

Response to reviewer 3

1. Abstract: .."specific recognition ability to the targets was good" – what does it mean „good"? Please specify it.

Response: Thank you for your constructive advice. In order to evaluate the superior specific adsorption capacity of MG-MIM, it was placed in a mixed solution of basic green, basic red 9, MG and LMG for extraction. As shown in Fig. 9, the adsorption capacity of MG-MIMs for MG and LMG was much higher than that of basic green and basic red 9, which indicated that the adsorption of MG-MIMs for MG and LMG was specific adsorption. It can be seen from the figure that MIM has better extraction capacity for MG and LMG which are more similar to template molecules, as described in Section 3.3.3,

2. Line 77-78: "MIMs 是 s 77 s owing" – what does it mean? Please correct it.

Response: Thank you very much for your comment. This typo has been corrected. Moreover, we have carefully checked and polished the language throughout the paper.

3. IR spectrum (Fig. 3) – please, remove the initial section with a lot of noise or apply a smoothing effect

Response: Thank you for your constructive advice. The FT-IR spectrum has been smoothed, and the original Fig.4 has been replaced in the revised manuscript.

4. How durable was the connection of the MIP polymer layer with the membrane. Didn't the weight of the graft layer decrease during the process as a result of washing out?

Response: Thank you for your constructive comment. The molecularly imprinted polymer is chemically bonded to the surface of the glass fiber membrane (described in Section 2.4). MIMs are obtained by chemical bonding, and unreacted components on the surface are removed by solvent to avoid affecting the subsequent use. In order to evaluate the adsorption capacity of MG-MIM, the reusability experiment was used to demonstrate the reusability of MG-MIM. The results showed that the extraction performance did not decrease significantly after five times of repeated use. This part was added to lines 358-371 in Section 3.3.3.

5. Is it possible to determine the model according to which sorption occurs for these membranes?

Response: Thank you for your constructive advice. The experiment of adsorption kinetics model is included in Section 2.5.2.

6. Was the contact time of the template - imprint checked?

Response: Thank you for your constructive advice. In this study, the contact time of the template-imprint was evaluated by the dynamic adsorption of MG-MIMs and NIMs, as shown in Section 3.3.2. The adsorption kinetics curve (Fig. 7A and 7B) showed that the adsorption rate of MG-MIMs for MG and LMG increased significantly faster than that of NIMs within 0-20 min. At 20 min, the adsorption of both materials reached saturation, indicating that the absorption procedure was a fast equilibrium.

7. How did the porosity of the membranes change after the polymerisation? What kind of membranes were used? Was the water flux checked before and after modification? If not, please do it.

Response: Thank you for your constructive advice. We have added the information related to membrane substrate and polymer membrane in the revised manuscript. The porosity of the membrane material is 90%, and the average porosity is 0.7 μm . After polymer chemical bonding, the porosity is lower (78%-80%), and the pore diameter is 0.1-0.5 μm . However, it can be found from the results of thermogravimetric analysis, SEM analysis and practical application that the polymer has enhanced adsorption capacity and physical/chemical stability.