Fig S1: Optimized geometrical parameters of the reaction of MnO₄⁻ with Ethylene. Bond distances and angles in Å and degrees.
Fig S2: Optimized geometrical parameters of the reaction of MnO₃Cl with Ethylene. Bond distances and angles in Å and degrees.
Fig S3: Optimized geometrical parameters of the reaction of MnO$_3$(NPH$_3$) with Ethylene. Bond distances and angles in Å and degrees.
Fig S4: Optimized geometrical parameters of the reaction of MnO₃(CH₃) with Ethylene. Bond distances and angles in Å and degrees.
Fig S5: Optimized geometrical parameters of the reaction of MnO$_3$(OCH$_3$) with Ethylene. Bond distances and angles in Å and degree
**Fig S6:** Optimized geometrical parameters of the reaction of MnO$_3$(Cp) with Ethylene. Bond distances and angles in Å and degrees.