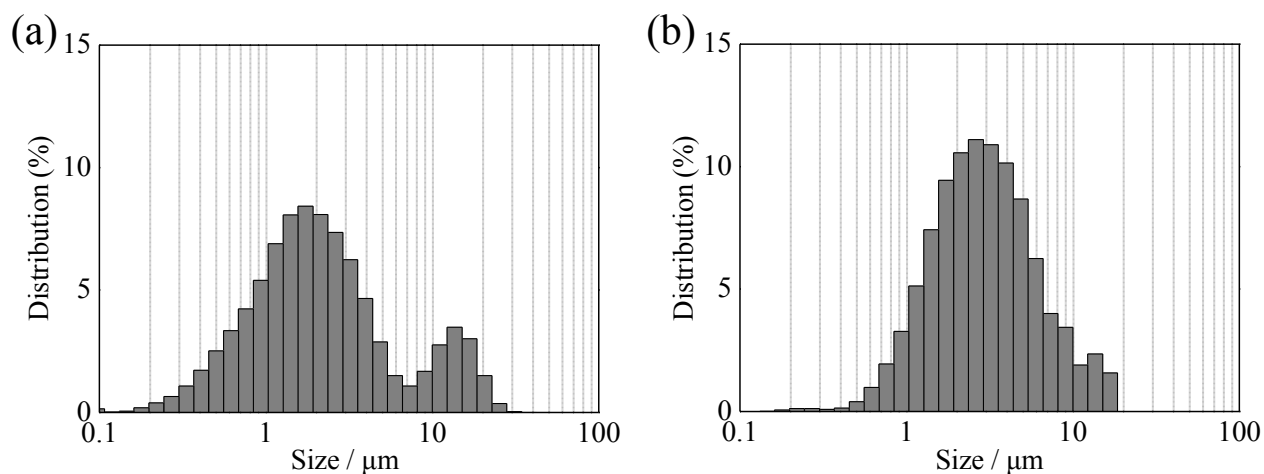
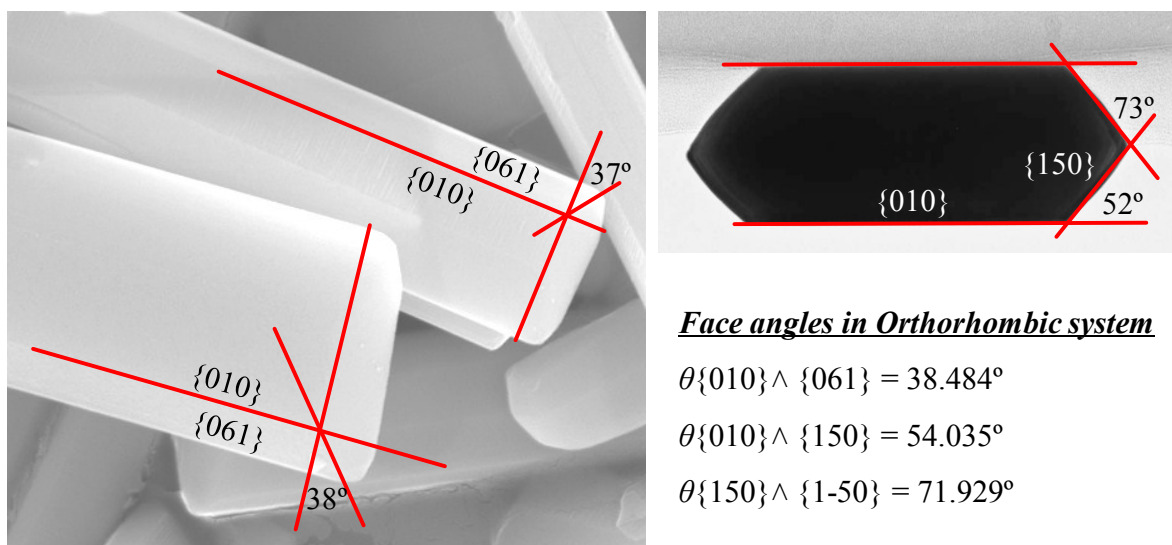


Electronic Supplementary Information (ESI) data



Supplementary Information 1 Particle size distributions of the (a) $\text{Sr}_2\text{Ta}_2\text{O}_7$ and (b) SrTaO_2N crystals.



Face angles in Orthorhombic system

$$\theta\{010\} \wedge \{061\} = 38.484^\circ$$

$$\theta\{010\} \wedge \{150\} = 54.035^\circ$$

$$\theta\{150\} \wedge \{1-50\} = 71.929^\circ$$

Supplementary Information 2 Face-angle measurements of the $\text{Sr}_2\text{Ta}_2\text{O}_7$ columnar structures.