

Contents

Characterization and properties

- Formation of La-containing microcrystals in KCl and NaCl matrices
T.Demkiv, V.Vistovskyi, P.Savchyn, G.Stryganyuk, A.Voloshinovskii, L.Demkiv 225
- The peculiarity of electric conductance of KDP single crystals
A.N.Levchenko, I.M.Pritula, V.B.Tyutyunnik, A.P.Gavrik, Yu.N.Velikhov, K.N.Belikov, O.N.Khomenko, V.M.Puzikov 230
- The relaxation of magnetomechanical effect in silicon crystals under cyclic magnetic treatment
V.A.Makara, L.P.Steblenko, A.M.Kuryliuk, Iu.L.Kobzar, S.M.Naumenko, A.M.Krit, V.M.Kravchenko 237
- Transformation of spinel crystals structure $MgO \cdot nAl_2O_3$ under high-temperature annealing
G.I.Belykh, V.T.Gritsyna, L.A.Lytvynov, V.B.Kolner 241
- Influence of isovalent doping on the cathodoluminescence of $Li_2B_4O_7:A$ ($A = K, Cu, Ag$) single crystals
V.T.Adamiv, V.P.Savchyn, P.V.Savchyn, I.M.Teslyuk, Ya.V.Burak 247
- The dislocation resonance absorption of ultrasound in KBr crystals at low temperatures
G.A.Petchenko, A.M.Petchenko 253
- Evolution of the pseudogap state in HTSC single crystals $ReBa_2Cu_3O_{7-\delta}$ ($Re=Y, Ho$) doped with Al and Pr
R.V.Vovk, A.A.Zavgorodniy, M.A.Obolenskii, A.V.Samoilov, Y.V.Biletskiy, V.M.Pinto Simoes 258
- $Li_2Zn_2(MoO_4)_3$ crystal as a potential detector for ^{100}Mo 2β -decay search
N.V.Bashmakova, F.A.Danevich, V.Ya.Degoda, I.M.Dmitruk, V.M.Kudovbenko, S.Yu.Kutovyi, V.V.Mikhailin, S.S.Nagorny, A.S.Nikolaiko, S.Nisi, A.A.Pavlyuk, S.Pirro, A.E.Savon, S.F.Solodovnikov, Z.A.Solodovnikova, D.A.Spasky, V.I.Tretyak, S.M.Vatnik, E.S.Zolotova 266
- Suppression mechanism of millisecond afterglow in CsI:Tl crystals by Eu^{2+} impurity
A.M.Kudin, A.V.Shkoropatenko, N.V.Ovcharenko, V.D.Alekseev, L.N.Trefilova, A.L.Shpilinskaya 275
- Investigation of (100) In_4Se_3 crystal surface nanorelief
P.V.Galiy, A.Ciszewski, O.R.Dveriy, Ya.B.Losovyj, P.Mazur, T.M.Nenchuk, S.Zuber, Ya.M.Fiyala 279
- Study of surface influence on the n -Ge(110) electroreflectance spectra and their polarization spectroscopy
O.I.Vlasenko, P.O.Gentsar, A.V.Stronski 286
- Effect of tolerance factor and A-site cations disorder on transport properties of $A'_{1-x}A''_xCoO_{3-\delta}$ perovskites ($A' = Ho, Er; A'' = Ca, Sr$)
A.A.Kozlovskii, V.F.Khirnyi, A.V.Semenov, V.M.Puzikov, T.G.Deineka, O.V.Gaiduk, Yu.N.Chiang 292

Manifestation of multiphonon structure and orbitons in the tunnel spectra of manganites <i>V.M.Svistunov, V.N.Leonova, M.A.Belogolovskii, Yu.F.Revenko</i>	302
Raman and ESR study of gas detonation deposited hydroxyapatite coatings <i>V.M.Dzhagan, M.Ya.Valakh, A.A.Konchits, I.P.Vorona, V.S.Yefanov, M.I.Klyui, V.P.Temchenko, V.A.Dubok</i>	306
Radiation influence on characteristics of GaP light emitting diodes <i>A.Borzakovskiy, O.Gontaruk, V.Kochkin, P.Litovchenko, V.Opilat, I.Petrenko, V.Tartachnyk</i>	313
Optical transmittance and electric conductivity in nematic dispersions containing carbon nanotubes and organomodified montmorillonite <i>S.S.Minenko, A.I.Kocherzhyn, L.N.Lisetski, N.I.Lebovka</i>	319
Structure of Cu–In–Se thin films of variable composition <i>S.N.Grigorov, V.M.Kosevich, A.V.Taran</i>	324
ZnMgSe:Cr ²⁺ — a new active medium for lasers of middle IR <i>Yu.A.Zagoruiko, N.O.Kovalenko, V.M.Puzikov, O.A.Fedorenko, T.T.Basiev, M.E.Doroshenko, V.V.Osiko, H.Jelinkova, P.Koranda</i>	329
Magnetoelectric response of bismuth-substituted ferrite-garnet films irradiated by a high-power laser pulse <i>V.E.Koronovskyy</i>	332
Electro-optical properties of polymeric "guest-host" system doped with 8-hydroxyquinoline azo dyes and its cobalt complexes <i>N.A.Davidenko, I.I.Davidenko, I.A.Savchenko, A.T.Sinyugina, S.L.Studzinsky, A.N.Popenaka, L.S.Tonkovieva, A.Yu.Kolendo, A.N.Ankin</i>	335

Technology

Preparation of heterogeneous film structures by thermally activated mass-transfer <i>A.V.Filatov, A.E.Pogorelov, V.V.Nevdacha, A.F.Kravets</i>	339
Laminated material for gamma radiation shielding <i>I.I.Aksenov, V.A.Belous, I.G.Goncharov, A.S.Kuprin, N.S.Lomino, A.V.Mazilov, V.D.Ovcharenko, V.S.Pavlov, B.N.Razsukovany</i>	342
Preparation of high-gradient ferromagnetic matrices for magnetic filters (separators) with fractal surface structure by magnetoelectrolysis <i>S.V.Gorobets, O.Yu.Gorobets, O.N.Bylo, M.M.Potyomkin</i>	347
Optically transparent melamine-formaldehyde polymers modified with proton acceptors <i>V.V.Lebedev, T.A.Blank, V.L.Avramenko, L.P.Eksperiandova, D.A.Mishurov, V.D.Titskaya, A.S.Shadrikov</i>	351

Personalia

<i>In memory of prof. O.G. Vlokh</i>	355
--------------------------------------------	-----