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Correction: An aqueous hybrid electrolyte for low-temperature zinc-based energy storage devices

Nana Chang,^{ab} Tianyu Li,^a Rui Li,^{ab} Shengnan Wang,^{ab} Yanbin Yin,^{*a} Huamin Zhang^a and Xianfeng Li^{*a}

Correction for 'An aqueous hybrid electrolyte for low-temperature zinc-based energy storage devices' by Nana Chang et al., *Energy Environ. Sci.*, 2020, 13, 3527–3535, <https://doi.org/10.1039/D0EE01538E>.

In Fig. 2c on page 3530 of this article, the previous notation of “ 10^{-5} ” should be corrected to “ 10^{-8} ” in the y-axis label on the right, due to a mistake in the process of converting “ $\text{\AA}^2 \text{nS}^{-1}$ ” (unit of theoretical calculation) into “ $\text{cm}^2 \text{S}^{-1}$ ” (unit of picture presentation). There is no description of the value of the diffusion coefficient, only the discussion about the trend.

Fig. 2c should appear as follows:

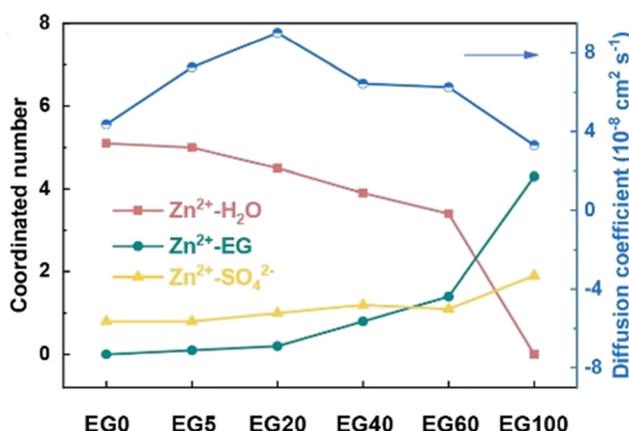


Fig. 2 (c) Coordination numbers of H₂O, EG, and SO₄²⁻ around Zn²⁺ and the diffusion coefficient of Zn²⁺ in different electrolytes calculated from MD simulations.

The discussion of the diffusion coefficient in Fig. 2c should be as follows:

“Moreover, the diffusion rate of Zn²⁺ in these electrolytes can be qualitatively evaluated by the mean-squared displacement (MSD) as a function of time (Fig. S13, ESI[†]). Surprisingly, the diffusion coefficient of Zn²⁺ rises and then declines as the EG content increases (Fig. 2c). When the EG-to-water ratio is lower than 60%, the diffusion coefficient of the hybrid electrolyte is still higher than that of EG0. This result shows that the solvation structure of Zn²⁺ coordinated with EG and H₂O contributes to the fast transport of Zn²⁺. Nevertheless, the calculated fast ion diffusion coefficient of Zn²⁺ is not quite consistent with the slight decrease in the ionic conductivities of the hybrid electrolytes at 20 °C (Fig. 1b), which probably results from the gradually increasing viscosities of the hybrid electrolytes (Fig. S3, ESI[†]). Even so, fast Zn-ion transport in the hybrid electrolyte is achieved at low temperatures, when the solvation interaction of EG with Zn²⁺ becomes more prominent.”

This correction does not have any impact on the core idea and conclusion of this work.

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

^a Division of Energy Storage, Dalian National Laboratory for Clean Energy, Dalian Institute of Chemical Physics, Chinese Academy of Sciences, 457 Zhongshan Road, Dalian 116023, China. E-mail: yinyanbin@dicp.ac.cn, lixianfeng@dicp.ac.cn

^b University of Chinese Academy of Sciences, Beijing 100049, China

