

Erratum: Calculation of nuclear magnetic shieldings. X. Relativistic effects [J. Chem. Phys. 105, 3175 (1996)]

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The σ_{uv}^{NP} (OP-II) term given by Eq. (55) should be deleted because

$$\langle {}^1\Psi_n^{(0)} | H_u^{(1,0,1)}(SZ) | {}^3\Psi_m^{(0)} \rangle = 0.$$

The σ_{uv}^{NP} (FC-III) term given by Eq. (66) should be replaced by

$$\begin{aligned} \sigma_{uv}^{NP}(\text{FC-III}) = & (16\pi/3)(\mu_0/4\pi)^2 \mu_B^4 \sum_{v'} \sum_{n,m}' \langle {}^1\Psi_0^{(0)} | H_v^{(0,1,1)}(\text{FC}) | {}^3\Psi_n^{(0)} \rangle \langle {}^3\Psi_n^{(0)} | H_u^{(1,0,1)}(SZ) | {}^3\Psi_m^{(0)} \rangle \\ & \times \langle {}^3\Psi_m^{(0)} | H_{v'}^{(0,0,1)}(\text{SO}) | {}^1\Psi_0^{(0)} \rangle / ({}^1E_0^{(0)} - {}^3E_n^{(0)}) ({}^1E_0^{(0)} - {}^3E_m^{(0)}). \end{aligned} \quad (66)$$

The σ_{uv}^{NP} (SD-III) term given by Eq. (74) should be replaced by

$$\begin{aligned} \sigma_{uv}^{NP}(\text{SD-III}) = & 2(\mu_0/4\pi)^2 \mu_B^4 \sum_{v'} \sum_{n,m}' \langle {}^1\Psi_0^{(0)} | H_v^{(0,1,1)}(\text{SD}) | {}^3\Psi_n^{(0)} \rangle \langle {}^3\Psi_n^{(0)} | H_u^{(1,0,1)}(SZ) | {}^3\Psi_m^{(0)} \rangle \\ & \times \langle {}^3\Psi_m^{(0)} | H_{v'}^{(0,0,1)}(\text{SO}) | {}^1\Psi_0^{(0)} \rangle / ({}^1E_0^{(0)} - {}^3E_n^{(0)}) ({}^1E_0^{(0)} - {}^3E_m^{(0)}). \end{aligned} \quad (74)$$

Erratum: Binary nucleation kinetics: A matrix method [J. Chem. Phys. 101, 9997 (1994)]

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Due to errors in our computer code, the numbers in Table II are incorrect. Corrected version of Table II is given below, and it shows that the conventionally used theory approximates the matrix method nucleation rates very well in the ammonia-water system. The conclusions considering the ammonia-water system are changed, respectively.

In Fig. 6 the axes representing number of ammonia molecules and number of water molecules should be interchanged.

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TABLE I. The nucleation rates evaluated with standard method I_k and matrix method I_m and the saddle point flow directions evaluated by standard method ϕ_k and matrix method ϕ_m , the ratios of nucleation rates I_k/I_m , and the coordinates of the saddle points (i^*, j^*) in $\text{H}_2\text{O}-\text{NH}_3$ system with temperature T , gas phase activity of water S_w and gas phase activity of ammonia S_a .

$T(\text{K})$	S_a	S_w	$I_k \text{ 1/m}^3 \text{ s}$	$I_m \text{ 1/m}^3 \text{ s}$	I_k/I_m	i^*, j^*	$\phi_k(^{\circ})$	$\phi_m(^{\circ})$
233.15	0.31	2.5	0.32×10^{13}	0.32×10^{13}	1.00	10,35	54.3	55.1
233.15	0.23	3.0	0.60×10^{13}	0.59×10^{13}	1.02	18,36	58.2	59.4
233.15	0.16	3.5	0.27×10^{13}	0.29×10^{13}	0.93	15,37	63.6	62.0
223.15	0.45	2.5	0.11×10^{14}	0.11×10^{14}	1.00	18,29	50.6	51.1
223.15	0.33	3.0	0.92×10^{13}	0.91×10^{13}	1.01	16,30	55.4	55.8
223.15	0.25	3.5	0.12×10^{14}	0.11×10^{14}	1.09	15,31	58.3	59.9
223.15	0.19	4.0	0.13×10^{14}	0.12×10^{14}	1.08	13,30	61.2	63.5
223.15	0.14	4.5	0.83×10^{13}	0.82×10^{13}	1.01	12,31	64.1	66.2
223.15	0.11	5.0	0.12×10^{14}	0.12×10^{14}	1.00	11,31	66.0	68.2