

Reflected light (RL)

Transmitted light (TL)

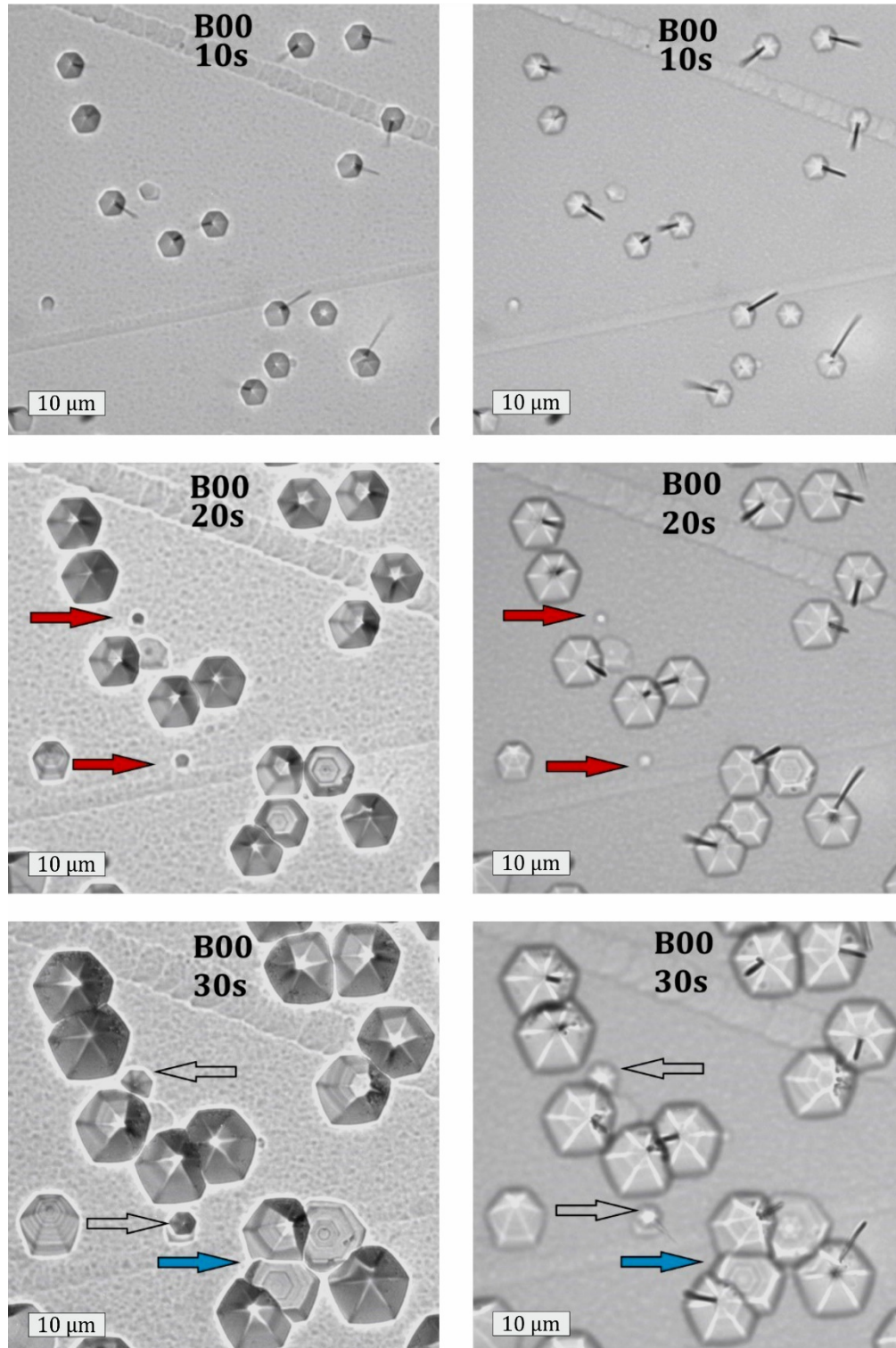


Figure S1-1. Reflected-light and transmitted-light images of a basal section of Durango apatite after 10, 20 and 30 seconds etching in 5.5 M HNO_3 at 21 °C. Red arrows: tracks added between the first and second step; open arrows show the same tracks at 30 seconds. Blue arrows: overlapping etch pits. Note the lower contrast and internal structure of shallow etch pits.

