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Full Professor, Head of Unit, Chief Researcher
Section of Optoelectronics and Semiconductor Technology
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Research interests

Domain engineering in lithium niobate and lithium tantalate for nonlinear optical application;

Micro and nano-domain engineering in ferroelectrics;

Ferroic domain structure: arising and evolution;

Polarization reversal process in ferroelectrics;

Kinetics of phase transformations;

Nanotechnology.

Qualifications

Mathematics and Physics, Doctor, Higher Attestation Commission under the Ministry of Education and Science of Russian Federation

3 Aug 1990 → ...

Mathematics and Physics, Candidate, Higher Attestation Commission under the Ministry of Education and Science of Russian Federation

12 May 1975 → ...

27 Oct 1993 → ... Full Professor, Full Professor

2 Apr 1986 → ... Senior Reseacher, Senior Reseacher

Research outputs

Achieving ultrahigh energy storage performance over a broad temperature range in $(\text{Bi}_{0.5}\text{Na}_{0.5})\text{TiO}_3$ -based eco-friendly relaxor ferroelectric ceramics via multiple engineering processes

Zhang, L., Cao, S., Li, Y., Jing, R., Hu, Q., Tian, Y., Gu, R., Kang, J., Alikin, D. O., Shur, V. Y., Wei, X., Liu, G., Gao, F., Du, H., Yan, Y. & Jin, L., 10 Mar 2022, In: Journal of Alloys and Compounds. 896, 163139.

Ultrahigh electrostrictive effect in potassium sodium niobate-based lead-free ceramics

Zhang, L., Jing, R., Huang, Y., Hu, Q., Alikin, D. O., Shur, V. Y., Wang, D., Wei, X., Zhang, L., Liu, G. & Jin, L., Mar 2022, In: Journal of the European Ceramic Society. 42, 3, p. 944-953 10 p.

Tunable order in colloids of hard magnetic hexaferrite nanoplatelets

Eliseev, A. A., Trusov, L. A., Anokhin, E. O., Chumakov, A. P., Korolev, V. V., Sleptsova, A. E., Boesecke, P., Pryakhina, V. I., Shur, V. Y., Kazin, P. E. & Eliseev, A. A., Feb 2022, In: Nano Research. 15, 2, p. 898-906 9 p.

Unusual domain growth during local switching in triglycine sulfate crystals

Turygin, A. P., Kosobokov, M. S., Golitsyna, O. M., Drozhdin, S. N. & Shur, V. Y., 27 Dec 2021, In: Applied Physics Letters. 119, 26, 262902.

Structure, dielectric, electrostrictive and electrocaloric properties of environmentally friendly Bi-substituted BCZT ferroelectric ceramics

Wei, F., Zhang, L., Jing, R., Hu, Q., Alikin, D. O., Shur, Y. Y., Zhang, J., Lu, X., Yan, Y., Du, H., Wei, X. & Jin, L., 15 Dec 2021, In: Ceramics International. 47, 24, p. 34676-34686 11 p.

Submicron periodical poling by local switching in ion sliced lithium niobate thin films with a dielectric layer

Slautin, B. N., Zhu, H. & Shur, V. Y., 1 Dec 2021, In: Ceramics International. 47, 23, p. 32900-32904 5 p.

As-grown domain structure in calcium orthovanadate crystals

Shishkina, E., Yuzhakov, V., Nebogatikov, M., Pelegova, E., Linker, E., Ivleva, L. & Shur, V., Dec 2021, In: Crystals. 11, 12, 1508.

Photoinduced conductivity during sub-bandgap illumination in periodically poled MgO:LiNbO₃ with charged domain walls

Savchenkov, E. N., Dubikov, A. V., Kuzmich, D. E., Sharaeva, A. E., Shandarov, S. M., Burimov, N. I., Chuvakova, M. A., Akhmatkhanov, A. R. & Shur, V. Y., Dec 2021, In: Optical Materials. 122, 111813.

Tunable injection-seeded fan-out-PPLN optical parametric oscillator for high-sensitivity gas detection

Erushin, E., Nyushkov, B., Ivanenko, A., Akhmatkhanov, A., Shur, V., Boyko, A., Kostyukova, N. & Kolker, D., Nov 2021, In: Laser Physics Letters. 18, 11, 7 p., 116201.

New Data on Various Directed Dose-Response Relationships and the Combined Action Types for Different Outcomes of In Vitro Nanoparticle Cytotoxicity

Panov, V., Bushueva, T., Minigalieva, I., Naumova, A., Shur, V., Shishkina, E., Sutunkova, M., Gurvich, V., Privalova, L. & Katsnelson, B., 26 Oct 2021, In: Dose-Response. 19, 4, 9 p., 15593258211052420.

Dimensionality increase of ferroelectric domain shape by pulse laser irradiation

Shur, V. Y., Kosobokov, M. S., Makaev, A. V., Kuznetsov, D. K., Nebogatikov, M. S., Chezganov, D. S. & Mingaliev, E. A., 15 Oct 2021, In: Acta Materialia. 219, 7 p., 117270.

