Review of: "Effect of Copper Donor Material Assisted Friction Stir Welding of AA6061-T6 Alloy On Downward Force, Microstructure, And Mechanical Properties"

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

General remarks:

- Authors have presented 43 references. However, only two of them have been published in last three years, which is unacceptable. It is impossible to show relevant scientific background without information from newly published papers.
- Abstract should be supported by quantitative results from performed investigations.

Introduction:

- “Friction stir welding (FSW) is a novel solid-state joining process ” - it has been developed 30 years ago - in 1991 (as you stated), so the phrase “nove" should be deleted.
- The usage of FSW should be described wider. Each year, it is used for joining the more and more structures, which is not presented in the paper.

Expermental procedure:

- Firstly, I propose to change the name of this section to “Materials and Experimental procedure”, due to wide description of materials, whih is presented here.
- Table 1/Table 2/Table 3 - the source of presented values is missing. Have they been taken from standard, manufacturer data, or Authors performed relevant tests? It is not clear.
- “All the joints were friction stir welded at a speed of 1 mm/s or 3 mm/s.” . What does it mean “all”? It is not clear, how many specimens have been performed. Moreover, there is lack of information about parameters used for each specimen. Authrs should clearly mark the parameters for each specimen.
- "The weld properties was examined in terms of microstructure, Vickers micro-hardness, tensile test, and fractography." - there is no information about used standards? Have Authors used reuirements from relevant standards? If yes, the number of standards should be presented. If not, they should descrie, why. Only for tensile test, the standard is presented.

Results and Discussion:

- This section is well written. I have only minor remarks here.

- The information about etching is missed.
- Figure 2 - scale bars should be presented.
- Figure 9 - scale bars should be bigger.

Conclusions:

- This section is clear.