Combining the neutral-transport (NT) code including the rovibrationally resolved collisional-radiative (CR) model with the molecular dynamics (MD) simulation, we clarify the influence of the divertor plate accurately on the spatial distribution of hydrogen atoms and molecules (H, H₂) in the divertor plasma region.

We calculated distributions of emission angle, translational, vibrational and rotational energy of emitted atoms and molecules for H₂, D₂, and T₂.

Number of emitted hydrogen atoms and molecules in 1500 trials in three cases of tungsten targets (T_A, T_B, and T_C). The number of hydrogen atoms in each tungsten target is 2272, 4368, and 6320 for T_A, T_B, or T_C, respectively. The number of tungsten atoms is set to 4608 for all tungsten targets.