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Observation of insulating–insulating monoclinic structural transition in macro-sized VO₂ single crystals

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In our article, we reported the observation of monoclinic M2 to M1 structural phase transition in VO₂ single crystal near the temperature of ~49 °C. However, the re-examination of Laue patterns reveals that previously defined monoclinic M1 and M2 phases can be interpreted as monoclinic M2 and triclinic T phases instead. Careful experimental geometry calibration and further refinement of the lattice parameter ratios and angles show that monoclinic M2 and triclinic T phases fit better with the experimental data. On the other hand, our previous misidentification of the insulating phases does NOT affect the conclusions of our article.

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References

Figure 1 Laue patterns of triclinic T and monoclinic M2 phases from VO₂ crystal structures obtained from μ-XRD at 25 °C and 52 °C, respectively.