

Final technical corrections for se-2017-74

1. Please provide definitions or explanations for the following terms and concepts. Just introduce a sentence or two when you first talk about them:

- 'graphite crystallinity' and 'aggregate crystallinity'
- the nature of and the difference between D1 and D2 bands

2. Tunistra and Koenig, 1978, is missing in the references

3. Please correct in text:

line 178: '...with random orientations' specify if grain shapes, grain (crystal) orientations.

line 227: replace 'shear strain' with, e.g., 'deformation'

line 230: replace 'structural order' by 'aggregate crystallinity'

line 244: insert 'and'

line 272: replace 'structural disorder' with 'aggregate crystallinity'

line 272ff: please rephrase, make two sentences

4. Please correct in figure captions:

Figure 1 and 3: replace 'shear strain' by 'apparent shear strain' (fix reference on line 74)

Figure 2: where is the description of the 'error estimate'

Figure 4: indicate if BSE or SE contrast

Figure 4b: should be 'X-Y' section, not Y-Z (fix reference in text line 95)

Figure 4e: why 'sub-perpendicular to the shear direction'? shouldn't it be the shear plane? and why sub-perpendicular. Do you mean 001 of graphite grains are parallel to the shear plane?

Please clear up caption and corresponding text (line 164 to 169).

Figure 5 clarify what you mean by 'kink band stacking'