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Mechanical properties optimization of AZX612-Mg alloy joint by double-sided friction stir welding

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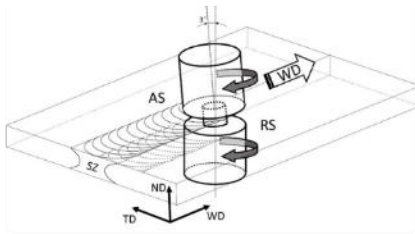
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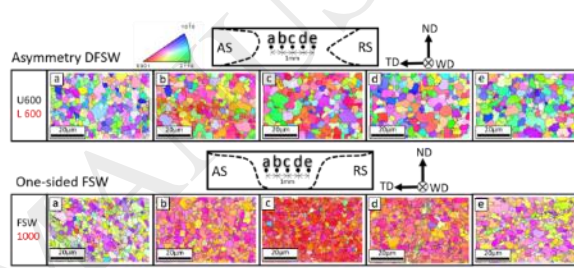
mail: edward30365797@gmail.com Phone number: +81-06-6879-8663 Fax number: +81-06-6879-8663

Graphical abstract

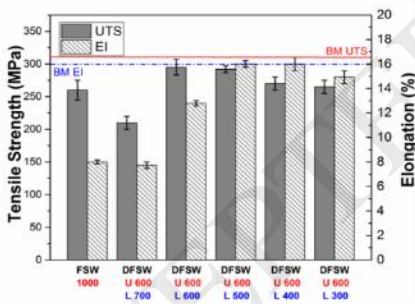
a) Asymmetrically stir from both upper and lower side



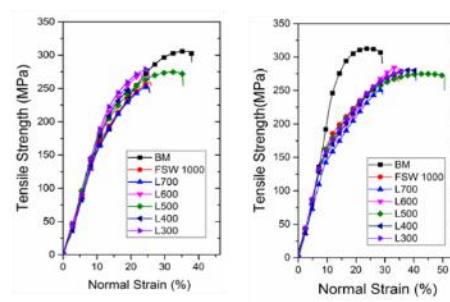
b) Randomized texture distribution in the SZ compared with the conventional FSW



c) Joint with BM level UTS and EI is achieved



d) The U600L500 joint shows preferable mechanical properties along both TD and WD



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