Morphotropic phase boundary in Sm-substituted BiFeO₃ ceramics: Local vs microscopic approaches

Pakalniškis, A., Skaudžius, R., Zhaludkevich, D. V., Zhaludkevich, A. L., Alikin, D. O., Abramov, A. S., Murauskas, T., Shur, V. Y., Dronov, A. A., Silibin, M. V., Selskis, A., Ramanauskas, R., Lukowiak, A., Strek, W., Karpinsky, D. V. & Kareiva, A., 15 Sep 2021, In: Journal of Alloys and Compounds. 875, 8 p., 159994.

Statics and dynamics of ferroelectric domains in molecular multiaxial ferroelectric (Me₃NOH)₂[KCo(CN)₆]

Xu, W. J., Romanyuk, K., Zeng, Y., Ushakov, A., Shur, V., Tselev, A., Zhang, W. X., Chen, X. M., Kholkin, A. & Rocha, J., 7 Sep 2021, In: Journal of Materials Chemistry C. 9, 33, p. 10741-10748 8 p.

Local piezoelectric properties of doped biomolecular crystals

Kholkin, A., Alikin, D., Shur, V., Dishon, S., Ehre, D. & Lubomirsky, I., Sep 2021, In: Materials. 14, 17, 7 p., 4922.

Silica coating of Fe₃O₄ magnetic nanoparticles with PMIDA assistance to increase the surface area and enhance peptide immobilization efficiency

Demin, A. M., Maksimovskikh, A. I., Mekhaev, A. V., Kuznetsov, D. K., Minin, A. S., Pershina, A. G., Uimin, M. A., Shur, V. Y. & Krasnov, V. P., 15 Aug 2021, In: Ceramics International. 47, 16, p. 23078-23087 10 p.

Local Polarization Reversal by Ion Beam Irradiation in SBN Single Crystals Covered by Dielectric Layer

Shikhova, V. A., Chezganov, D. S., Nuraeva, A. S., Nebogatikov, M. S., Greshnyakov, E. D., Pashnina, E. A., Anikin, V. A., Turygin, A. P., Kholkin, A. L., Ivleva, L. I. & Shur, V. Y., Aug 2021, In: IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control. 68, 8, p. 2824-2831 8 p., 9427192.

Nonlinear Characterization of Waveguide Index Profile: Application to Soft-Proton-Exchange in LiNbO₃

Neradovskiy, M., Tronche, H., Chezganov, D., Pashnina, E., Vlasov, E., Baldi, P., Lunghi, T., Shur, V., Doutre, F. & De Micheli, M., 15 Jul 2021, In: Journal of Lightwave Technology. 39, 14, p. 4695-4699 5 p., 9424369.

Advanced large-scale nanofabrication route for ultrasensitive sers platforms based on precisely shaped gold nanostructures

Akil, S., Omar, R., Kuznetsov, D., Shur, V., Naciri, A. E. & Jradi, S., Jul 2021, In: Nanomaterials. 11, 7, 18 p., 1806.

Domain structure evolution during alternating current poling and its influence on the piezoelectric properties in [001]-cut rhombohedral PIN-PMN-PT single crystals

Ushakov, A. D., Hu, Q., Liu, X., Xu, Z., Wei, X. & Shur, V. Y., 7 Jun 2021, In: Applied Physics Letters. 118, 23, 5 p., 232901.

Modification of chemically and physically obtained Fe₃O₄ magnetic nanoparticles with L-Lys for cell labeling

Demin, A. M., Kandarakov, O. F., Minin, A. S., Kuznetsov, D. K., Uimin, M. A., Shur, V. Y., Belyavsky, A. V. & Krasnov, V. P., Jun 2021, In: Russian Chemical Bulletin. 70, 6, p. 1199-1208 10 p.

Design of SiO₂/aminopropylsilane-modified magnetic Fe₃O₄ nanoparticles for doxorubicin immobilization

Demin, A. M., Vakhrushev, A. V., Valova, M. S., Minin, A. S., Kuznetsov, D. K., Uimin, M. A., Shur, V. Y., Krasnov, V. P. & Charushin, V. N., May 2021, In: Russian Chemical Bulletin. 70, 5, p. 987-994 8 p.

Cardioinotropic effects in subchronic intoxication of rats with lead and/or cadmium oxide nanoparticles

Klinova, S. V., Katsnelson, B. A., Minigalieva, I. A., Gerzen, O. P., Balakin, A. A., Lisin, R. V., Butova, K. A., Nabiev, S. R., Lookin, O. N., Katsnelson, L. B., Privalova, L. I., Kuznetsov, D. A., Shur, V. Y., Shishkina, E. V., Makeev, O., Valamina, I. E., Panov, V. G., Sutunkova, M. P., Nikitina, L. V. & Protsenko, Y. L., 1 Apr 2021, In: International Journal of Molecular Sciences. 22, 7, 20 p., 3466.

In-plane polarization contribution to the vertical piezoresponse force microscopy signal mediated by the cantilever "buckling"

Alikin, D. O., Gimadeeva, L. V., Ankudinov, A. V., Hu, Q., Shur, V. Y. & Kholkin, A. L., 30 Mar 2021, In: Applied Surface Science. 543, 7 p., 148808.

Thermal stability of dielectric and energy storage performances of Ca-substituted BNTZ ferroelectric ceramics

Huang, Y., Zhang, L., Jing, R., Hu, Q., Alikin, D. O., Shur, V. Y., Islam, S. S., Du, H., Wei, X., Feng, G., Zhang, L. & Jin, L., 1 Mar 2021, In: Ceramics International. 47, 5, p. 6298-6309 12 p.

