

Li et al. used several ultrapure water batch leaching protocols to examine the effects of agitation methods, contact time, and filter pore size on the solubility of trace elements. This is good work and is recommended to be published in AMT after concerning the following weaknesses.

Major comments:

1. Why is it needed to “formulate a standard operating procedure for ultrapure water batch leaching” when agitation methods, contact time, and filter pore size led to small or even insignificant differences in the solubility of trace elements?
2. In lines 246-253, the authors mentioned that longer contact time (2 and 4h) would cause an increase in solubility by 1.3 times for Zn and ~3.1 for As. However, why does this study only consider the contact time of 0.5-2h?
3. More comparative experiments should be added to avoid uncertainties in each group for testing the distribution of aerosol particles and the effects of agitation methods, contact time, and filter pore size.

Minor suggestion

1. Add the representation of the circles within each figure or in the first figure.