CORRECTION

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Correction: Beyond Newton's law of cooling in evaluating magnetic hyperthermia performance: a device-independent procedure

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Correction for 'Beyond Newton's law of cooling in evaluating magnetic hyperthermia performance: a device-independent procedure' by Sergiu Ruta et al., Nanoscale Adv., 2024, https://doi.org/10.1039/d4na00383g.

The authors regret that some of the notation used to represent eqn (6)–(8) could be misinterpreted and therefore have been amended.

All calculations were carried out using the 1D heat transport model (eqn (5)). Eqn (6)–(8) indicate the correction to the SLP taking into account the instantaneous losses. The notation is intended to indicate derivatives during heating and cooling rather than absolute values.

In general, the expectation is that the second term in eqn (8) is negative, therefore the correction will be an increase in SLP prediction based on the heating part only. The correct notation is to use square brackets rather than vertical lines around the derivatives, as seen below:

$$\left[\frac{\partial \Delta T_r}{\partial t}\right]_{heating} = \alpha_r \left[\frac{\partial^2 \Delta T_r}{\partial r^2}\right]_{heating} + S, \tag{6}$$

$$\left[\frac{\partial \Delta T_r}{\partial t}\right]_{cooling} = \alpha_r \left[\frac{\partial^2 \Delta T_r}{\partial r^2}\right]_{cooling}, \tag{7}$$

$$S = \left[\frac{\partial \Delta T_r}{\partial t}\right]_{heating} - \left[\frac{\partial \Delta T_r}{\partial t}\right]_{cooling}. \tag{8}$$

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

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