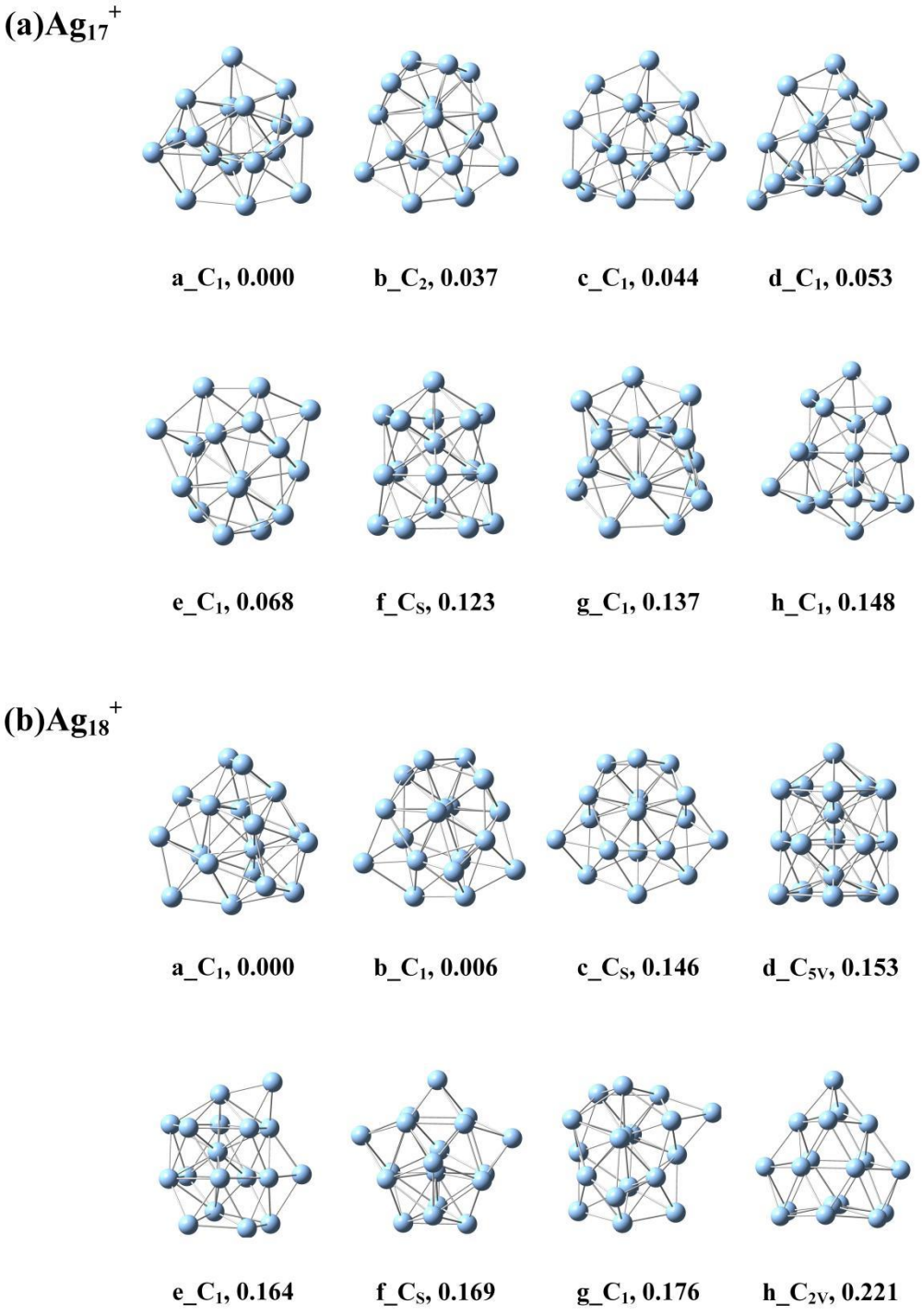

Figure S8. The low-lying eight structures of Ag_{17}^{+} and Ag_{18}^{+} determined by the calculations at the PBE/def2-SVP level of theory. The Ag_{17}^{+} is in its singlet state and the Ag_{18}^{+} is in its doublet state. The geometry of each structure and its energy (in eV) relative to the lowest-lying one was indicated.

