Publications: Journals

Thermodynamics of Liquid Metals: The Phonon Dynamics

**A. B. Patel, N. K. Bhatt, B. Y. Thakore, F. Soyalp, P. R. Vyas and A. R. Jani**
J. Non-Cryst. Solids (Communicated)

Temperature dependent atomic transport properties of liquid Rb

**A. B. Patel, N. K. Bhatt, B. Y. Thakore, P. R. Vyas and A. R. Jani**

The Temperature Dependent Electrical Transport Properties of Liquid Sn using Pseudopotential Theory

**A. B. Patel, N. K. Bhatt, B. Y. Thakore, P. R. Vyas and A. R. Jani**

Temperature dependent atomic transport properties of liquid Sn

**A. B. Patel, N. K. Bhatt, B. Y. Thakore, P. R. Vyas and A. R. Jani**
DOI: 10.1140/epjb/e2014-40888-7.

The Temperature Dependent Elastic Moduli of Liquid Potassium


Structural and Vibrational Properties of FeO using First-Principles

N. K. Bhatt, **A. B. Patel, A. Y. Vahora, P. R. Vyas, B. Y. Thakore, and A. R. Jani**

Publications: Journals Proceedings

Electrical Transport Properties of Liquid Na at Different Temperatures

**A. B. Patel, N. K. Bhatt, A. R. Jani and S. G. Kambholja**

Concentration Dependent Electrical Transport Properties of Binary Al$_{1-x}$Ga$_x$ Alloys

C. H. Patel, **A. B. Patel, N. K. Bhatt, A. R. Jani and P. N. Gajjar**

Collective Modes of Ti$_{44}$Zr$_{20}$Cu$_{12}$Be$_{19}$ Bulk Metallic Glass

Prakruti Chaudhari, A. Y. Vahora, **A. B. Patel, N. K. Bhatt, and B. Y. Thakore**
Regarding High Pressure Melting of Na
N. K. Bhatt, A. B. Patel, A. R. Jani, and P. R. Vyas

The Electrical Transport Properties of Liquid Rb using Pseudopotential Theory
A. B. Patel, N. K. Bhatt, B. Y. Thakore, P. R. Vyas and A. R. Jani

Frequency Moments and Elastic Moduli of Liquid Rubidium at Different Temperatures
A. B. Patel, N. K. Bhatt, B. Y. Thakore and A. R. Jani

Shock Hugoniot and High Pressure Melting Curve for CaF$_2$

Phonon Dispersion of Noble Metal: Copper as a Prototype

The Temperature Dependent Collective Dynamics of Liquid Sodium
A. B. Patel, S. G. Khambholja, N. K. Bhatt, B. Y. Thakore, P. R. Vyas and A. R. Jani

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**Papers presented at National and International Conferences/Symposia**

1. “Study of Vibrational Dynamics and Relaxation Mechanism in Ca$_{70}$Mg$_{30}$ Metallic Glass over a Wide Range of Temperature” presented at National Conference on Recent Trends in Materials Science (RTMS-2011) organized by Department of Physics, Jaypee University of Information Technology, Waknaghat, Solan, Himachal Pradesh (08,10-October, 2011).


3. “Structural and Vibrational Dynamics of Liquid Tin (Sn) over the Wide Range of Temperature” presented at A National Conference on Condensed Matter Days (CMDAYS-2012) organized by Department of Applied Physics, Birla Institute of Technology, Mesra, Ranchi, Jharkhand (29,31-August, 2012).