

Corrigendum

Corrigendum to “Mono-manganese mechanism of the photosystem II water splitting reaction by a unique Mn_4Ca cluster” [Biochim. Biophys. Acta Bioenergetics 1767 (2007) 484–492]

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The generalized kinetic theory of isotopic $^{16}\text{O}/^{18}\text{O}$ exchange reactions of two substrate water (or their derivative) molecules bound to the Mn_4Ca cluster in the oxygen evolving complex (OEC) of photosystem II (PSII) has been developed by adding the cross-exchange processes between them. The simulations based on this theory support our predicted structure of OEC where two substrate water molecules are bound to the *cis*-positions on the terminal Mn_a ion. In this article some corrigenda have been found and need to be corrected.

First, the following misprints in Eqs. (1), (2), and (4) should be corrected as follows:

$$e^{-k_1} \rightarrow e^{-K_1}, \quad e^{-k_2} \rightarrow e^{-K_2}, \quad e^{-(k_1+K_2)t} \rightarrow e^{-(k_1+k_2)t},$$

and

$$e^{-(K_1+K_2)t} \rightarrow e^{-(k_1+k_2)t}$$

in Eq. (1);

$$e^{(-k_1 k_2)t} \rightarrow e^{(-k_1 + k_2)t}$$

in Eq. (2);

$$K_1 - k_2 \rightarrow k_1 - k_2, \quad x_3 - x_3 \rightarrow x_3 - x_{-3}, \quad K_1 + K_2 \rightarrow k_1 + k_2, \quad k_1 + k_2 - k_2 \rightarrow k_1 + k_2 - K_2,$$

and

$$k_2 \tilde{x}_{-3} \rightarrow k_2 \tilde{x}_3$$

in Eq. (4).

Second, the following mistakes in Table 1 should be corrected: in the “ $\text{S}_{1a}/+\text{ClRH}$ ” row, the “ $R_{ab}/R_{bc}/R_{bd}/R_{cd}/R_{be}/R_{ce}/R_{de}$ ” and “Spins: $S_a/S_b/S_c/S_d$ ” values should be replaced with 3.56/3.19/2.80/2.79/3.40/3.35/3.29/3.03 and 1.55/1.92/1.97/1.52, respectively.