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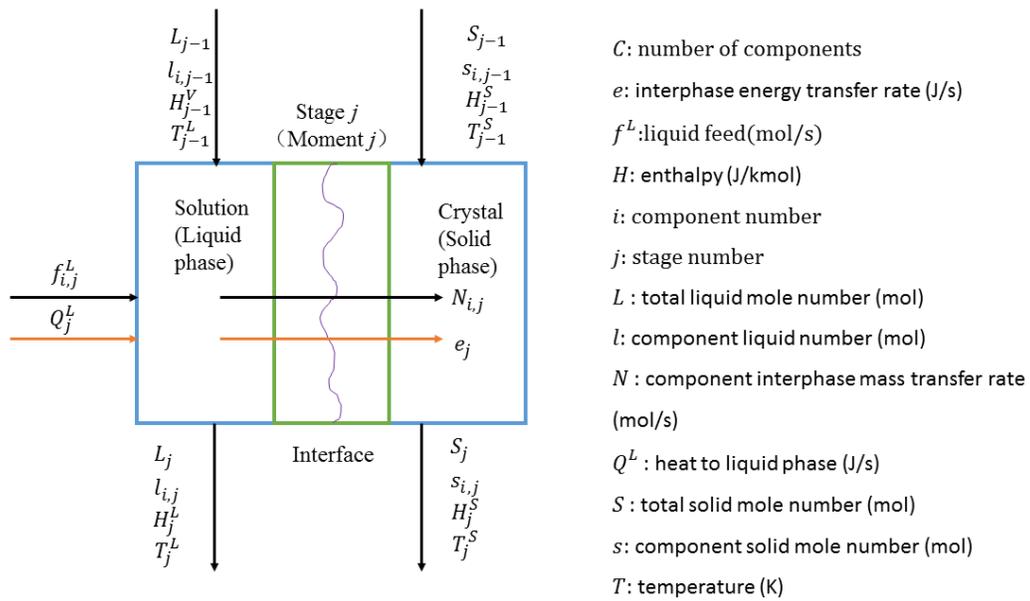


Fig. 1 Schematic diagram of non-equilibrium stage model for solution crystallization.

Here stage  $j$  stands for a discretized moment during simulation of the crystal growth

