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TABLE I. Intermolecular potentials used for atom-atom and atom-ion cross sections.

Interaction	Potential	ϕ_0	ρ (or r_e)	C	Range	Ref.
Ar-Ar	Eq. (3)	7010eV	0.258\AA	-	0.19-14.5eV	a
$\text{Ar}^+ - \text{Ar}$	${}^2\Sigma_u$ (5)	1.25	2.434	3.382	$2-2.9\text{\AA}$	b
$\text{Ar}^+ - \text{Ar}$	${}^2\Sigma_g$ (3)	900	0.431	-	1.9-5.17eV	b
$\text{Ar}^+ - \text{Ar}$	${}^2\Pi_u$ (3)	4640	0.306	-	0.81-3.3eV	b
$\text{Ar}^+ - \text{Ar}$	${}^2\Pi_g$ (3)	2.02×10^5	0.190	-	0.18-1.63eV	b

a. Ref. 7

b. Ref. 8