Lead-free BaTiO₃-based ceramics modified by Bi(Mg_{0.5}Sn_{0.5})O₃ with enhanced energy-storage performance and charge-discharge properties

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Forward growth of ferroelectric domains with charged domain walls. Local switching on non-polar cuts

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Influence of Humidity on Local Polarization Reversal in a Rb:KTP Single Crystal

Shishkina, E. V., Pelegova, E. V., Kosobokov, M. S., Akhmatkhanov, A. R., Yudin, P. V., Dejneka, A. & Shur, V. Y., 26 Jan 2021, In: ACS Applied Electronic Materials. 3, 1, p. 260-266 7 p.

Temperature-dependent Raman spectroscopy, domain morphology and photoluminescence studies in lead-free BCZT ceramic

Coondoo, I., Panwar, N., Krylova, S., Krylov, A., Alikin, D., Jakka, S. K., Turygin, A., Shur, V. Y. & Kholkin, A. L., 15 Jan 2021, In: Ceramics International. 47, 2, p. 2828-2838 11 p.

Local electronic transport across probe/ionic conductor interface in scanning probe microscopy

Romanyuk, K. N., Alikin, D. O., Slautin, B. N., Tselev, A., Shur, V. Y. & Kholkin, A. L., Jan 2021, In: Ultramicroscopy. 220, 13 p., 113147.

Comparative and Combined In Vitro Vasotoxicity of Nanoparticles Containing Lead and Cadmium

Bushueva, T. V., Minigalieva, I. A., Panov, V. G., Sutunkova, M. P., Gurvich, V. B., Shur, V. Y., Shishkina, E. V., Naumova, A. S., Artemenko, E. P. & Katsnelson, B. A., 2021, In: Dose-Response. 19, 1, 7 p.

Domain merging in LaBGeO₅ single crystals

Plashinnov, K. S., Akhmatkhanov, A. R., Nebogatikov, M. S., Milov, E. V., Shnidshtein, I. V. & Shur, V. Y., 2021, In: Ferroelectrics. 575, 1, p. 151-157 7 p.

Evolution of the domain structure during polarization reversal in relaxor SBN single crystals studied by Čerenkov-type second harmonic generation microscopy

Shikhova, V. A., Nebogatikov, M. S., Anikin, V. A., Ivleva, L. I. & Shur, V. Y., 2021, In: Ferroelectrics. 576, 1, p. 75-84 10 p.

Formation of submicron stripe domain ensembles during polarization reversal in Rb doped KTP crystal covered by dielectric layer

Chuvakova, M. A., Akhmatkhanov, A. R., Vaskina, E. M., Gimadeeva, L. V., Greshnyakov, E. D. & Shur, V. Y., 2021, In: Ferroelectrics. 574, 1, p. 101-108 8 p.

Forward domain growth on the non-polar cut of lithium niobate crystal during irradiation by focused ion beam

Chezganov, D. S., Nuraeva, A. S., Pashnina, E. A., Turygin, A. P. & Shur, V. Y., 2021, In: Ferroelectrics. 574, 1, p. 92-100 9 p.

Local polarization reversal in barium titanate single crystals and ceramics

Abramov, A. S., Gimadeeva, L. V., Alikin, D. O., Hu, Q., Wei, X. & Shur, V. Y., 2021, In: Ferroelectrics. 574, 1, p. 1-7 7 p.

Magnetoelastic effect in CoNi particles caused by thermal resizing of a lithium niobate crystal substrate

Bizyaev, D. A., Bukharaev, A. A., Nurgazizov, N. I., Chuklanov, A. P., Akhmatkhanov, A. R. & Shur, V. Y., 2021, In: Ferroelectrics. 574, 1, p. 65-71 7 p.

Micro-Raman domain imaging in calcium orthovanadate single crystals

Shishkina, E. V., Greshnyakov, E. D., Zelenovskiy, P. S., Yuzhakov, V. V., Ivleva, L. I. & Shur, V. Y., 2021, In: Ferroelectrics. 576, 1, p. 85-93 9 p.

Modeling and physical properties of diphenylalanine peptide nanotubes containing water molecules

Bystrov, V. S., Coutinho, J., Zhulyabina, O. A., Kopyl, S. A., Zelenovskiy, P. S., Nuraeva, A. S., Tverdislov, V. A., Filippov, S. V., Kholkin, A. L. & Shur, V. Y., 2021, In: Ferroelectrics. 574, 1, p. 78-91 14 p.

Second harmonic generation in periodically poled MgO:LN crystal with 2 μm period created by e-beam irradiation

Savelyev, E. D., Akhmatkhanov, A. R., Chezganov, D. S., Vlasov, E. O., Pashnina, E. A., Shur, V. Y., Tronche, H., Doutre, F., Lunghi, T. & Baldi, P., 2021, In: Ferroelectrics. 576, 1, p. 50-54 5 p.

Some data on the comparative and combined toxic activity of nanoparticles containing lead and cadmium with special attention to their vasotoxicity

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Submicron periodical poling in Z-cut lithium niobate thin films

Slautin, B. N., Zhu, H. & Shur, V. Y., 2021, In: Ferroelectrics. 576, 1, p. 119-128 10 p.

