

### Contents

- |  |  |
|--|--|
| <p><b>425 Stress-induced effects in light scattering by plasmons in <i>p</i>-type germanium</b><br/> <i>V.N. Poroshin, A.V. Gaydar, A.A. Abramov, V.N. Tulupenko</i></p> | <p><b>461 Unipolar injection currents in <math>\text{Bi}_4\text{Ge}_3\text{O}_{12}</math> crystals</b><br/> <i>T.M. Bochkova, S.N. Plyaka, G.Ch. Sokolyanskii</i></p>  |
| <p><b>431 The microdefects classification in semiconducting silicon</b><br/> <i>V.I. Talanin, I.E. Talanin</i></p>   | <p><b>465 Thermally stimulated luminescence studies of undoped and doped <math>\text{CaB}_4\text{O}_7</math> compounds</b><br/> <i>J. Manam, S.K. Sharma</i></p>   |
| <p><b>437 Metastable interstitials in CdSe and CdS crystals</b><br/> <i>L.V. Borkovska, B.M. Bulakh, L.Yu. Khomenkova, N.O. Korsunskaya, I.V. Markevich</i></p>          | <p><b>471 Effect of microwave electromagnetic radiation on the structure, photoluminescence and electronic properties of nanocrystalline silicon films on silicon substrate</b><br/> <i>E.B. Kaganovich, I.M. Kizyak, S.I. Kirillova, R.V. Konakova, O.S. Lytvyn, P.M. Lytvyn, E.G. Manoilo, V.E. Primachenko, I.V. Prokopenko</i></p> |
| <p><b>441 On the origin of the 300 K near-band-edge luminescence in CdTe</b><br/> <i>K.D. Glinchuk, N.M. Litovchenko, O.N. Strilchuk</i></p>                             | <p><b>479 Structural changes in the multilayer systems containing <math>\text{In}_x\text{Ga}_{1-x}\text{As}_{1-y}\text{N}_y</math> quantum wells</b><br/> <i>I.M. Fodchuk, V.B. Gevyk, O.G. Gimchinsky, E.N. Kislovskii, O.P. Kroytor, V.B. Molodkin, S.I. Olihovskii, E.M. Pavelescu, M. Pessa</i></p>                                |
| <p><b>444 High-temperature injection spectroscopy of deep traps in CdTe polycrystal films</b><br/> <i>A.S. Opanasyuk, N.N. Opanasyuk, N.V. Tirkusova</i></p>             | <p><b>487 A fresh approach to interpretation of visible photoluminescence spectra in silicon nanostructures</b><br/> <i>A.V. Sachenko, Yu.V. Kryuchenko, E.G. Manoilo, E.B. Kaganovich</i></p>   |
| <p><b>450 Acoustoelectric transient spectroscopy of microwave treated GaAs-based structures</b><br/> <i>O.Ya. Olikh</i></p>  | <p><b>492 Structure and luminescence study of nanoporous silicon layers with high internal surface</b><br/> <i>V.A. Makara, M.M. Melnichenko, K.V. Svezhentsova, L.Yu. Khomenkova, O.M. Shmyryeva</i></p>  |
| <p><b>454 Atomic defects and physical-chemical properties of PbTe-InTe solid solutions</b><br/> <i>D.M. Freik, V.M. Boychuk, L.I. Mezhylovsjka</i></p>                   |  |
| <p><b>458 Mechanisms of forward current transport in p-GaSe-n-InSe heterojunctions</b><br/> <i>Z.D. Kovalyuk, V.P. Makhniy, O.I. Yanchuk</i></p>                         |  |

- 496 Optical properties of ZnO aggregates in KBr matrix**  
*M. Samah, M. Bouguerra, H. Khelfane*
- 499 Study of gamma field induced degradation of green GaP light diode electroluminescence characteristics**  
*S.O. Kanevsky, P.G. Litovchenko, V.Ja. Opilat, V.P. Tartachnyk, M.B. Pinkovs'ka, O.P. Shakhov, V.M. Shapar*
- 505 Polymer films as a sensitive coating for quartz crystal microbalance sensors array**  
*I.A. Koshets, Z.I. Kazantseva, Yu. M. Shirshov*
- 508 Modeling high performance multilayer antireflection coatings for visible and infrared (3–5 $\mu$ m) substrates**  
*M.H. Asghar, M.B. Khan, S. Naseem*
- 514 Influence of elastic deformation on a residual ellipticity of polished optical materials**  
*V.P. Maslov, A.Z. Sarsembaeva, F.F. Sizov*
- 517 Distortion compensation technique for high resolution microscopy**  
*V.N. Borovytsky*
- 520 The study of the lifetime of ZnS-based luminescent films by using the devices of LMS series**  
*K. Popovych, Yu. Nakonechny, I. Rubish, V. Gerasimov, G. Leising*
- 524 Dual model describing effects of evaporated metal gate on low-*k* dielectric methylsilsequioxane in metal oxide semiconductor capacitor structure**  
*K.C. Aw, K. Ibrahim*
- 528 Vacuum method for creation of liquid crystal orienting microrelief**  
*Yu. Kolomzarov, P. Oleksenko, V. Sorokin, P. Tytarenko, R. Zelinsky*
- 533 Author Index 2003 (Volume 6)**