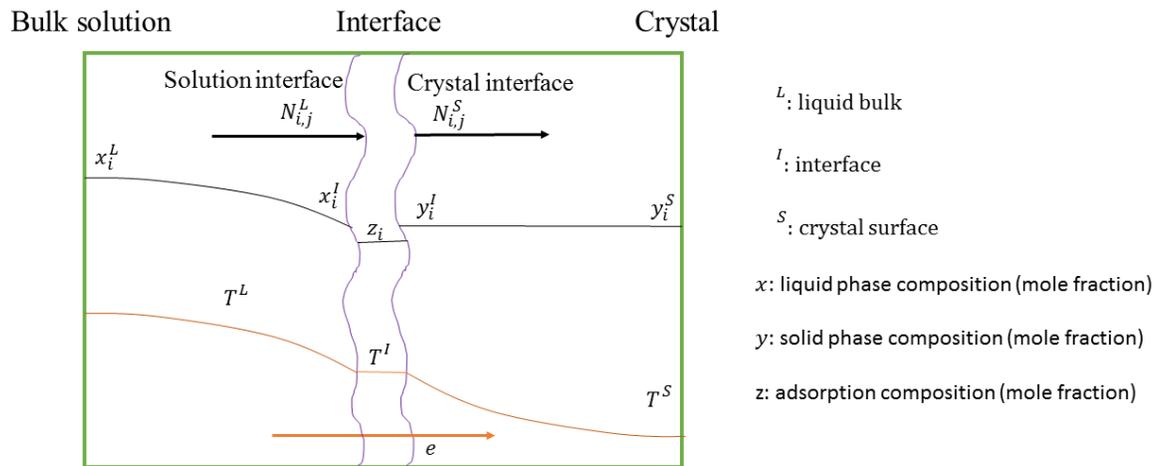


Fig.2 Schematic diagram of the interface model

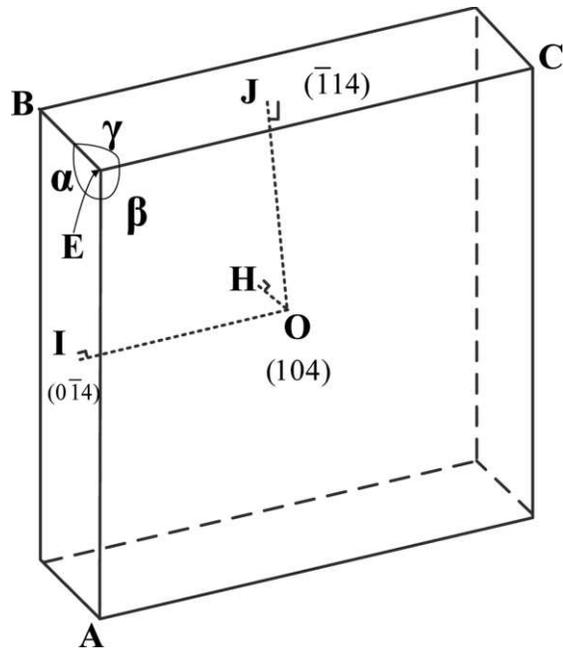


Fig. 3 Equilibrium and experimental morphology of a  $\text{NaNO}_3$  crystal

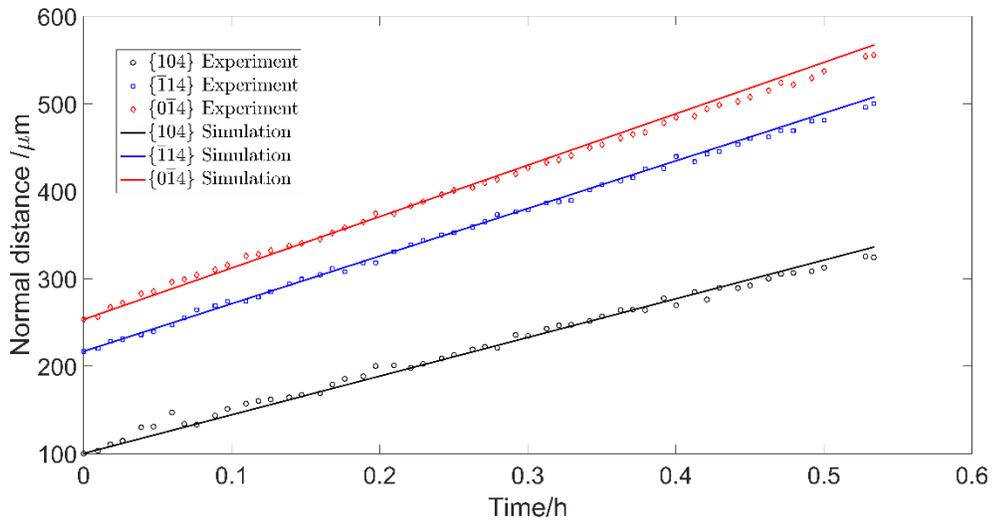


Fig. 4 Comparison of simulated and experimental normal distance evolution of pure  $\text{NaNO}_3$  crystal growth