The input of Barkhausen pulses to the switching current in congruent lithium niobate

Kipenko, I. A., Akhmatkhanov, A. R., Esin, A. A. & Shur, V. Y., 2021, In: Ferroelectrics. 574, 1, p. 156-163 8 p.

Tilt control of the charged domain walls created by local switching on the non-polar cut of MgO doped lithium niobate single crystals

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Transformation of initial domain structure by ac electric field in lithium tantalate crystals with composition gradient

Greshnyakov, E. D., Pryakhina, V. I., Lisjikh, B. I., Nebogatikov, M. S. & Shur, V. Y., 2021, In: Ferroelectrics. 574, 1, p. 136-143 8 p.

ДИЗАЙН SiO₂/АМИНОПРОПИЛСИЛАН-МОДИФИЦИРОВАННЫХ МАГНИТНЫХ НАНОЧАСТИЦ Fe₃O₄ ДЛЯ ИММОБИЛИЗАЦИИ НА НИХ ДОКСОРУБИЦИНА

Дёмин, А. М., Вахрушев, А. В., Валова, М. С., Минин, А. С., Кузнецов, Д. К., Уймин, М. А., Шур, В. Я., Краснов, В. П. & Чарушин, В. Н., 2021, In: Известия Академии наук. Серия химическая. 5, p. 987-994 8 p.

Модификация физически и химически полученных магнитных наночастиц Fe_3O_4 L-Lys для мечения клеток
Дёмин, А. М., Кандараков, О. Ф., Минин, А. С., Кузнецов, Д. К., Уймин, М. А., Шур, В. Я., Белявский, А. В. & Краснов, В. П., 2021, In: Известия Академии наук. Серия химическая. 6, p. 1199-1208 10 p.

Общетоксическое и кардиовазотоксическое действие наночастиц оксида кадмия

Klinova, S. V., Minigalieva, I. A., Katsnelson, B. A., Solovyeva, S. N., Privalova, L. I., Gurchich, V. B., Ryabova, I. V., Chernyshov, I. N., Bushueva, T. V., Sakhautdinova, R. R., Shur, V. Y., Shishkina, E. V. & Sutunkova, M. P., 2021, In: Gigiena i Sanitariya. 99, 12, p. 1346-1352 7 p.

ПОЛВЕКА В НАУКЕ. ОТ ЛАБОРАТОРИИ СЕГНЕТОЭЛЕКТРИКОВ К ЦЕНТРАМ КОЛЛЕКТИВНОГО ПОЛЬЗОВАНИЯ И ФУНДАМЕНТАЛЬНОЙ БИОТЕХНОЛОГИИ И БИОИНЖЕНЕРИИ

Шур, В. Я., 2021, In: Наноиндустрия. 14, 1 (103), p. 8-15 8 p.

Скоростная модуляция поперечно-модового состава лазерных пучков с помощью дифракционных оптических элементов на основе $LiNbO_3$

Esin, A. A., Akhmatkhanov, A. R., Pavelyev, V. S. & Shur, V. Y., 2021, In: Computer Optics. 45, 2, p. 222-228 7 p.

Термоиндуцированное изменение поля переключения планарных $CoNi$ -микрочастиц, сформированных на поверхности монокристаллического ниобата лития

Бизяев, Д. А., Нургазизов, Н. И., Бухараев, А. А., Чуکلанов, А. П., Шур, В. Я. & Ахматханов, А. Р., 2021, In: Физика твердого тела. 63, 9, p. 1273-1278 6 p.

Zircon from diamondiferous kyanite gneisses of the Kokchetav massif: Revealing growth stages using an integrated cathodoluminescence, Raman spectroscopy and electron microprobe approach

Rezvukhina, O. V., Korsakov, A. V., Rezvukhin, D. I., Mikhailenko, D. S., Zamyatin, D. A., Greshnyakov, E. D. & Shur, V. Y., Dec 2020, In: Mineralogical Magazine. 84, 6, p. 949-958 10 p.

Periodically-poled $KTiOAsO_4$ structures for optical parametric oscillator pumped by 1053 nm DPSS nanosecond laser

Erushin, E. Y., Boyko, A. A., Kostyukova, N. Y., Isaenko, L. I., Akhmatkhanov, A., Shur, V. & Kolker, D. B., 2 Nov 2020, *Proceedings - International Conference Laser Optics 2020, ICLO 2020*. Institute of Electrical and Electronics Engineers Inc., 1 p. 9285487. (Proceedings - International Conference Laser Optics 2020, ICLO 2020).

Observation of the Photoinduced Conductivity in a Regular Domain Structure with Tilted Walls in $MgO:LiNbO_3$ at a Wavelength of 632.8 nm at Bragg Diffraction

Savchenkov, E. N., Dubikov, A. V., Sharaeva, A. E., Burimov, N. I., Shandarov, S. M., Esin, A. A., Akhmatkhanov, A. R. & Shur, V. Y., Nov 2020, In: JETP Letters. 112, 10, p. 602-606 5 p.

Photoresponsive Organic-Inorganic Hybrid Ferroelectric Designed at the Molecular Level

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Surface piezoelectricity and pyroelectricity in centrosymmetric materials: A case of α -glycine

Dishon, S., Ushakov, A., Nuraeva, A., Ehre, D., Lahav, M., Shur, V., Kholkin, A. & Lubomirsky, I., 2 Oct 2020, In: Materials. 13, 20, p. 1-6 6 p., 4663.

