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BaTiO3 계에서 전위가 단결정 성장에 미치는 영향

Effect of dislocation on Single Crystal Growth in BaTiO₃

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In titania-excess barium titanate systems, grains have polyhedral shape with atomically flat interfaces. Because of their flat interfaces, it is predicted that their growth rates are depending on by nucleation steps in their interfaces. In previous researches, flat interface's migration can be promoted by defects, i.e. twin lamella in Barium titanate and dislocation in strontium titanate, since defects give easy nucleation sites for boundary migration. In the present investigation, we studied the effect of dislocations on the boundary migration below eutectic temperature with the single crystal embedded powder compact model experiments.