**Detailed Response to Reviewer**

**Reviewer #2:**

1. **The subsections 2.1, 2.2, and 2.6 start with the specific details. It is recommended to insert one or two sentences, explaining the considered method or theory, at the star of each subsection.**

The suggested sections have been modified as per the suggestion of reviewer.

1. **Eqs. (4) and (5) must be improved.**

Done.

1. **The origin of Eqs. (16)-(19) is unclear. Are they derived by the authors or obtained from literature?**

Equation (16) is taken from a reference mentioned by [18]. Whereas subsequent equations (17-19) are derived and obtained by differentiating with respect to time.

1. **The scale bars in Figs. 7 and 8 are different. This complicates comparison of the figures.**

Authors do agree with the reviewer’s keen observation of different scale bars on the microstructures. But the physical appearance of nano porous structure of porous anodic alumina magnification should be higher that is why different scale bars were used in these figures. Silicon and copper do not have porous surface therefore, low magnification images were shown in Figure 7.

1. **The color scheme used to denote the investigated surfaces in Figs. 14, 15, and 16 is confusing. The color marking of the experimental data associated with the specific substrate is different. The same can be said about legends in Figs. 14, 15, and 16, in which the investigated surfaces are randomly presented. In all three figures, the legends must be identical, and the same color must be used for the investigated substrate.**

As per the suggestion of the reviewer, color scheme of the figures has been modified.

1. **The abbreviation of fluorotrichlorosilane is presented twice after the usage of term FOTS.**

Amended.

1. **The polydimethylsiloxane is abbreviated twice.**

Amended.

1. **The porous anodic alumina is abbreviated twice.**

Amended.

1. **The polytetrafluoroethylene is abbreviated twice.**

Amended.

1. **The authors should explain difference between polytetrafluoroethylene, PTFE, and Teflon because these terms are used together. If there is no difference, the authors should stick to single term throughout the paper. (EDITOR'S NOTE - Teflon(R) is a trademark and if used should be marked as such - D. Schiraldi)**

Authors do agree with the reviewer’s comment. Therefore, Teflon® has been used throughout the manuscript.

1. **Ref. (6) is unacceptable. It is just a blog and was introduced during last revision.**

As per the suggestion of the reviewer, it has been replaced with appropriate references.