

# Correction to “Impact of I<sub>2</sub> Additions on Iodide Transport in Polymer Electrolytes for Dye-Sensitized Solar Cells: Reduced Pair Formation versus a Grotthuss-Like Mechanism”

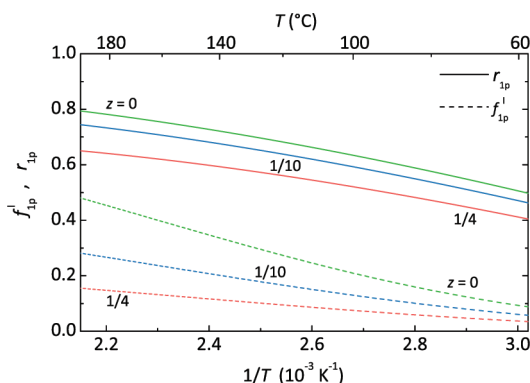
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In Figure 4 of the above-referenced Letter, we presented as dashed lines the fractional pair component of iodine transport in PEO<sub>30</sub>NaI,  $f_{1p}^I$ , as a function of temperature for three different I<sub>2</sub>/NaI molar ratios  $z$  ( $= 0, 1/10$ , or  $1/4$ ). However, in the original publication the annotations to the highest and lowest dashed line were interchanged by mistake. The same is true for the respective colors, red and green. As a consequence, the  $f_{1p}^I$  behavior depicted in the lower part of the former Figure 4 contradicted with the results of the model fittings and the corresponding descriptions in the text.

The revised version of Figure 4 is given in this note. It now shows that  $f_{1p}^I$  decreases with increasing  $z$ , as is correctly written in the text of the Letter on page 2091 below Figure 5. Thus,  $f_{1p}^I$  exhibits a similar trend to the pair fraction  $r_{1p}$  upon the addition of small amounts of pure iodine to the polymer–salt complex, as quantified by  $z$ . The reason for this behavior lies in the formation of the bulky I<sub>3</sub><sup>−</sup> anions whose tendency to associate with Na<sup>+</sup> cations is assumed to be negligibly small.

Furthermore, in the second to last sentence of the summary (third line from the top of page 2092, above the Experimental Procedures), the incorrect notation of the referred system causes confusion. Obviously, the mentioned similar investigations were *not* conducted on PEO<sub>30</sub>NaI:I<sub>2</sub> (1:z), which is the system extensively presented in the Letter, but on the system PEO<sub>10</sub>NaI:I<sub>2</sub> (1:z) having a 3 times *higher* salt concentration (data not shown). These findings, then, raise the question of whether, in even more concentrated systems, for example, those based on ionic liquids, the role of the Grotthuss mechanism may have been overestimated by virtually neglecting the possible impact of ion association.



**Figure 4.** Pair fraction  $r_{1p}$  and fractional pair component of iodine transport  $f_{1p}^I$  in PEO<sub>30</sub>NaI:I<sub>2</sub> (1:z) electrolytes with different I<sub>2</sub> mole fractions  $z$ , as indicated. The solid and dashed lines result from simultaneous fitting of all transport data within a comprehensive model.

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