Local electromechanical response in doped ceria: Rigorous analysis of the phase and amplitude

Alikin, D. O., Slautin, B. N., Ushakov, A. D., Shur, V. Y., Mishuk, E., Lubomirsky, I., Tselev, A. & Kholkin, A. L., Oct 2020, In: IEEE Transactions on Dielectrics and Electrical Insulation. 27, 5, p. 1478-1485 8 p., 9215096.

Piezoelectric Actuation of Graphene-Coated Polar Structures

Kholkin, A. L., Ushakov, A. D., Chuvakova, M. A., Kosobokov, M. S., Akhmatkhanov, A. R., Turutin, A. V., Chichkov, M. V., Kravchenko, I. I., Kopelevich, Y. & Shur, V. Y., Oct 2020, In: IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control. 67, 10, p. 2142-2147 6 p., 9107107.

The effect of water molecules on elastic and piezoelectric properties of diphenylalanine microtubes

Zelenovskiy, P., Yuzhakov, V., Nuraeva, A., Kornev, M., Shur, V. Y., Kopyl, S., Kholkin, A., Vasilev, S. & Tofail, S. A. M., Oct 2020, In: IEEE Transactions on Dielectrics and Electrical Insulation. 27, 5, p. 1474-1477 4 p., 9215095.

A combined Raman spectroscopy, cathodoluminescence, and electron backscatter diffraction study of kyanite porphyroblasts from diamondiferous and diamond-free metamorphic rocks (Kokchetav massif)

Rezvukhina, O. V., Korsakov, A. V., Rezvukhin, D. I., Zamyatin, D. A., Zelenovskiy, P. S., Greshnyakov, E. D. & Shur, V. Y., 1 Sep 2020, In: Journal of Raman Spectroscopy. 51, 9, p. 1425-1437 13 p.

Dumortierite and tourmaline from the Barchi-Kol diamond-bearing kyanite gneisses (Kokchetav massif): A Raman spectroscopic study and petrological implications

Korsakov, A. V., Rezvukhina, O. V., Rezvukhin, D. I., Greshnyakov, E. D. & Shur, V. Y., 1 Sep 2020, In: Journal of Raman Spectroscopy. 51, 9, p. 1839-1848 10 p.

Magnetoactive Compound Based on Humic Acid and Magnetite as a Sorbent for Heavy Metals

Zhakina, A. K., Arnt, O. V., Vassilets, Y. P., Shur, V. Y. & Volegov, A. S., 1 Sep 2020, In: Russian Journal of Applied Chemistry. 93, 9, p. 1366-1371 6 p.

Micro-Raman study of crichtonite group minerals enclosed into mantle garnet

Alifirova, T., Rezvukhin, D., Nikolenko, E., Pokhilenko, L., Zelenovskiy, P., Sharygin, I., Korsakov, A. & Shur, V., 1 Sep 2020, In: Journal of Raman Spectroscopy. 51, 9, p. 1493-1512 20 p.

New insights on Raman spectrum of K-bearing tourmaline

Musiyachenko, K. A., Korsakov, A. V., Shimizu, R., Zelenovskiy, P. S. & Shur, V. Y., 1 Sep 2020, In: Journal of Raman Spectroscopy. 51, 9, p. 1415-1424 10 p.

Strain-polarization coupling mechanism of enhanced conductivity at the grain boundaries in BiFeO₃ thin films

Alikin, D., Fomichov, Y., Reis, S. P., Abramov, A., Chezganov, D., Shur, V., Eliseev, E., Kalinin, S. V., Morozovska, A., Araujo, E. B. & Kholkin, A., Sep 2020, In: Applied Materials Today. 20, 7 p., 100740.

An investigative study on the effect of pre-coating polymer solutions on the fabrication of low cost anti-adhesive release paper

Vasilev, S., Vodyashkin, A., Vasileva, D., Zelenovskiy, P., Chezganov, D., Yuzhakov, V., Shur, V., O'reilly, E. & Vinogradov, A., Aug 2020, In: Nanomaterials. 10, 8, p. 1-12 12 p., 1436.

Barkhausen pulses caused by domain merging in congruent lithium niobate

Akhmatkhanov, A. R., Kipenko, I. A., Esin, A. A. & Shur, V. Y., 13 Jul 2020, In: Applied Physics Letters. 117, 2, 5 p., 022903.

An overview of experiments with lead-containing nanoparticles performed by the Ekaterinburg nanotoxicological research team

Minigaliyeva, I. A., Sutunkova, M. P., Gurvich, V. B., Bushueva, T. V., Klinova, S. V., Solovyeva, S. N., Chernyshov, I. N., Valamina, I. E., Shur, V. Y., Shishkina, E. V., Makeyev, O. H., Panov, V. G., Privalova, L. I. & Katsnelson, B. A., 2 Jul 2020, In: Nanotoxicology. 14, 6, p. 788-806 19 p.

