

**Paper title: Full color imaging system based on the jointly
integration of metalens and neural network**

Manuscript ID: nanomaterials-2935878

Dear editor,

We are truly grateful to yours and other reviewers' critical comments and thoughtful suggestions on our manuscript. Based on these comments and suggestions, we have made careful modifications on the original manuscript. All changes made to the text are using the "Track Changes" function. We hope the new manuscript will meet your magazine's standard. Below you will find our point-by-point responses to the reviewers' comments/ questions.

#Reviewer 1

Point 1: The abstract requires thorough revision to enhance clarity and coherence. During the revision process, special attention should be given to highlighting the key findings.

Response 1: Thanks for your professional guidance. We revised the abstract to make it clearer and easier to understand

Point 2: Various recently published important papers on neural network applications are missing from the manuscript. Please discuss the following publications in your manuscript (J. Hazard. Mater. 462 (2024) 132773; J. Mater. Chem. A., 11 (2023) 9009-0918; Sep. Purif. Technol. 326 (2023) 124891). Besides, Please clearly highlight the key objectives of this study.

Response 2: Thank you very much for your thorough review. We have cited these three articles, which can be seen in References 13-15. We have added introduction section and described this work in detail in the last paragraph of the section 1.

Point 3: Figure 1 could be revised.

Response 3: Thank you for your suggestions. We have modified Figure 1 to make it clearer.

Point 4: The result and discussion section is too small and does not reflect the entire methodology. please revise properly.

Response 4: Thank you for your thorough review. In the section 3, we have added the description of the network parameters and the analysis of the results, including the performance of PSF, Loss, PSNR, SSIM, etc.

Point 5: A lot of English grammar and typo errors were seen throughout the manuscript. please revise carefully.

Response 5: Thank you for your thorough review. We have checked the full text and made corrections where there are grammatical errors.