COMPLEX INTERFACE BETWEEN TWO MONOCLINIC PHASES

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Summary

A model of complex phase boundary, which includes an induced intermediate phase, is suggested. It has been shown that, provided the crystallographic parameters of two monoclinic phases do not satisfy the condition of thin interface formation, a complex phase interface characterized by two structures is formed. The minima in the temperature dependences of elastic energy of those two possible structures in the induced phase have been shown to correspond to the temperatures and the temperature hysteresis of a real phase transition, with $Pb_3(VO_4)_2$ being selected as an example.