

Contents

<i>Svechnikov S.V., Kaganovich E.B.</i> Luminescent properties of Si nanostructures (review)	5
<i>Vlasenko O.I., Vlasenko Z.K.</i> Extended defects and their influence on the electronic properties of narrow-gap CdHgTe solid solutions (review)	27
<i>Vlasenko O.I., Vlasenko Z.K., Kurilo I.V., Lopatynskii I.Ye., Rudyj I.O., Liashenko O.V.</i> Peculiarities of the initial growth stages of graded band-gap epitaxial CdHgTe layers on CdTe	51
<i>Gorban A.P., Sachenko A.V., Kostylyov V.P., Sokolovsky I.O., Chernenko V.V.</i> Mechanisms of recombination current formation in forward biased silicon p-n-junction and solar cells	57
<i>Dan'ko V.A., Indutnyy I.Z., Maidanchuk I.Y., Min'ko V.I., Shepeliavyi P.E., Yukhimchuk V.A.</i> Formation of the photoluminescence structure based on SiO _x porous films	65
<i>Stronski A.V.</i> Application of chalcogenide vitreous semiconductors in holography, optoelectronics and information technologies	73
<i>Primachenko V.E., Bulach B.M., Venger E.F., Kirillova S.I., Chernobai V.A.</i> Electrophysical properties of interfaces of porous (nanocrystal) silicon films/single-crystal silicon.	97
<i>Seritsan O.V., Tomashik V.N., Feychuk P.I., Shcherbak L.P., Kopach O.V.</i> Interaction of Ga ₂ Te ₃ and GaTe with cadmium	111
<i>Bekhtir O.V., Sizov F.F.</i> Restoration of the defocused and blurred medical thermal images	115
<i>Veligura L.I., Vlasenko N.A., Denisova Z.L., Goroneskul V.Yu., Kononets Ya.F., Tsyrkunov Yu.A.</i> Near-infrared emitting thin-film electroluminescent structures based on ZnS(Se):Cr	124
<i>Aleinikov A.V., Vainberg V.V., Vorobkalo F.M., Nemish I.Yu.</i> Thermal resistance of germanium resistive thermometers in the temperature range 0.4 to 4.2 K	132
<i>Litovchenko N.M., Strilchuk O.M., Prokchorovich A.V.</i> Lux-brightness characteristics of excitonic luminescent bands in CdTe	136
<i>Rogozin I.V.</i> Luminescence of p-type ZnO layers implanted by As ⁺ ions	140
<i>Bilevich Ye.O., Sukach A.V., Tetyorkin V.V.</i> Effect of chemical treatment of surface on the barrier height in Au/p-CdTe Schottky diodes	144
<i>Gromashevskii V.L., Tatyanyenko N.P.</i> Electrostatic potential investigation of silicon surface in piezodielectric-semiconductor layered structure	152
<i>Danylyuk V.M., Lysiuk I.O., Olikh Ja.M., Shcherbin K.V.</i> Detection of ultrasonic oscillations on silicon wafers by adaptive interferometer with CdTe:Ge	157
<i>Sukach A.V., Oliynik G.S., Tetyorkin V.V., Voroschenko A.T., Lukyanenko V.I., Nughnaya T.P.</i> Peculiarities of diffused InAs p-n junctions formation and investigation their photoelectrical properties	162
<i>Sukach G.A., Kidalov V.V., Potapenko E.P.</i> Physico-mathematical modelling of the nitridization process of A ³ B ⁵ gallium compounds in nitrogen radicals	172
On the occasion of birthday date centenary of Prof. O.G. Miselyuk	181