

**Rapid Communication**

EPR studies on Jahn-Teller effects in zinc doped copper trisethylenediamine sulphate

SARMILA DATTA AND A K PAL

**Condensed Matter & Materials Physics**

Studies on structural defects from X-ray diffraction for indium intercalation compounds of tantalum disulphide and diselenide

T K MANDAL, S K SRIVASTAVA, P BALA, B K SAMANTARAY AND B K MATHUR

Alloying behaviour of liquid Al–Ca alloys

N JHA, S M RAFIQUE, A K MISHRA, R N SINGH AND V N SINGH

EPR and magnetic susceptibility study of manganese ions in  $\text{Bi}_2\text{O}_3 \cdot \text{PbO} \cdot \text{As}_2\text{O}_3$  glass matrix

I ARDELEAN, M PETFANU, S SIMON, V SIMON, F CIORCAS, C BOB AND S FILIP

Dielectric relaxation studies of acetophenone-ethanol mixtures using time domain reflectometry

A C KUMBHARKHANE, S M PURANIK, C G AKODE AND S C MEHROTRA

Capacitance measurements for mercuric iodide radiation detectors

MAHMOUD A HASSAN

Semi-classical theory for thermodynamics of molecular fluids

II. Application to hydrogen isotopes

SHANKAR S KARKI AND SURESH K SINHA

High temperature equation of state and bulk modulus for NaCl and KCl crystal

J SHANKER AND S S KUSHWAH

Effect of sintering on the dielectric behaviour of Mn–Zn ferrite

M A AHMED AND E H EL-KHASWA

Study of volume-compression with pressure for some alkali halides along isotherms at high temperatures

A VIJAY AND T S VERMA

**Nuclear Physics**

Studies on inner Bremsstrahlung from  $^{90}\text{Sr}$ – $^{90}\text{Y}$  and  $^{185}\text{W}$

S L KESHAVA, K GOPALA AND P VENKATARAMAIAH

Effect of absorber thickness and beam divergence on gamma-ray buildup factor

GURDEEP S SINDHU, KARAMJIT SINGH, PARJIT S SINGH AND GURMEL S MUDAHAAR

**Particle Physics**

Photon-monopole scattering in non-Abelian gauge theory

P P PUROHIT, V P PANDEY AND B S RAJPUT

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**Non-Abelian dyons in supersymmetric theories**

**MANU PRATAP SINGH AND B S RAJPUT**

***q*-deformed Weinberg-Salam model and *q*-deformed Maxwell equations**

**S A ALAVI, M SARBISHAEI AND A MOKHTARI**

***Note***

**Electrical conductivity studies in nematic mixtures**

**ANUJ AGARWAL, V P ARORA, V K AGARWAL, K K RAINA AND B BAHADUR**