

Comments to “Study on high-temperature oxidation behavior of platinum-clad nickel composite wire “

The authors of this work developed a Pt/Ni clad composite wire to replace pure platinum leads for temperature sensors in high-temperature applications. The work reports original results and surely provide a good contribution to the technology advancement in the field of interest. However, certain points, particularly related to the Bibliography and Figures, should be corrected before publication of this work could be recommended.

Detailed comments:

1. Introduction: bibliography reports 27 citations. However, in the final part of the Introduction I note a missing gap from [25] to [33] and some numbering confusion. Further, the last citations are given with an evident wrong numbering. For instance, Touni is not 32 , but 27. On the other hand, Huang is reported as [33] , but it seems missing in the bibliography. Please, give a check to this mix up and re-order or add the bibliography as appropriate.
2. Par 3.1 : “sample 1 was 5 μm with a deviation of 5.1 μm ..”. Similarly, a sentence later “ sample 2 was 8 μm with a deviation of 5.3 μm ”. These deviation values seem too high. Are they a typo?. Please, give a check to the reported values.
3. Page 5 of 15: “...as can be seen in Figure 4h,v”. Maybe “Figure 4h,x”?
4. Figure 4 (p.5): the label (e) is repeated twice.
5. Figure 5: labels (a) and (b) are misplaced.
6. Figure 6: figure components and labels are all misplaced.
7. Figure 7, legend: reference to EDS map of Pt is missing. It should be (d).
8. Figure 10, EDX line profiling: reference to Ni, Pt and O seems all to be wrong. Line (c) should be Ni and not Pt; (d) Pt and not oxygen, (e) O and not Ni. Please give a check and correct as appropriate.
9. Page 12 of 15: Legend of the Figure : “Variation curves of the mechanical properties...” is wrong: it is Figure 13 and not 12.
10. Page 13 of 15: “Figure 13 shows a schematic diagram ...”; it is Figure 14 , not 13. Please correct also the corresponding legend.
11. Similarly, at the end of page 13 of 15: “was partially exfoliated , as shown in Figure 14..”. It is Figure 15 , not 14. The corresponding legend should also be updated.
12. As general comment, I would suggest to enlarge the labels (Ni, Pt , O) in all EDS maps or lines to make them more readable.
13. Bibliography: Ref [1], [12] and [15]: the year is 2023, not 2022.

14. Ref [4], [9], [17], [18], [24] and [25] are not found . Correct or replace with a more easy to find literature.
15. Ref [5] page is missing. It should be 131313.
16. Ref [8] : page is missing. It should be 3533.
17. Ref. [20], the year is 1990, not 2017.