Different domain switching kinetics in tetragonal PMN-PT single crystal studied by in situ observation and current analysis

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Prizes

Благодарность Министерства науки и высшего образования Российской Федерации, 2020

Абатурова, Ольга Сергеевна (Recipient), Анимица, Ирина Евгеньевна (Recipient), Артемова, Татьяна Георгиевна (Recipient), Багин, Дмитрий Николаевич (Recipient), Багирова, Тамара Борисовна (Recipient), Бандо, Михаил Владимирович (Recipient), Баранский, Виталий Анатольевич (Recipient), Белов, Антон Александрович (Recipient), Беляева, Зоя Владимировна (Recipient), Берсенева, Вера Сергеевна (Recipient), Блинков, Олег Геннадьевич (Recipient), Богатова, Татьяна Феоктистовна (Recipient), Боронина, Людмила Николаевна (Recipient), Васьковский, Владимир Олегович (Recipient), Венгерова, Марина Витальевна (Recipient), Власова, Мария Федоровна (Recipient), Воронина, Людмила Ивановна (Recipient), Гейн, Александр Георгиевич (Recipient), Гофман, Алексей Георгиевич (Recipient), Грובה, Людмила Семеновна (Recipient), Гудов, Александр Геннадьевич (Recipient), Гурова, Ольга Николаевна (Recipient), Давыдов, Юрий Сергеевич (Recipient), Захарова, Анна Валерьевна (Recipient), Злыгостев, Сергей Николаевич (Recipient), Зуев, Андрей Юрьевич (Recipient), Иванов, Михаил Григорьевич (Recipient), Ишматов, Закир Шарифович (Recipient), Карасик, Александр Аркадьевич (Recipient), Кельчевская, Наталья Рэмовна (Recipient), Кеммет, Елена Викторовна (Recipient), Кизюн, Николай Николаевич (Recipient), Киселева, Марина Васильевна (Recipient), Клочков, Игорь Владимирович (Recipient), Комарова, Елена Сергеевна (Recipient), Кореньгин, Дмитрий Викторович (Recipient), Корнеева, Лариса Ивановна (Recipient), Королева, Оксана Вячеславовна (Recipient), Краснова, Анна Вольфрамовна (Recipient), Кузнецов, Эдуард Дмитриевич (Recipient), Кузнецова, Юлия Владимировна (Recipient), Кузьмин, Станислав Вячеславович (Recipient), Кузьмина, Александра Владимировна (Recipient), Купина, Наталия Александровна (Recipient), Куприянов, Юрий Филиппович (Recipient), Ларионова, Виола Анатольевна (Recipient), Лобанов, Михаил Львович (Recipient), Мазуров, Владимир Данилович (Recipient), Медведева, Галина Фортунатовна (Recipient), Мехдиева, Камилия Рамазановна (Recipient), Мехоношин, Алексей Анатольевич (Recipient), Нархова, Елена Николаевна (Recipient), Неволлина, Алена Леонидовна (Recipient), Никулин, Валерий Александрович (Recipient), Нуждин, Олег Игоревич (Recipient), Овечкина, Марина Андреевна (Recipient), Осипчукова, Елена Владимировна (Recipient), Останина, Татьяна Николаевна (Recipient), Остроушко, Александр Александрович (Recipient), Плотников, Сергей Васильевич (Recipient), Подольяк, Ирина Анатольевна (Recipient), Попова, Наталья Викторовна (Recipient), Поторочина, Ксения Сергеевна (Recipient), Рабовская, Мария Яковлевна (Recipient), Раскатов, Евгений Юрьевич (Recipient), Расторопова, Марина Ивановна (Recipient), Резер, Татьяна Михайловна (Recipient), Рудой, Валентин Михайлович (Recipient), Рукавишникова, Ирина Владимировна (Recipient), Сараева, Светлана Юрьевна (Recipient), Сесекин, Александр Николаевич (Recipient), Слесарев, Анатолий Иванович (Recipient), Степановских, Елена Ивановна (Recipient), Ткачук, Галина Андреевна (Recipient), Трофимова, Ольга Геннадиевна (Recipient), Уломский, Евгений Нарциссович (Recipient), Ушаков, Артем Юрьевич (Recipient), Хафизова, Эльвира Минишаевна (Recipient), Цепелев, Владимир Степанович (Recipient), Черепанов, Владимир Александрович (Recipient), Чуксина, Наталия Владимировна (Recipient), Шаманаева, Ирина Викторовна (Recipient), Шестакова, Ирина Александровна (Recipient), Шишов, Михаил Георгиевич (Recipient), Шкавро, Стэлла Леонидовна (Recipient), Шур, Владимир Яковлевич (Recipient), Щенникова, Людмила Александровна (Recipient) & Юрк, Ирина Леонидовна (Recipient), 2020

Общенациональная премия «Профессор года», 2018

Шур, Владимир Яковлевич (Recipient), Попов, Артемий Александрович (Recipient) & Редин, Дмитрий Алексеевич (Recipient), 2018

IEEE Senior Member

Шур, Владимир Яковлевич (Recipient), 2016

Диплом «Профессор года» губернатора Свердловской области, 2010

Шур, Владимир Яковлевич (Recipient), 2010

Почетный работник высшего профессионального образования Российской Федерации, 2006

Шур, Владимир Яковлевич (Recipient) & Дронишинец, Николай Павлович (Recipient), 2006

Специальная премия Министерства образования и науки РФ в рамках IV Всероссийского конкурса «Наука – обществу - 2005», 2005

