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Study of Elastic Properties of Ionic Solids at High Temperature and Volume Expansion Ratio

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Abstract: *In our study we develop a new expression for temperature dependence of thermal pressure for MgO and CaO crystal. A generally elastic property of solid depends on the strength of inter atomic forces of solid. So far our work has been resolute on thermal pressure is dependent of temperature and diverges it's linearly in high temperature volume expansion ratio through the effect of temperature. This present method has been developed on the temperature dependence of thermal pressure for MgO and CaO crystal at atmospheric pressure and volume expansion ratio at high temperature. A neighboring data of Gruneisen parameter is found to be in close convention with theoretical and investigational confirmations the standing of present study.*

Keywords: Ionic solid, elastic relations, Anderson parameter.

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