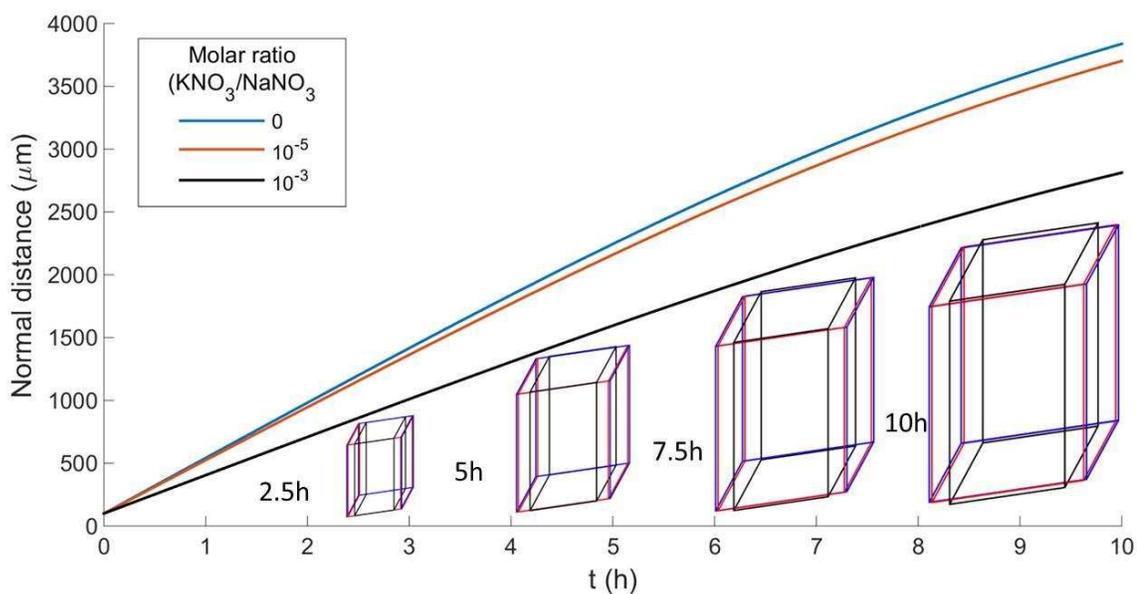


Fig. 5 Evolution normal distance of face  $\{104\}$  and crystal shape during  $\text{NaNO}_3$  crystal growth with different  $\text{KNO}_3/\text{NaNO}_3$  molar ratio

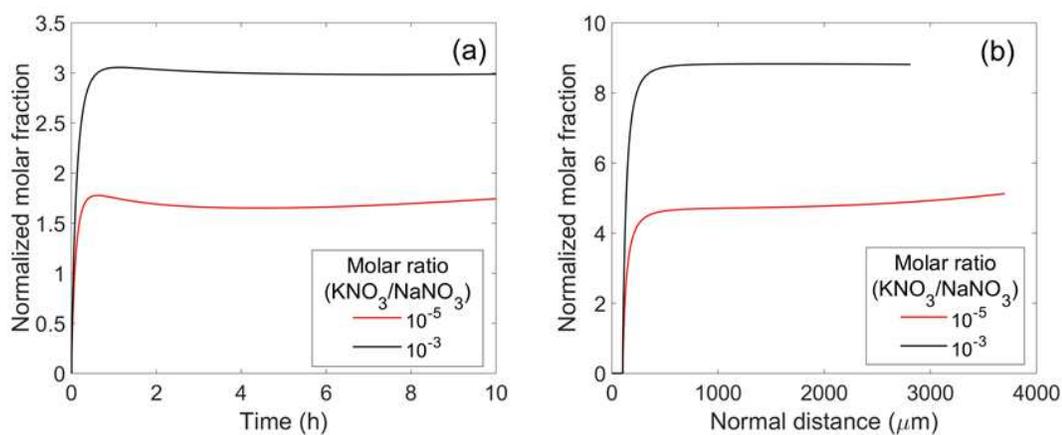


Fig. 6 Crystal with different  $\text{KNO}_3/\text{NaNO}_3$  molar ratio. The molar fraction is normalized through dividing it by the initial molar ratio of  $\text{KNO}_3/\text{NaNO}_3$  (i.e. 103 or 105). (a) Evolution of  $\text{KNO}_3$  molar fraction in the whole crystal (b)  $\text{KNO}_3$  molar fraction distribution in the normal direction of face  $\{104\}$

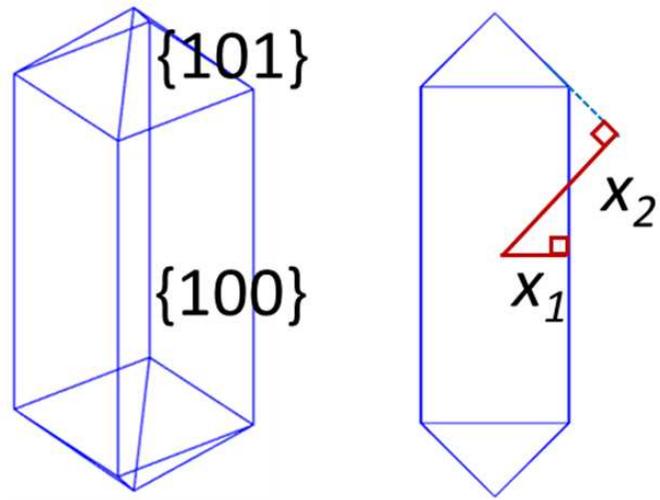


Fig. 7 KDP crystal