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α-PbO_2-type nanophase of TiO_2 from coesite-bearing eclogite in the Dabie Mountains, China—Reply

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ABSTRACT

Our efforts to introduce defects in rutile by conventional mechanical grinding as used for TEM study did not produce any defects or twinning. Experimental SAED patterns of rutile with intercalated α-PbO_2-type TiO_2 lamellae are consistent with those expected from calculated patterns. The values and precision of lattice parameters of α-PbO_2-type TiO_2 derived from such SAED patterns are also consistent with crystal data from X-ray diffraction studies.

Keywords: TiO_2, high-resolution transmission electron microscope, Dabie mountains, UHP metamorphism