Table 1. Energetics and dynamics of Coulomb explosion of deuterium containing homonuclear $(D_2)_n$ clusters and heteronuclear $(A_k^{q_k+}B_\ell^{q_B+})_n$ or $(A_k^{q_A+}B_\ell^{q_B+}C_p^{q_C+})_n$ clusters at $I_M = 10^{18}$ W•cm^{-2}

Cluster	**ρ_{mol},* Å^{-3}**	**q_{mol} or q_B[†]**	***Z*, eV SIM[‡]; EML[§¶]**	**κ SIM[‡]; EML[§¶]**	**a, fs^{-1} SIM; EML[¶‖]**
$(D_2)_n$	0.025	2	12.5; 13.6	0.61; 0.60	0.16; 0.17
$(CD_4)_n$	0.016	8	42.5; 46.7	0.70; 0.60	0.27
$(DI)_n$	0.013	22	115; 165	0.80; 0.83	0.50; 0.45
$(CD_3I)_n$	0.010	26	130; 181	0.80; 0.83	

Simulation data (SIM) are compared with the results of the electrostatic model (EML). The cluster initial radius is related to n by $R_0 = (3n/4\pi\rho_{mol})^{1/3}$.

*Initial molecular density of molecular ion.

[†]Ion charge $q_{mol} = kq_A + \ell q_B + pq_C$ for cases A and B, and $q_{mol} = \ell q_B + pq_C$ for ECLHH, where $q_I = 22$ is an average charge in the size domain n = 1061–2171, and $q_C = 4$ for $(CD_3I)_{2171}$.

[‡]$E_M(n) = Zn^{2/3}$ and $\kappa = E_M(n)/E_{av}(n)$, with Z and κ being independent of n.

[§]See Fig. 3.

[¶]See text. For the ECLHHs, we neglect a weak cluster size dependence of Z, due to the dependence of q_I on n, which arises from ignition and screening effects on inner ionization [Last, I. & Jortner, J. (2004) *J. Chem. Phys.* **120,** 1336–1347; Last, I. & Jortner, J. (2005) *Proc. Natl. Acad. Sci. USA* **102,** 1291–1295].

[‖]From the time dependence of the first moment of the distribution of the light ions, $\langle R\rangle = \langle R\rangle_0 = a(t - t_{onset})$.