

Dear Editor,

We like to express our appreciation to the reviewers for their comments. We are resubmitting the revised version of the paper number MSB-D-24-00484. We have studied the comments of the reviewer carefully, and have changed the text according to the comments they have listed. Below we refer to each of the reviewer's comments.

Response to Reviewer #1

Comment 1. *The author should add the aim of the research in the introduction part.*

Reply: This study aimed to compare the effectiveness of meta-heuristic algorithms in extracting the parameters of new-generation solar cells from the S-shaped IV curves and to determine the most suitable ones for addressing this optimization problem.

The aim of the research was added in the introduction part (page 2, paragraph 3 (last paragraph in the Introduction), line 1-2).