

## 9th International Conference on Cryocrystals and Quantum Crystals Odessa, Ukraine, September 2–8, 2012

Guest Editors M.A. Strzhemechny and E.S. Yakub

### Содержание

<i>Preface</i> .....	521
<i>Goncharov Alexander F., Howie Ross T., and Gregoryantz Eugene</i> Hydrogen at extreme pressures (Review Article) .....	523
<i>Strzhemechny M.A. and Dolbin A.V.</i> Novel carbon materials: new tunneling systems (Review Article) .....	531
<i>Yakub E.S.</i> Ionic model for highly compressed solid hydrogen .....	541
<i>Freiman Yu.A., Grechnev Alexei, Fretyak S.M., Goncharov Alexander F., and Hemley Russell J.</i> Sound velocities in solid hydrogen under pressure .....	548
<i>Yakub L.N.</i> Melting line of polymeric nitrogen .....	552
<i>Strazzulla G.</i> Crystalline and amorphous structure of astrophysical ices .....	556
<i>Antsygina T.N. and Chisliko K.A.</i> Structural evolution of ferromagnetic <sup>3</sup> He multilayers adsorbed on exfoliated graphite .....	560
<i>Bagatskii M.I., Barabashko M.S., and Sumarokov V.V.</i> The heat capacity of nitrogen chain in grooves of single-walled carbon nanotube bundles .....	568
<i>Savchenko E.V., Khyzhniy I.V., Uvainov S.A., Ponomaryov A.N., Gumenchuk G.B., and Bondybey V.E.</i> Anomalous low-temperature “post-desorption” from solid nitrogen .....	574
<i>Boltnev R.E., Bykhalo I.B., Krushinskaya I.N., Pelmenov A., Khmelenko V.V., Lee D.M., Khyzhniy I.V., Uvainov S.A., Savchenko E.V., Ponomaryov A.N., Gumenchuk G.B., and Bondybey V.E.</i> Comparative study of thermally stimulated luminescence and electron emission of nitrogen nanoclusters and films .....	580
<i>Solodovnik A.A., Danchuk V.V., and Mysko N.S.</i> Cluster approach to formation of nitrogen–rare gas cryoalloys ..	586
<i>Drobyshev A., Aldivarov A., Korshikov E., Kurnosov V., Sokolov D., and Tokmoldin N.</i> Structure and phase transition peculiarities in solid nitrous oxide and attempt at their explanation .....	591
<i>Khrapak A.G. and Khrapak S.A.</i> Energy of vacancy formation in the continuum matter model .....	596
<i>Ramos M.A., Hassaine M., Kaboul B., Jiménez-Ribolís R.J., Shmytko I.M., Krivchikov A.I., Sharapova I.V., and Korolyuk O.A.</i> Low-temperature properties of monoalcohol glasses and crystals .....	600
<i>Konstantinov V.A., Sagan V.V., Revyakin V.P., Zvonaryova A.V., and Pursky O.I.</i> Isochoric thermal conductivity of solid furan .....	606
<i>Nazin S., Chikina I., and Shikin V.</i> Cryogenic electrolytes .....	611
<i>Bondarenko V.L., Simonenko Yu.M., Diachenko O.V., and Matveyev E.V.</i> Cascade units for neon isotopes production by rectification method .....	617