

Review of: "The Influence of Hot Extrusion on The Mechanical and Wear Properties of an Al6063 Metal Matrix Composite Reinforced With Silicon Carbide Particulates"

Sareh Mosleh-Shirazi¹

¹ Shiraz University of Technology

Potential competing interests: No potential competing interests to declare.

The authors evaluated the mechanical properties of Al-SiC composites. The results are interesting. However, some explanations should be revised:

1- The abstract only states the experimental or calculated process of this work. The authors should give specific results to demonstrate the research significance.

2- It is an interesting topic of Al-SiC composites; however, there are several similar publications, such as *Journal of Ultrafine Grained and Nanostructured Materials* 55 (2) (2022) 133-144, *Advanced Materials Research* 829 (2014) 505-509, and *Scientific Reports* 5 (1) (2015) 18154. The authors should cite and compare with such literature, and justify the difference or new approach/knowledge from the current study.

3- Some parameters need to be defined just after appearing in the text.

4- In the Experimental part, the authors should list all the reagents used, including their purity, supplier, etc. Furthermore, the authors should explain about Al-SiC composites characterization methods such as density and SEM. 5- # Results and discussion: Evaluate the structure of Al-SiC composites before and after extrusion by SEM.

6- All the findings of the current work need to be compared and discussed with the results of other researchers' findings instead of having a general comparison with other researchers' works. Compare more the results of the recent study with previous studies such as *Transactions of Nonferrous Metals Society of China* 26 (7) (2016) 1801-1808, *Materials Research Express* 6 (6) (2019) 065039, and *Tribology International* 103 (2016) 620-628.

7- # Conclusions: This section is too general, please add some information about the value of obtained parameters of the tested series as well as information about the novelty of the proposed technology.