November 23, 2022

Dear ***Dr. Michael M. Lee***,

This is Dr. Jun Zou, professor at Zhejiang University and the corresponding/first author of the papers below (Reference [3] and [32])[1, 2], which have been extensively by the third reviewer for making review decision for the manuscript (Manuscript Number: abo7696) "Uncover rock-climbing fish's secret of balancing tight adhesion and fast sliding for bioinspired robots". The co-authors for the paper contacted me recently regarding points being used to support your decision, which draw my attention that our paper might be misunderstood. I thought I should write to you to clarify the confusion.

The reviewer referenced my previous works[1-3] about *Beaufortia kweichowensis* to analyze the contribution of the manuscript "Uncover rock-climbing fish's secret of balancing tight adhesion and fast sliding for bioinspired robots". I do not agree with the reviewer's comparison. There are no fundamental conflictions between the new discoveries proposed by the manuscript and the point of my former published papers. The main point is whether microbubbles are important for the adhesion of *Beaufortia kweichowensis*. I do not agree with the reviewer's comment and believe he misunderstood our point. In my published paper, I found adhesion of *Beaufortia kweichowensis* decreased sharply if the microbubbles disappear. It broke the seal of *Beaufortia kweichowensis*. I believe the conclusion in the above manuscript that the Stefan force generated by micro setae leads to adhesion force of the fish is a new approach to uncovering the adhesion-sliding secret of *Beaufortia kweichowensis*. The point makes sense to me and is a new finding in the literature. I personally believe the work is significant and interesting. It advanced our previous work on the adhesion and crawling mechanism of *Beaufortia kweichowensis*. The biomimetic robot inspired by *Beaufortia kweichowensis* is particularly interesting. In viewing the broad interests on the subject in robotics society, I strongly recommend reconsideration for potential publication of the manuscript.

While I am grateful to the third reviewer for reading my papers carefully, I think it is important that we support opinions from different viewpoints. This is also the reason that I am writing to you and hope to draw your attention on the matter.

References

[1] Jinrong Wang, Chen Ji, Wei Wang, **Jun Zou***, Huayong Yang, Min Pan, An adhesive locomotion model for the rock-climbing fish, Beaufortia kweichowensis. Scientific Reports. 9(1): 16571 (2019).

[2] **Jun Zou**, Jinrong Wang, Chen Ji*, The adhesive system and anisotropic shear force of Guizhou Gastromyzontidae. Scientific Reports. 6: 37221 (2016).

[3] Jinrong Wang, Yongxin Xi, Chen Ji, **Jun Zou***, A biomimetic robot crawling bidirectionally with load inspired by rock-climbing fish. Journal of Zhejiang University-Science A. 23: 14-26 (2022).

Sincerely yours,

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Professor

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