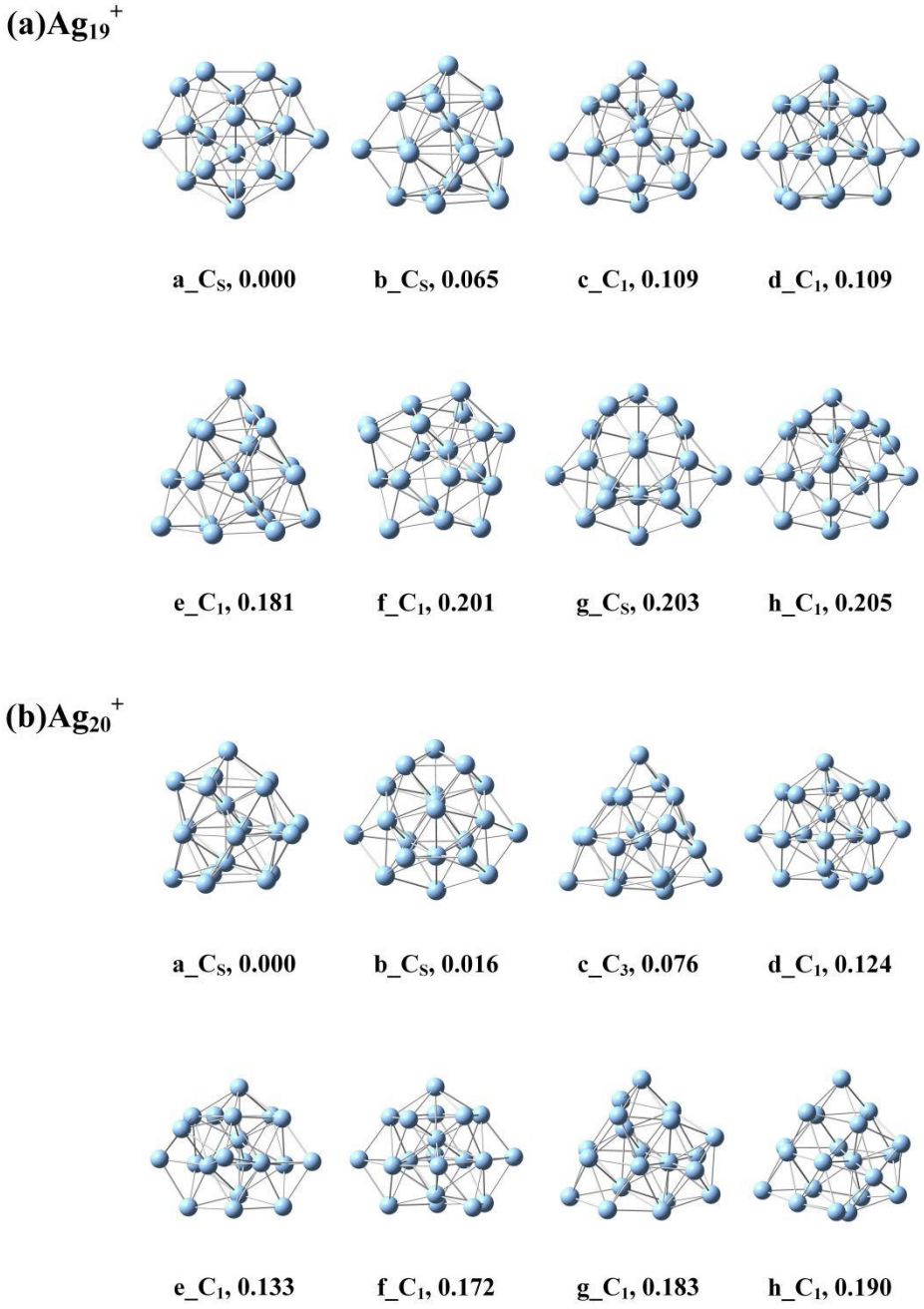

Figure S9. The low-lying eight structures of Ag_{19}^{+} and Ag_{20}^{+} determined by the calculations at the PBE/def2-SVP level of theory. The Ag_{19}^{+} is in its singlet state and the Ag_{20}^{+} is in its doublet state. The geometry of each structure and its energy (in eV) relative to the lowest-lying one was indicated.