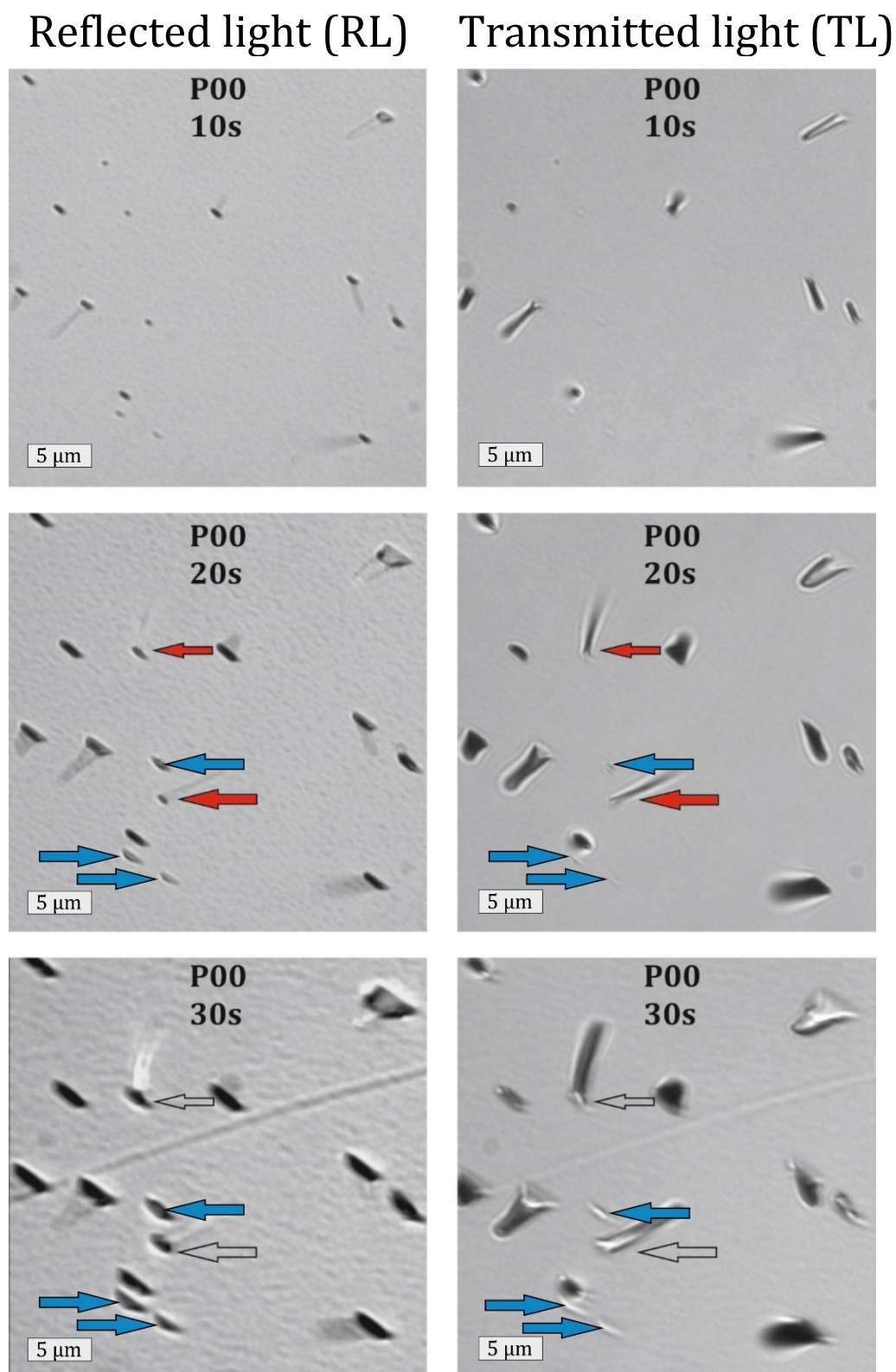


Figure S1-2. Reflected-light and transmitted-light images of a prism section of Durango apatite after 10, 20 and 30 seconds etching in 5.5 M HNO_3 at 21 °C. Red arrows: tracks added between first and second etch, characterized by undersized openings parallel to the c -axis (D_{PAR}) and long, thin etch channels; open arrows show the same tracks at 30 seconds. Blue arrows: reflected-light features not identifiable in transmitted light. Note the parallel track openings.

