

Review of: "Fractional-order LCL filters: principle, frequency characteristics, and their analysis"

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In the last years, in different fields, in order to describe the most different phenomena, many authors have tried to replace the ordinary derivatives with fractional derivatives without any real motivation and have studied what consequences this phenomenological approach involves.

In other cases, however, this substitution has a more solid theoretical basis and opens the possibility to investigate the phenomena in a more complete and accurate way, being able to describe with great accuracy the complex phenomenology of the experimental results.

The manuscript of Xu et al. belongs to this second category and therefore in this case the introduction of fractional derivatives is very useful.

On the whole, the work seems to me done with competence and in a correct way and I have no particular criticisms to be made and therefore I would welcome its publication.

I have only one small observation to make. The frequency characteristic curves of FOLCL when α and β vary are shown in fig 4 and fig 5. It seems to me that the results, which are multiple and very interesting, are discussed a little too hastily and that it would be worthwhile for the authors to extend the discussion of these results a little more. This would surely improve the work, that already in itself is good.