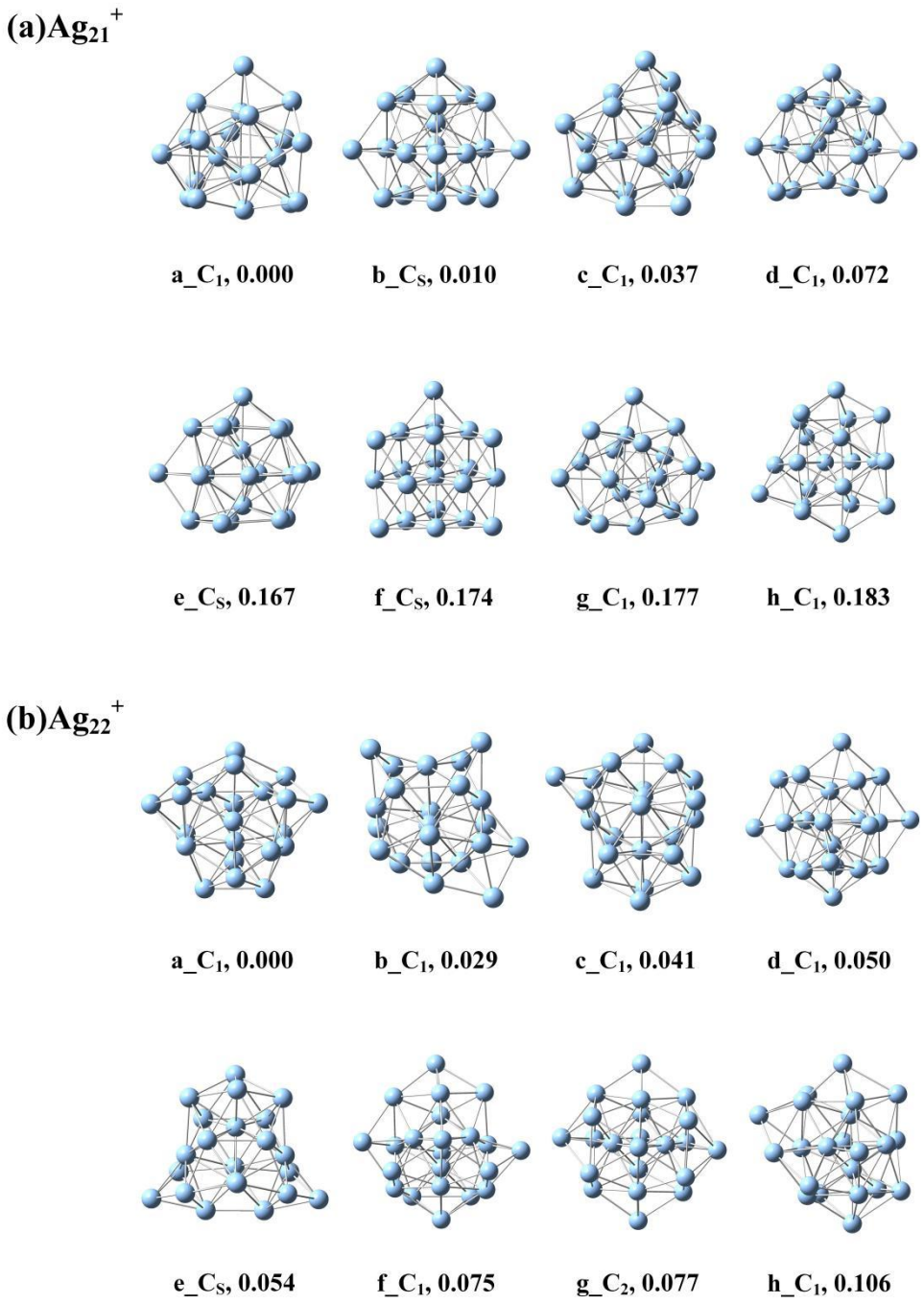

Figure S10. The low-lying eight structures of Ag_{21}^{+} and Ag_{22}^{+} determined by the calculations at the PBE/def2-SVP level of theory. The Ag_{21}^{+} is in its singlet state and the Ag_{22}^{+} is in its doublet state. The geometry of each structure and its energy (in eV) relative to the lowest-lying one was indicated.