

Содержание

25th Int. Symp. „Nanostructures: Physics and Technology“, Saint Petersburg, Russia, June 26–30, 2017

Issues 4 and 5 of *Fizika i Tekhnika Poluprovodnikov*, vol. 52 (2018) contain only the abstracts of papers presented at the Symposium. The full papers are published in *SEMICONDUCTORS*, vol. 52, Issues 4 and 5 (2018).

• Excitons in Nanostructures

Belov P.A.

Calculation of energy states of excitons in square quantum wells	495
--	-----

Golovatenko A.A., Semina M.A., Rodina A.V., Shubina T.V.

Biexciton binding energy in spherical quantum dots with Γ_8 valence band	496
---	-----

Kuznetsova M.S., Cherbunin R.V., Litvyak V.M., Kolobkova E.V.

Spectroscopy of PbS and PbSe quantum dots in fluorine phosphate glasses	497
---	-----

Loginov D.K., Donets A.V.

Effect of transverse electric field on polariton reflectance spectra of wide quantum wells	498
--	-----

Schneider L.M., Lippert S., Kuhnert J., Renaud D., Kang K.N., Ajayi O., Halbich M.-U., Abdulmunem O.M., Lin X., Hassoon K., Edalati-Boostan S., Kim Y.D., Heimbrot W., Yang E.H., Hone J.C., Rahimi-Iman A.

The impact of the substrate material on the optical properties of 2D WSe ₂ monolayers	499
--	-----

Rodina A.V., Golovatenko A.A., Shornikova E.V., Yakovlev D.R., Efros Al.L.

Dangling bond spins controlling recombination dynamics of excitons in colloidal nanocrystals and nanoplatelets	500
--	-----

Kulik L.V., Gorbunov V., Zhuravlev S., Timofeev V.B., Kukushkin I.V.

Long-lived magnetoexcitons and two-dimensional magnetofermionic condensate in GaAs/AlGaAs heterostructure	501
---	-----

Kosobukin V.A.

Plasmon-excitonic polaritons in metal-semiconductor nanostructures with quantum wells	502
---	-----

• Nanostructure Characterization

Zulina N.A., Achor U.S., Kniazev K.I.

Polymer composition influence on optical properties of laser-generated Au nanoparticles based nanocomposites	503
--	-----

Bodunov E.N., Simoes Gamboa A.L.

Luminescence Decay of Colloidal Quantum Dots and Stretched Exponential (Kohlrausch) Relaxation Function	504
---	-----

Filatov D.O., Guseinov D.V., Chalkov V.Yu., Denisov S.A., Shengurov V.G.

Ballistic hole emission spectroscopy of self-assembled GeSi/Si(001) nanoislands	505
---	-----

Mikoushkin V.M., Bryzgalov V.V., Nikonorov S.Yu., Solonitsyna A.P., Marchenko D.E.

Composition and band structure of the native oxide nanolayer on the ion beam treated surface of the GaAs wafer	506
--	-----

Senkevich N.Y., Vrubel I.I., Polozkov R.G., Shelykh I.A.

Geometry optimization and charge density distribution of single layer of Zn-based metal-organic framework	507
---	-----

Stupin D.D.

Platinum Nanoporous Electrode covered by Single Cell as Bio-Electronic Sensor of Radiation Hazard	508
---	-----

Shtrom I.V., Filosofov N.G., Agekian V.F., Smirnov M.B., Serov A.Yu., Reznik R.R., Kudryavtsev K.E., Cirlin G.E.

Optical properties of GaN nanowires grown by MBE on SiC/Si(111) hybrid substrate	509
--	-----

Soshnikov I.P., Kotlyar K.P., Bert N.A., Kirilenko D.A., Bouravleuv A.D., Cirlin G.E.

The features of GaAs nanowire SEM images	510
--	-----

Alekseev P.A., Sharov V.A., Geydt P., Dunaevskiy M.S., Soshnikov I.P., Reznik R.R., Lysak V.V., Lähderanta E., Cirlin G.E.

