Review of: "A Mini-Review On MXene Based Textiles For Electromagnetic Interference Shielding Application"

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Potential competing interests: The author(s) declared that no potential competing interests exist.

This manuscript reviews the MXene based textiles for EMI shielding application. The basic theory of EMI shielding and the latest research in M-textiles are introduced, and the synthesis protocol and mechanism are summarized. Provides some very valuable insights. However, it is not very systematic.

Following are several major concerns:

1. Some sentences are verbose, for example, “In this regard, MXene-based textiles (M-textiles) have been proved to be efficient for shielding applications owing to their conductivity, mechanical flexibility, easy coating capability, etc, whose applications range from everyday clothes to aerospace, from protective to automotive, and so on.” in the abstract. The author is recommended to simplify them.
2. The graph of published reviews and patents related to MXene has no caption below. Please perfect it. Also, does this graph count global reviews and patents? No relevant patents were published or filed in 2022?
3. The second formula format on page 5 is weird, please confirm.
4. The words in Figure 3 are best not to stand upside down for the convenience of readers.
5. What is the shielding mechanism of ceramic materials with EMI shielding function? As very hard and fragile materials, what scenarios can ceramics be used in the field of EMI shielding? How to apply?
6. How can MXene based textiles prevent the oxidation of MXene?
7. The overall logic and clarity of the review is not high. Figure 5 has no corresponding description in the text. And Figure 5 is incorrectly referenced in the description paragraph to Figure 7 (Page 12).
8. The writing format of many units and $Ti_3C_2T_x$ is incorrect, please check and correct by yourself.
9. Figure 8 is incorrectly referenced in the description paragraph to Figure 9 (Page 14).
10. What are the differences among the different processes of M-textiles? And what are the effects of different processes on the EMI shielding effectiveness and other functions of textiles?
11. The author is too careless. Figure 9 is incorrectly referenced in the description paragraph to Figure 10 (Page 14). Figure 11 has no corresponding description in the text.
12. What are the means to improve the EW absorption of MXene based textiles? What is its internal mechanism? And what is the relationship between conductivity and EW absorption intensity? What is its internal mechanism?