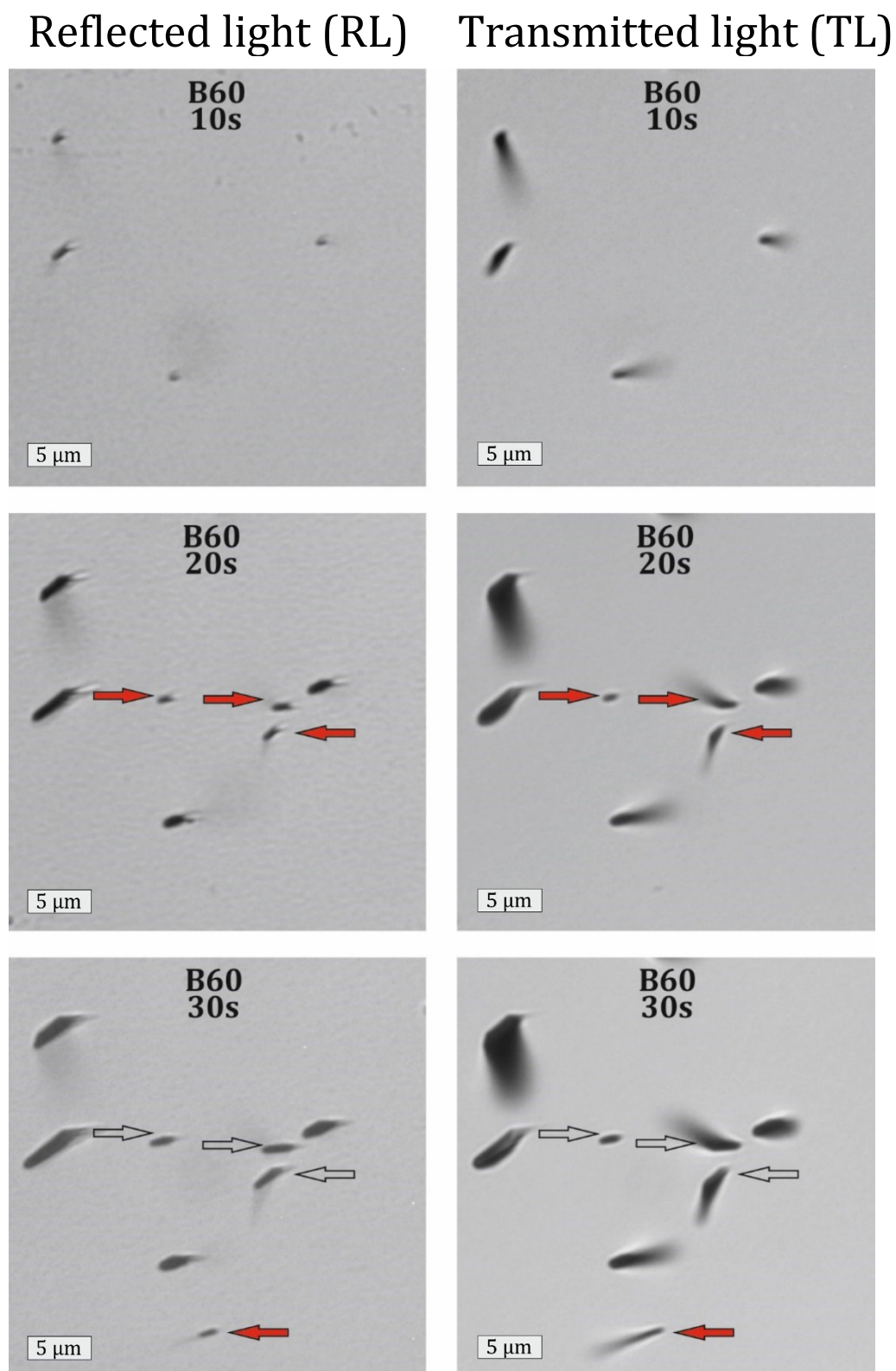


Figure S1-3. Reflected-light and transmitted-light images of an apatite surface at 30° to the *c*-axis after 10, 20 and 30 seconds etching in 5.5 M HNO₃ at 21 °C. Red arrows: tracks added between the first and second and second and third etch; open arrows point to the first set of added tracks at 30 seconds etching. The reflected light images show the unlike sizes, orientations and growth rates of the track openings and the absence of shallow etch figures.