Остроушко, Александр Александрович (Recipient) & Шур, Владимир Яковлевич (Recipient), 2005

Соросовский профессор, 2001

Вшивков, Сергей Анатольевич (Recipient), Шур, Владимир Яковлевич (Recipient) & Иванов, Алексей Олегович (Recipient), 2001

Почетная грамота в конкурсе «Лучший изобретатель Уральского Университета», 1987

Шур, Владимир Яковлевич (Recipient), 1987

Диплом Министерства высшего и среднего специального образования РСФСР, 1985

Шур, Владимир Яковлевич (Recipient), 1985

Press/Media

Scientists Have Taken a Major Step in the Development of Domain Engineering

Vladimir Ya. Shur, Mikhail S. Kosobokov, Andrey V. Makaev, Dmitry K. Kuznetsov, Maxim S. Nebogatikov, Dmitry S. Chezganov & Evgeniy A. Mingaliev
29/09/2021

1 Media contribution

Two University Projects Will Receive Grants from the Russian Ministry of Education and Science

Vladimir Shur & Dmitry Alexandrov

28/09/2021

1 Media contribution

Ученые сделали кардинальный шаг в развитии доменной инженерии

Владимир Яковлевич Шур, Михаил Сергеевич Кособоков, Андрей Владимирович Макаев, Дмитрий Константинович Кузнецов, Максим Сергеевич Небогатиков, Дмитрий Сергеевич Чезганов & Евгений Альбертович Мингалиев
27/09/2021

1 Media contribution

Два проекта вуза получают гранты Минобрнауки России

Владимир Яковлевич Шур & Дмитрий Валерьевич Александров

24/09/2021

1 Media contribution

Scientists Talk about Materials with Spontaneous Polarization

Vladimir Shur

30/08/2021
1 Media contribution

Ученые расскажут о материалах со спонтанной поляризацией
Владимир Яковлевич Шур
27/08/2021
1 Media contribution

The Study of Nanotechnology Will Get a New Impulse
Vladimir Shur
14/07/2021
1 Media contribution

Изучение нанотехнологий получит новый импульс
Владимир Яковлевич Шур
13/07/2021
1 Media contribution

UrFU Physicists Were the First in the World to Record Submicron Domains
Vladimir Shur
07/04/2021
1 Media contribution

Физики вуза первыми в мире научились записывать субмикронные домены
Владимир Яковлевич Шур
07/04/2021
1 Media contribution

Ural Federal Univeristy Scientists Studied the Conductivity of Individual Particles of a Lithium Battery Cathode
K. N. Romanyuk, D. O. Alikin, B. N. Slautin & V. Ya. Shur
18/12/2020
1 Media contribution

Ученые изучили проводимость отдельных частиц катода литиевой батареи
Константин Николаевич Романюк, Денис Олегович Аликин, Борис Николаевич Слаутин & Владимир Яковлевич Шур
17/12/2020
1 Media contribution

Physicists supervise the formation of higher manganese silicide films
Tatiana V. Kuznetzova, Alexander A. Esin & Vladimir Ya. Shur
04/06/2018
1 Media contribution

Genius of Nano - Dr. Vladimir Shur's Interview on New Materials
Vladimir Shur
22/10/2020
1 Media contribution

Эффект нанобабочки
Владимир Яковлевич Шур
21/10/2020
1 Media contribution

Как научные разработки меняют представление о традиционных материалах
Владимир Яковлевич Шур

21/10/2020
1 Media contribution

Swiss Delegation Headed by Deputy Ambassador Visited UrFU

Elena Trubina, Elvira Symaniuk, Vladimir Shur, Leonid Plotnikov & Vladimir Mazurenko
13/10/2020
1 Media contribution

Delegation of Switzerland Headed by Deputy Ambassador Visited UrFU

Elvira Symaniuk, Vladimir Shur, Elena Trubina, Vladimir Mazurenko & Leonid Plotnikov
13/10/2020
1 Media contribution

Вуз посетила делегация Швейцарии во главе с заместителем посла

Эльвира Эвальдовна Сыманюк, Владимир Яковлевич Шур, Леонид Валерьевич Плотников, Владимир Владимирович Мазуренко & Елена Германовна Трубина
13/10/2020
1 Media contribution

Ученые рассказали о последних достижениях в сфере сегнетоэлектричества

Владимир Яковлевич Шур
19/08/2020
1 Media contribution

Ferroelectricity's Discovery 100th Anniversary - Progress Knows No Boundaries

Vladimir Shur
07/08/2020
1 Media contribution

Какое вещество используют для изготовления микрофонов и сыров, рассказал Владимир Шур

Владимир Яковлевич Шур
07/08/2020
1 Media contribution

Scientists Create Piezoelectric Elements Compatible With the Human Body

Andrei Kholkin & Vladimir Shur
01/04/2020
1 Media contribution

UrFU Physicists Began to Grow Large Crystals

Vladimir Shur
06/04/2020
1 Media contribution

Физики вуза начали выращивать крупные кристаллы

Владимир Яковлевич Шур
06/04/2020
1 Media contribution

Ученые создают совместимые с организмом пьезоэлектрические элементы

Андрей Леонидович Холкин & Владимир Яковлевич Шур
01/04/2020
1 Media contribution

Профессор вуза развивает научное сотрудничество с Китаем

Владимир Яковлевич Шур

23/01/2020
1 Media contribution

Как управлять кристаллом?

