Dear Dr. Bojan Radak:

Thanks you for your letter and for the reviewers’ comments concerning our manuscript entitled “Modeling and optimizing an electrochemical oxidation process using artificial neural network, genetic algorithm, and particle swarm optimization”（5546）. Those comments are all valuable and very helpful for revising and improving paper, as well as the import guiding significance to our researches. We have studied comments carefully and have made correction which we hope meet with approval. Revised portion are marked in red in the paper.

The main corrections in the paper and the responds to the reviewer’s comments are as following:

1. Response to comment: (“The terms of the non-linear optimization model are shown in Eq. (1)…”- but Eq (1) gives a linear relationship.)

Response: We have made correction according to the Reviewer’s comments.

1. Response to comment: (please explain the differences between AF and TF?)

Response: The role of the AF is to distribute the independent variables in the input layers to the hidden layer and to feed the results of neurons of hidden layers to the output layer. The role of the TF is to employ different variants of algorithm to adjusting the weight and the bias of each neuron.

1. Response to comment: (“Furthermore, different combinations of AF would lead to completely different consequences.” - provide references for this claim!)

Response: Considering the Reviewer’s suggestion, we have provided references 29. A, Wu, Z. Zeng, C. Fu, W. Shen, NEUROCOMPUTING, **74** (2011) 831

1. Response to comment: (Table I and Fig 2 - which dataset was used for performance determination?)

Response: The minimum values for ADD and RMSE of 1.77% and 0.22, respectively, was used for Table I; The minimum values for RMSE when the number of hidden neurons is 11 with trainlm as BP algorithm was used for Fig 2.

1. Response to comment: (Those are not functions but different variants of BP

Algorithm.)

Response: We have made correction according to the Reviewer’s comments.

1. Response to comment: (how the number of hidden neurons was determined?)

Response: Increasing the number of neurons more than 11 did not significantly decrease the RMSE.

1. Response to comment: (Fig 3 and 6 should be deleted.)

Response: Considering the Reviewer’s suggestion, we have deleted the Fig 3 and 6.

1. Response to comment: (Please give the calculation steps of the relative importance of the independent variable.)

Response: As Reviewer’s suggested that we have given the calculation equation.

1. Response to comment: (Provide the relative importance and weights for BPNN.)

Response: Considering the Reviewer’s suggestion, we have provide the relative importance and weights for BPNN.

1. Response to comment: (Rewritten the section of *Evaluating the performance of BPNN and GA-BPNN*)

Response: We have rewritten this part according to the Reviewer’s suggestion. Besides, there are some data error in Fig 4 and have made correction. The value of R2 during test procedure was much smaller than the original.

1. Response to comment: (The simple size of 10 points is very small to be analyzed by residual frequency plots. Instead, provide residual vs. experimental plots.)

Response: We have made correction according to the Reviewer’s comments and provided residual vs. experimental plots.

1. Response to comment: (“adjusted” is also a model prediction?)

Response: The value of “adjusted” is model prediction. The purpose of readjusting the optimal parameters was to facilitate experimental operation.

We tried our best to improve the manuscript and made some changes in the manuscript. These changes will not influence the content and framework of the paper. And here we did not list the changes but marked in red in revised paper.

We appreciate for Editors/Reviewers’ warm work earnestly, and hope that the correction will meet with approval.

Once again, thank you very much for your comments and suggestion.

Best regards,

Banghai Liu