

Letter to the Editor

Dear Drs Walther and Gerthsen,

We appreciate your comments with respect to our recent article published in *Microscopy and Microanalysis*. As we state in our article, “to the best of our knowledge” our article was the first work reporting the application of the Richardson–Lucy algorithm to resolve plasmonic resonances in electron energy-loss spectra (EELS) obtained with a monochromated electron beam. For literature search we rely mainly in scientific databases that contain indexed articles such as “Web of Science” and “Science Direct.” Regretfully, the references you cite in your letter are not indexed in these databases as we detail in the following lines:

- The abstract of Walther et al. (2012b) presented in EMC 2012 has not been indexed to the Web of Science or to Science Direct.
- The abstract of Walther et al. (2013) presented in MC 2013 has not been indexed to Web of Science or to Science Direct. And in a search in Google Scholar using the title of the abstract, the content is not available. The only result is a link to the schedule of the conference.
- The article of Walther et al. (2012a) is an arXiv submission. And it has not been peer reviewed nor published in any journal, by the date of the online publication of our article. Therefore it is not indexed in any scientific database.
- In the article Carmeli et al. (2012) there is no mention of, nor reference to the Richardson–Lucy algorithm in the results. Thus, this reference, although nice work, is not a report of the use of the RL algorithm to resolve plasmonic resonances in EELS spectra obtained with a monochromated electron beam. We thus believe that this reference is entirely not relevant to the deconvolution discussion.

In addition, our work is the first in-depth report of the use of the Richardson–Lucy algorithm that was able to achieve an energy resolution of 10 meV in EELS and spectrum image of surface plasmon resonances acquired with a monochromated beam. We also analyze, in-depth, the performance of the deconvolution, the effects of noise, and number of iterations. We also proposed, implemented, and tested two methods to limit the number of iterations in the algorithm. And finally we also investigated the effect of the algorithm in spectrum images of surface plasmon resonances.

In summary, although we sincerely regret missing these prior reports, it was not possible for us or other researchers that use established scientific databases as the ones mentioned above, to find the references discussed in your Letter to the Editor.

Sincerely,
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REFERENCES

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