Андрей Дмитриевич Ушаков, Александр Андреевич Есин, Андрей Ришатович Ахматханов & Владимир Яковлевич Шур
25/09/2019
1 Media contribution

Ученые УрФУ создали новый материал для медицинского оборудования и кино

Владимир Яковлевич Шур
12/09/2019
1 Media contribution

Более 200 учёных открыли «окно в наномир» на конференции в Екатеринбурге

Владимир Яковлевич Шур
26/08/2019
1 Media contribution

Учёные УрФУ исследуют новые электродные материалы и разрушение композитов

Дмитрий Сергеевич Цветков, Дмитрий Викторович Зайцев, Татьяна Андреевна Калинина, Владимир Яковлевич Шур, Ольга Николаевна Корочкова, Григорий Васильевич Зырянов & Артемий Александрович Попов
30/10/2018
1 Media contribution

Пять ученых вуза отличились в новых конкурсах Российского фонда фундаментальных исследований

Дмитрий Сергеевич Цветков, Дмитрий Викторович Зайцев, Татьяна Андреевна Калинина, Владимир Яковлевич Шур, Ольга Николаевна Корочкова, Григорий Васильевич Зырянов & Артемий Александрович Попов
30/10/2018
1 Media contribution

Изучено преобразование частоты лазерного излучения в нелинейных фотонных кристаллах

Иван Сергеевич Батулин, Андрей Ришатович Ахматханов & Владимир Яковлевич Шур
15/07/2018
1 Media contribution

Ученые решили проблему контролируемого синтеза тонких пленок

Татьяна Владимировна Кузнецова, Виктория Игоревна Пряхина, Александр Андреевич Есин & Владимир Яковлевич Шур
29/05/2018
1 Media contribution

Новые напечатанные на принтере наноструктуры способны генерировать электрический ток

Константин Николаевич Романюк, Семен Григорьевич Васильев, Павел Сергеевич Зеленовский, Владимир Яковлевич Шур & Андрей Леонидович Холкин
26/03/2018
1 Media contribution

Applied Materials : Researchers at ITMO University Report New Data on Applied Materials & Interfaces (Diphenylalanine-Based Microribbons for Piezoelectric...

Константин Николаевич Романюк, Семен Григорьевич Васильев, Павел Сергеевич Зеленовский, Владимир Яковлевич Шур & Андрей Леонидович Холкин
29/03/2018
1 Media contribution

Владимир Шур стал профессором года

Владимир Яковлевич Шур

28/03/2018
1 Media contribution

University Scientists Will Show Wings of Rare Butterflies

Владимир Яковлевич Шур
16/03/2018
1 Media contribution

Pyroelectric peptide microtubes turn heat to electric currents

V. Y. Shur, E. M. Vaskina, E. V. Pelegova, M. A. Chuvakova, A. R. Akhmatkhanov, M. Ivanov & A. L. Kholkin
05/10/2016
1 Media contribution

Bundles of Microtubes Developed by Peptides Convert Thermal Energy into Electrical Energy

V. Y. Shur, E. M. Vaskina, E. V. Pelegova, M. A. Chuvakova, A. R. Akhmatkhanov, M. Ivanov & A. L. Kholkin
05/10/2016
1 Media contribution

Physicists and Biologists of the University will Use Bioprinting in their Work

Vladimir Shur
09/02/2018
1 Media contribution

Уральские ученые скоро будут печатать человеческую кожу на "принтере"

Владимир Яковлевич Шур
09/02/2018
1 Media contribution

Физики и биологи университета займутся биопринтингом

Владимир Яковлевич Шур
08/02/2018
1 Media contribution

В университете умеют создавать в сегнетоэлектриках нанометровые области с увеличенной проводимостью

Александр Андреевич Есин, Андрей Ришатович Ахматханов, Екатерина Михайловна Васькина & Владимир Яковлевич Шур
31/08/2017
1 Media contribution

Вуз улучшил показатели в рейтинге открытости вузов по версии Webometrics

Андрей Леонидович Холкин, Владимир Яковлевич Шур, Эльвира Эвальдовна Сыманюк, Вячеслав Яковлевич Сосновских, Гарольд Ефимович Зборовский, Михаил Владимирович Волков, Наталия Александровна Купина & Владимир Дмитриевич Селезнев
18/07/2017
1 Media contribution

ЧЕТВЕРТЫЙ ВСЕРОССИЙСКИЙ КОНКУРС "НАУКА - ОБЩЕСТВУ - 2005"

Александр Александрович Остроушко & Владимир Яковлевич Шур
31/01/2006
1 Media contribution

Владимир Шур удостоен звания почётного члена Института инженеров электротехники и электроники

Владимир Яковлевич Шур
26/09/2016
1 Media contribution

Ученые университета вновь включили вуз в десятку лучших в России

Владимир Яковлевич Шур, Вячеслав Яковлевич Сосновских, Эльвира Эвальдовна Сыманюк, Михаил Владимирович Волков, Владимир Дмитриевич Селезнев, Алексей Олегович Иванов, Гарольд Ефимович Зборовский & Василий Алексеевич Бакулев

01/02/2017

1 Media contribution

Между тигром и драконом

Владимир Яковлевич Шур

14/09/2015

1 Media contribution