GaAs wurtzite nanowires for hybrid piezoelectric solar cells	511
--	-----

Fomin Maxim A., Chernev Andrey L., Bagraev Nicolay T., Klyachkin Leonid E., Emelyanov Anton K., Dubina Michael V.	Dielectric properties of oligonucleotides on the surface of Si nanosandwich structures	512
• Nanostructure Technology		
Ploog Klaus H.	Molecular Beam Epitaxy of Materials Interfaces with Atomic Precision	513
Kazantsev D.M., Akhundov I.O., Alperovich V.L., Shwartz N.L., Kozhukhov A.S., Latyshev A.V.	Thermal smoothing and roughening of GaAs surfaces: experiment and Monte Carlo simulation	514
Evropetsev E.A., Semenov A.N., Nechaev D.V., Jmerik V.N., Kaibyshev V.Kh., Troshkov S.I., Brunkov P.N., Usikova A.A., Ivanov S.V., Toropov A.A.	Metal-semiconductor nanoheterostructures with an AlGaN quantum well and in-situ formed surface Al nanoislands	515
Gerasimenko N.N., Balakleyskiy N.S., Volokhovskiy A.D., Smirnov D.I., Zaporozhan O.A.	Ion Synthesis: Si—Ge Quantum Dots	516
Gorokhov E.B., Astankova K.N., Azarov I.A., Volodin V.A., Latyshev A.V.	New method of porous Ge layer fabrication: structure and optical properties	517
Kamalieva A.N., Toropov N.A., Vartanyan T.A., Baranov M.A., Parfenov P.S., Bogdanov K.V., Zharova Y.A., Tolmachev V.A.	Fabrication of silicon nanostructures for application in photonics	518
Lukyanenko A.V., Smolyarova T.E.	Alternative technology for creating nanostructures using Dip Pen Nanolithography	519
Nastovjak A.G., Neizvestny I.G., Vasilenko M.A., Shwartz N.L.	Concentric GaAs nanorings growth modelling	520
Privezentsev V.V., Makunin A.V., Batrakov A.A., Ksenich S.V., Goryachev A.V.	Nanoparticle formation in Zn^+ and O^+ ion sequentially implanted SiO_2 film	521
Reznik R.R., Kotlyar K.P., Soshnikov I.P., Kukushkin S.A., Osipov A.V., Cirlin G.E.	MBE growth and structural properties of InAs and InGaAs nanowires with different mole fraction of In on Si and strongly mismatched SiC/Si(111) substrates	522
Tarasov I.A., Rautskii M.V., Yakovlev I.A., Volochaeve M.N.	Effect of epitaxial alignment on electron transport from quasi-two-dimensional iron silicide α -FeSi ₂ nanocrystals into <i>p</i> -Si(001)	523
Timoshnev Sergei, Mizerov Andrey, Sobolev Maxim, Nikitina Ekaterina	Growth of GaN layers on Si(111) substrates by plasma-assisted molecular beam epitaxy	524
Vasev A.V., Putyato M.A., Preobrazhenskii V.V., Bakarov A.K., Toropov A.I.	Kinetics of structural changes on GaSb(001) singular and vicinal surfaces during the UHV annealing	525
Jmerik V.N., Shubina T.V., Nechaev D.V., Semenov A.N., Kirilenko D.A., Davydov V.Yu., Smirnov A.N., Eliseev I.A., Posina G., Ivanov S.V.	Site-controlled growth of GaN nanorods with inserted InGaN quantum wells on μ -cone patterned sapphire substrates by plasma-assisted MBE	526
Gladskikh I.A., Gushchin M.G., Vartanyan T.A.	Resistance switching in Ag, Au and Cu films at the percolation threshold	527
Smolyarova T.E., Lukyanenko A.V., Tarasov A.S., Sokolov A.E.	Dip-Pen Nanolithography Method for Fabrication of Biofunctionalized Magnetic Nanodiscs Applied in Medicine	528
Lubenchenko A.V., Batrakov A.A., Ivanov D.A., Lubenchenko O.I., Lashkov I.A., Pavolotsky A.B., Schleicher B., Albert N., Nielsch K.	Air-oxidation of Nb Nano-Films	529