Review of: "Representation of physical quantities: From scalars, vectors, tensors and spinors to multivectors"

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Potential competing interests: No potential competing interests to declare.

All in all, I really like the work. It is a good summary of previous tensor calculations. There are many works that are not well known, and it is nice to see all these works in one summary.
I have some points that could improve the paper. The work starts at a very low level in terms of tensor calculations. However, there are no definitions of the used terms (tensor, quaternion). I think these definitions would help a lot and would allow many more people to understand the work.

Adding a motivation for why these mathematical concepts are described in one work and how they are related would underline the importance of the topics.

You do not define irreducibility in relation to the rotation. Please change that.

In case you do not know the work, I would recommend reading the paper “Orthogonal irreducible decomposition of tensors of high orders” by W.N. Zou, Q.S. Zheng, D.X. Du. They describe a recursive formula for the decomposition (I don’t think that it has to be part of the work).

All in all, with a few more words of motivation and some more definitions, this work is a really nice paper, and I am very interested in further works based on this knowledge.