

Supporting information (SI)

Elucidating Pressure Dependency and Combustion Mechanism of Micro-unit Composite Propellants

Yuquan Liu^a, Dalin Xiang^b, Bowen Tao^{c, d}, Fang Du^{c, d}, Mingjie Wen^a,

Qingzhao Chu^a,

Xiaoya Chang^{a, *}, Dongping Chen^{a, *}

^a *State Key Laboratory of Explosion Science and Safety Protection, Beijing Institute of Technology, Beijing, 100081, China.*

^b *Beijing Institute of Astronautical System Engineering, Beijing 100076, China*

^c *National Key Laboratory of Aerospace Chemical Power, Xiangyang, 441003, China.*

^d *Hubei Institute of Aerospace Chemotechnology, Xiangyang, 441003, China.*

** Corresponding author: dc516@bit.edu.cn, xiaoya_chang@bit.edu.cn*

In the supplementary material, we present:

- Figure S1. MSD evolution of Cl, Al and O_{AP} atoms in models (a) A, (b) B1, (c) B2 and (d) B3 under condensed-phase combustion.
- Figure S2. Spatial distribution of five main products in models (a) A, (b) B1, (c) B2 and (d) B3 under condensed-phase combustion. (e) Spatial distribution of H₂O molecules in the B3 system.

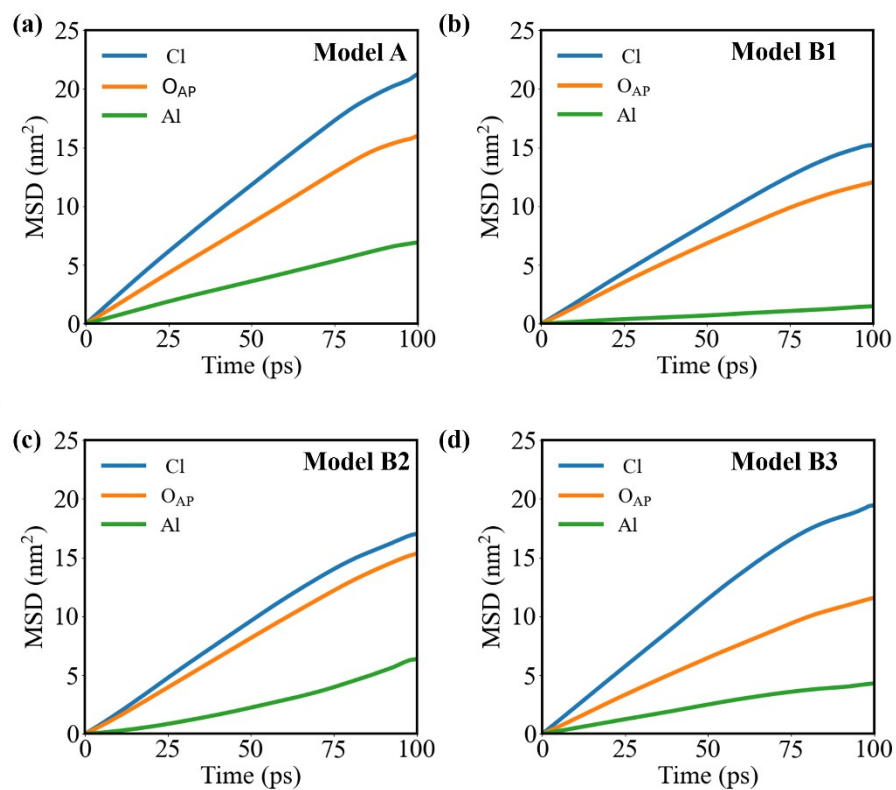


Figure S1. MSD evolution of Cl, Al and O_{AP} atoms in models (a) A, (b) B1, (c) B2 and (d) B3 under condensed-phase combustion.

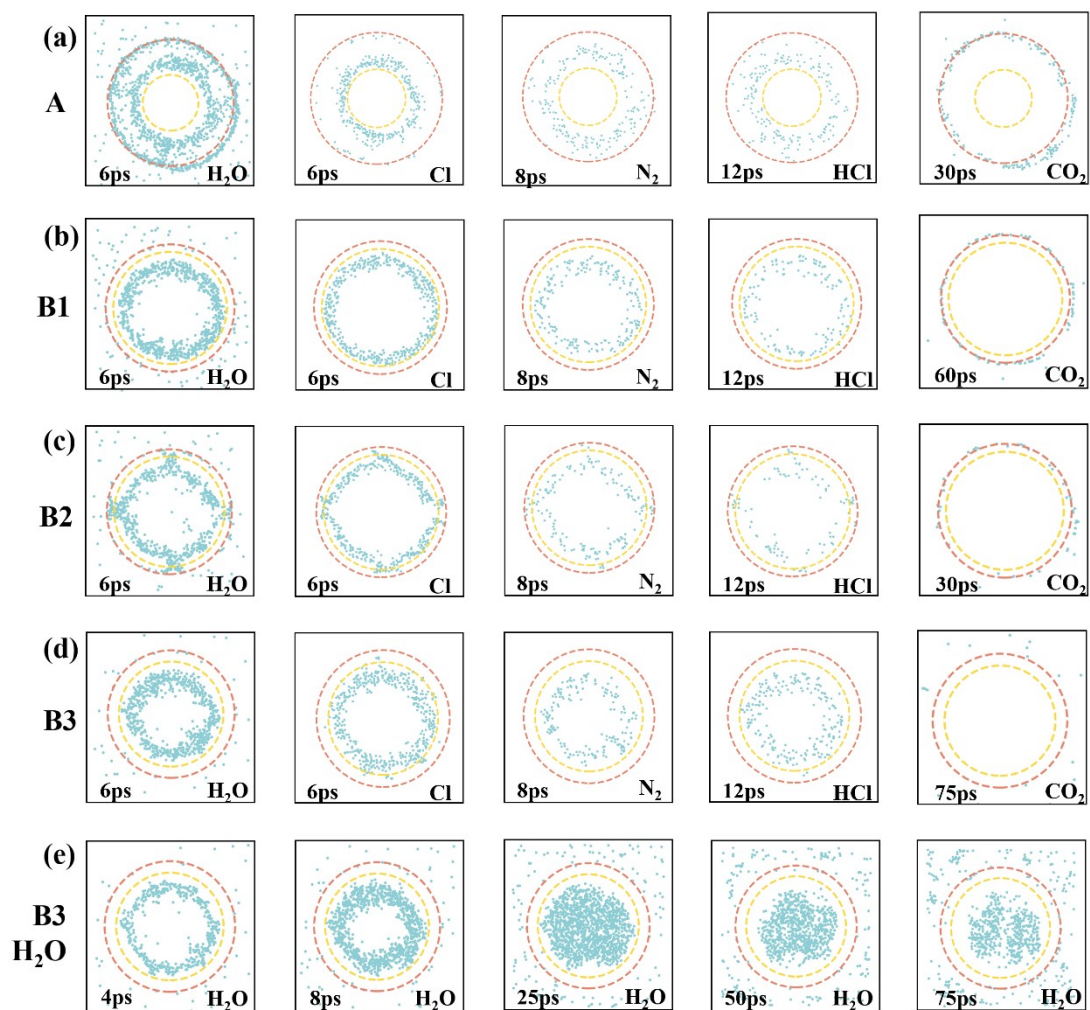


Figure S2. Spatial distribution of five main products in models (a) A, (b) B1, (c) B2 and (d) B3 under condensed-phase combustion. (e) Spatial distribution of H_2O molecules in the B3 system.