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Corrigendum: Improving parameter estimation of fuel cell using honey badger optimization algorithm

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A Corrigendum on Improving parameter estimation of fuel cell using honey badger optimization algorithm

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In the published article, there was an error in the legend for “**Figure 2**” as published “slowly while using digging for catching it.” The corrected legend appears below.

“Polarization curve of the PEMFC system (**Famouri and Gemmen, 2003**) showing the regions dominated by activation loss, ohmic loss, and concentration loss using HBA”.

In the published article, there was an error in “**Table 2**” as published “values of lower and upper limits of ξ_2 , ξ_3 , ξ_4 and R_c (Ω).” The corrected “**Table 2**” and its caption “Two parameter ranges of PEMFC parameters” appear below.

In the published article, there was an error in “**Table 4**” as published “lambda value.” The corrected “**Table 4**” and its caption “Estimated 250 W’s parameters” appear below.

The authors apologize for this error and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

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TABLE 2 Two parameter ranges of PEMFC parameters.

| Parameter | Lower limit | Upper limit |
|----------------|-------------|-------------|
| ξ_1 | -1.1997 | -0.8532 |
| ξ_2 | 0.80E-3 | 6.00E-3 |
| ξ_3 | 3.60E-5 | 9.80E-5 |
| ξ_4 | -26.00E-5 | -9.54E-5 |
| λ | 13 | 23 |
| $R_c (\Omega)$ | 0.1E-3 | 0.8E-3 |
| $b (V)$ | 0.0136 | 0.5000 |

TABLE 4 Estimated 250 W's parameters.

| Parameter | HBA | HGS | HHO | SCA | GWO |
|----------------|----------|----------|----------|---------|---------|
| ξ_1 | -0.9486 | -0.945 | -1.1097 | -0.9487 | -0.9478 |
| ξ_2 | 3.25E-03 | 3.00E-03 | 3.46E-03 | 3.23E-3 | 3.22E-3 |
| ξ_3 | 7.80E-5 | 7.8E-05 | 8.32E-05 | 7.69E-5 | 7.69E-5 |
| ξ_4 | -1.73E-4 | -1.0E-04 | -1.52E-4 | -1.8E-4 | -1.8E-4 |
| λ | 1.7E+01 | 17.993 | 2.29E+1 | 18.395 | 18.231 |
| $R_c (\Omega)$ | 8.0E-04 | 5.8E-04 | 3.83E-04 | 2.8E-04 | 3.5E-04 |
| b | 1.60E-02 | 1.6E-02 | 5.42E-02 | 1.8E-02 | 1.8E-02 |
| SSE | 0.354 | 0.3576 | 6.46-01 | 0.546 | 0.3680 |