

Interactive comment on “The origin of noise and magnetic hysteresis in crystalline permalloy ring-core fluxgate sensors” by B. B. Narod

Anonymous Referee #2

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This is a very interesting article about the origin of permalloy fluxgates noise and magnetic hysteresis. Magnetic properties of 6-81.3 permalloy have been deeply studied.

1- Page 323, line 20. Figure 3 is mentioned before Figure 2. It would be more appropriate to name figures in the same order they are mentioned.

2-Page 323, line 20. When it is said that “Figure 3 shows a similar probability density function for a collection of 195 “6-81” ring cores (12 μm), a function that...”, I think it could be useful to indicate if these ring cores from figure 3 are “as received” or “heat treated”, because the comparison versus figure 1 ring cores results.

3-Page 326, line 24, where it is said that “ The picture presented above is not useful

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for...” I would substitute by “ Figure 5 is not useful for...”

4-Page 327, line 11. Figure 14 is mentioned just after figure 6. As I said before, It would be more appropriate to name figures in the same order they are mentioned.

5-Page 329, line 11. It is clear that figure 9 is from another article and authors (Coïson et al. (2009)), but it would be appropriate to ask for permission to use and publish their figure.

6-Page 331, line 12. I think it would be necessary a very briefly description of the method used to measure B-H curves.

After comment these minor corrections, I think the manuscript is appropriate to be published.

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