

On the Theory of Relaxation in the Glass Transition Region

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To begin with, relaxation equations will be generally examined within the framework of the thermodynamics of irreversible processes. The relaxation in the glass transition region specifically proves to be a non-linear process which resembles an accelerated or retarded autocatalytic reaction. Therefore it is physically not very useful to split the relaxation in the glass transition region into a sum of linear relaxation mechanisms. The linear response theory and the concept of normal modes lose their validity.