

Angewandte Corrigendum

In this Communication, the incorrect G2 enthalpy data “–56.944771 (See Table S2 in Supporting Information)” of the NH_4^+ cation was used for the calculation of the heat of formation of the 2,2-dialkyltriazanium cation. The correct value is “–56.777599.” This mistake was caused by an error during input of “Charge” and “Multiplicity” for the G2 calculation of the NH_4^+ cation. The correct values are “Charge = 1; Multiplicity = 1”; however, in the original manuscript “Charge = 0; Multiplicity = 2” was used.

As a result, the ΔH_f , ΔH_f , P , vD , and I_{sp} data for salts **1** to **7** in Table 1 as published are incorrect. The correct data are given here in Table 1.

The sentence “All of the 2,2-dimethyl triazanium salts have positive heats of formation with **6** the highest (905 kJ mol^{-1} , Table 1)” on page 2794, left column, must be replaced with “Five 2,2-dimethyl triazanium salts have positive heats of formation with **6** the highest (465.4 kJ mol^{-1} , Table 1).”

All other results and conclusions of this Communication remain unaffected. The authors regret any confusion that may have arisen from the erroneous calculation.

Hypergolic Ionic Liquids with the 2,2-Dialkyltriazanium Cation

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Table 1: Properties of energetic 2,2-dimethyltriazanium salts.^[a]

Salts	$d^{[b]}$	$T_m^{[c]}$	$T_d^{[d]}$	Ignition delay ^[e]		Lattice energy ^[f]	$\Delta H_f^{[f]}$ cation	$\Delta H_f^{[f]}$ anion	$\Delta H_f^{[f]}$	$P^{[g]}$	$vD^{[h]}$	$I_{sp}^{[i]}$	$IS^{[j]}$
				N_2O_4	WFNA								
1 ^[k]	1.47	–	–	26	nh ^[l]	576.7	756.8	–230.3	–50.2	–	–	–	> 60
2	1.26	–0.19	145.7	8	16	501.2	756.8	–27.1	228.5	16.0	7169	226	> 60
3	1.15	10.7	134.2	sh ^[m]	22 ^[l]	506.5	756.8	113.4	363.7	12.1	6516	201	> 60
4	1.48	–	134.2	nh ^[l]	nh ^[l]	490.9	756.8	–127.7	138.2	21.2	7644	227	> 60
5	1.35	47.8	142.5	nh ^[l]	nh ^[l]	492.2	756.8	32.2	296.8	15.5	7009	211	> 60
6	1.20	74.4	153.3	nh ^[l]	nh ^[l]	491.7	756.8	200.3	465.4	11.1	6207	190	> 60
7	1.47	99.0	145.6	10	4	544.5	756.8	–307.9	–95.6	22.2	8034	228	> 60
IL A ^[n]	1.25	–61	–	–	15	481.4	908.0	113.4	540	8.9	5721	186.7	–
IL B ^[o]	1.41 ^[p]	–66	–	–	31	525.8	895.6	113.4	483	16.2	7158	213.3	–

[a] The P , vD , and I_{sp} values of salts **2** to **7** were calculated using Cheetah 6.0 instead of Cheetah 5.0. [b] Density [g cm^{-3}]. [c] Melting point [$^{\circ}\text{C}$] (from DSC measurement with $b = 10^{\circ}\text{C min}^{-1}$). [d] Decomposition temperature [$^{\circ}\text{C}$], DSC onsets from measurement with $b = 108^{\circ}\text{C min}^{-1}$. [e] [ms].

[f] Heat of formation [kJ mol^{-1}]. [g] Detonation pressure [GPa]. [h] Detonation velocity [m s^{-1}]. [i] Specific impulse measured in seconds (additional information). [j] Impact sensitivity [J] (BAM Fallhammer). [k] The Cheetah calculation for salt **1** failed. [l] nh = not hypergolic. [m] Hypergolic when a second drop of fuel was dropped into N_2O_4 . [n] 1-(2-Pentynyl)-3-methylimidazolium dicyanamide (ref. [3]). [o] 1-Methyl-4-amino-1,2,4-triazolium dicyanamide (ref. [3]). [p] Calculated (ref. [5 f]).