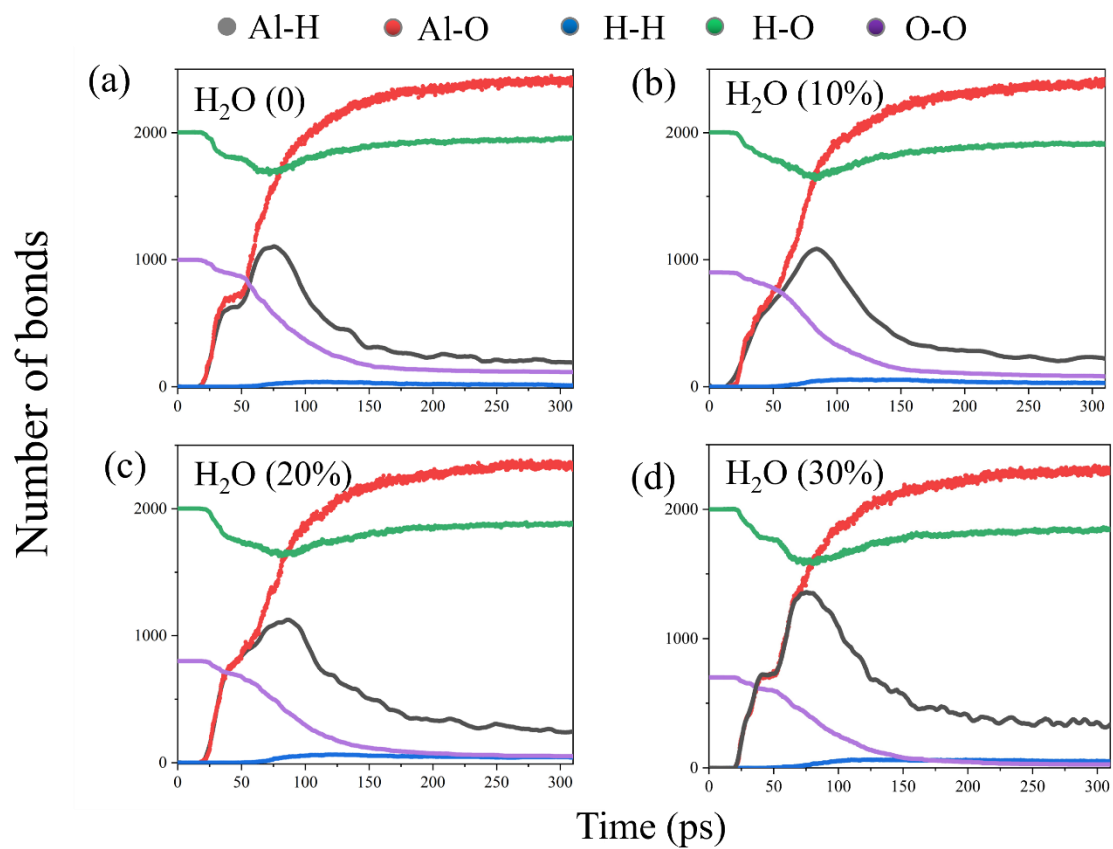


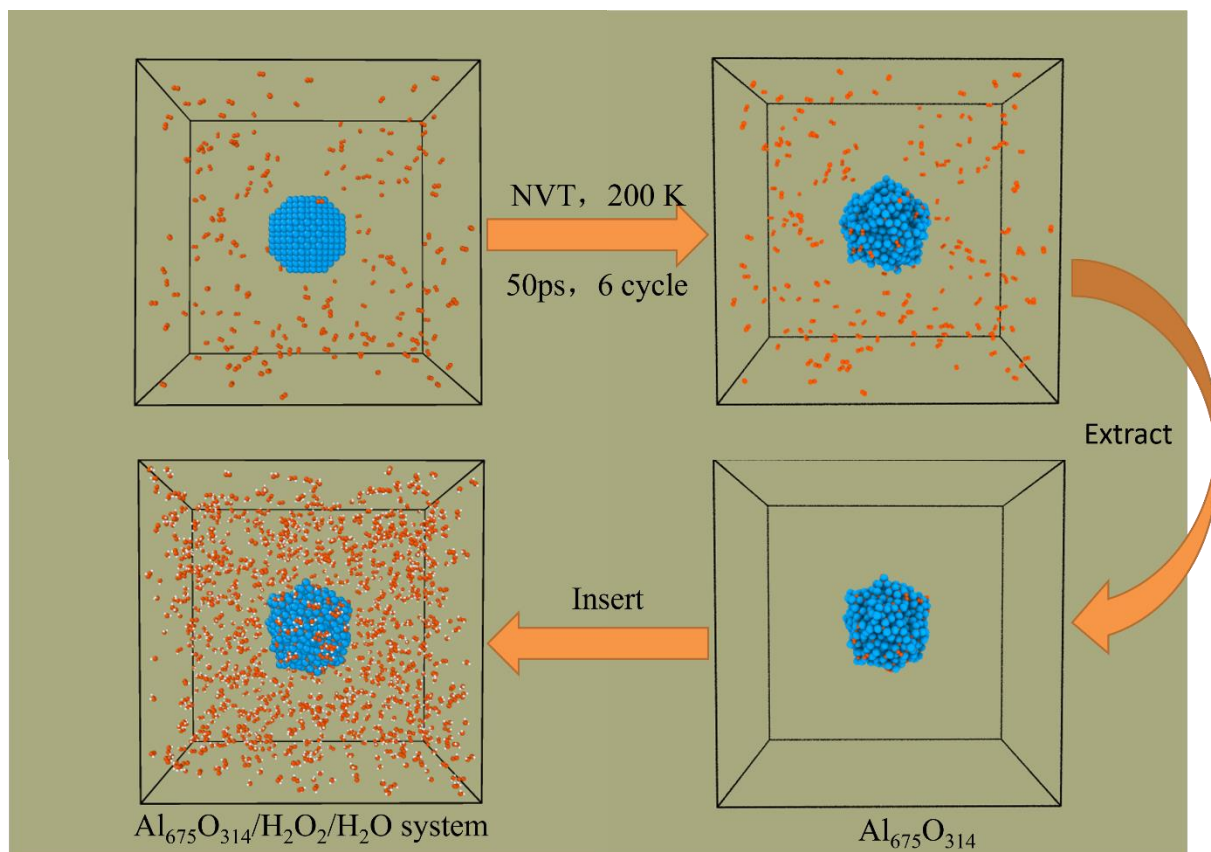
## Supporting Information

### **Atomistic Insights into the Influence of High Concentration H<sub>2</sub>O<sub>2</sub>/H<sub>2</sub>O on Al Nanoparticles Combustion: ReaxFF molecules dynamics simulation**

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**Figure S1.** Evolution of the number of H-H, H-O, Al-H, Al-O, O-O bonds for each system.



**Figure S2.** Formation of oxide layer on the surface of ANPs.