

Research outputs

1. Bystrov, V., Paramonova, E. V., Zelenovskii, P., Kopyl, S., Shen, H., Lin, T., & Fridkin, V. (2023). Photoelectronic Properties of Chiral Self-Assembled Diphenylalanine Nanotubes: A Computational Study. *Symmetry*, *15*(2), [504]. <https://doi.org/10.3390/sym15020504>
2. Kulachenkov, N., Barsukova, M., Alekseevskiy, P., Sapiyanik, A. A., Sergeev, M., Yankin, A., Krasilin, A. A., Bachinin, S., Shipilovskikh, S., Poturaev, P., Medvedeva, N., Denislamova, E., Zelenovskiy, P. S., Shilovskikh, V. V., Kenzhebayeva, Y., Efimova, A., Novikov, A. S., Lunev, A., Fedin, V. P., & Milichko, V. A. (2022). Dimensionality Mediated Highly Repeatable and Fast Transformation of Coordination Polymer Single Crystals for All-Optical Data Processing. *Nano Letters*, *22*(17), 6972-6981. <https://doi.org/10.1021/acs.nanolett.2c01770>
3. Romanyuk, K., Slabov, V., Alikin, D., Zelenovskiy, P., Correia, M. R. P., Keller, K., Ferreira, R. A. S., Vasilev, S., Kopyl, S., & Kholkin, A. (2022). Piezoactive dense diphenylalanine thin films via solid-phase crystallization. *Applied Materials Today*, *26*, [101261]. <https://doi.org/10.1016/j.apmt.2021.101261>
4. Zelenovskii, P. S., Romanyuk, K., Liberato, M. S., Brandão, P., Ferreira, F. F., Kopyl, S., Mafra, L. M., Alves, W. A., & Kholkin, A. L. (2021). 2D Layered Dipeptide Crystals for Piezoelectric Applications. *Advanced Functional Materials*, *31*(43), [2102524]. <https://doi.org/10.1002/adfm.202102524>
5. Bystrov, V., Sidorova, A., Lutsenko, A., Shpigun, D., Malyshko, E., Nuraeva, A., Zelenovskiy, P., Kopyl, S., & Kholkin, A. (2021). Modeling of self-assembled peptide nanotubes and determination of their chirality sign based on dipole moment calculations. *Nanomaterials*, *11*(9), [2415]. <https://doi.org/10.3390/nano11092415>
6. Kurochka, K. V., Melnikova, N. V., Alikin, D. O., Tebenkov, A. V., Korobeynikov, I. V., & Zelenovskiy, P. S. (2021). Glassy chalcogenide composites under high pressure. *Journal of Physics and Chemistry of Solids*, *152*, [109954]. <https://doi.org/10.1016/j.jpics.2021.109954>
7. Shishkina, E. V., Greshnyakov, E. D., Zelenovskiy, P. S., Yuzhakov, V. V., Ivleva, L. I., & Shur, V. Y. (2021). Micro-Raman domain imaging in calcium orthovanadate single crystals. *Ferroelectrics*, *576*(1), 85-93. <https://doi.org/10.1080/00150193.2021.1888264>
8. 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). Modeling and physical properties of diphenylalanine peptide nanotubes containing water molecules. *Ferroelectrics*, *574*(1), 78-91. <https://doi.org/10.1080/00150193.2021.1888051>
9. Bystrov, V., Coutinho, J., Zelenovskiy, P., Nuraeva, A., Kopyl, S., Zhulyabina, O., & Tverdislov, V. (2020). Structures and properties of the self-assembling diphenylalanine peptide nanotubes containing water molecules: Modeling and data analysis. *Nanomaterials*, *10*(10), 1-21. [1999]. <https://doi.org/10.3390/nano10101999>
10. Zelenovskiy, P., Yuzhakov, V., Nuraeva, A., Kornev, M., Shur, V. Y., Kopyl, S., Kholkin, A., Vasilev, S., & Tofail, S. A. M. (2020). The effect of water molecules on elastic and piezoelectric properties of diphenylalanine microtubes. *IEEE Transactions on Dielectrics and Electrical Insulation*, *27*(5), 1474-1477. [9215095]. <https://doi.org/10.1109/TDEI.2020.008921>
11. Rezvukhina, O. V., Korsakov, A. V., Rezvukhin, D. I., Zamyatin, D. A., Zelenovskiy, P. S., Greshnyakov, E. D., & Shur, V. Y. (2020). A combined Raman spectroscopy, cathodoluminescence, and electron backscatter diffraction study of kyanite porphyroblasts from diamondiferous and diamond-free metamorphic rocks (Kokchetav massif). *Journal of Raman Spectroscopy*, *51*(9), 1425-1437. <https://doi.org/10.1002/jrs.5757>
12. Alifirova, T., Rezvukhin, D., Nikolenko, E., Pokhilenko, L., Zelenovskiy, P., Sharygin, I., Korsakov, A., & Shur, V. (2020). Micro-Raman study of crichtonite group minerals enclosed into mantle garnet. *Journal of Raman Spectroscopy*, *51*(9), 1493-1512. <https://doi.org/10.1002/jrs.5979>
13. Musiyachenko, K. A., Korsakov, A. V., Shimizu, R., Zelenovskiy, P. S., & Shur, V. Y. (2020). New insights on Raman spectrum of K-bearing tourmaline. *Journal of Raman Spectroscopy*, *51*(9), 1415-1424. <https://doi.org/10.1002/jrs.5731>
14. Vasilev, S., Vodyashkin, A., Vasileva, D., Zelenovskiy, P., Chezganov, D., Yuzhakov, V., Shur, V., O'reilly, E., & Vinogradov, A. (2020). An investigative study on the effect of pre-coating polymer solutions on the fabrication of low cost anti-adhesive release paper. *Nanomaterials*, *10*(8), 1-12. [1436]. <https://doi.org/10.3390/nano10081436>
15. Zelenovskiy, P. S., Domingues, E. M., Slabov, V., Kopyl, S., Ugolkov, V. L., Figueiredo, F. M. L., & Kholkin, A. L. (2020). Efficient Water Self-Diffusion in Diphenylalanine Peptide Nanotubes. *ACS applied materials & interfaces*, *12*(24), 27485-27492. <https://doi.org/10.1021/acsami.0c03658>
16. Krylov, A., Krylova, S., Kopyl, S., Krylov, A., Salehli, F., Zelenovskiy, P., Vtyurin, A., & Kholkin, A. (2020). Raman spectra of diphenylalanine microtubes: Polarisation and temperature effects. *Crystals*, *10*(3), [224]. <https://doi.org/10.3390/cryst10030224>
17. Omar, R., En Naciri, A., Fahes, A., Jradi, S., Issa, A., Kuznetsov, D., Shur, V., Zelenovskiy, P., Battie, Y., & Akil, S. (2020). Precise control of the size and gap between gold nanocubes by surface-based synthesis for high SERS performance. *Soft Matter*, *16*(7), 1857-1865. <https://doi.org/10.1039/c9sm02405k>

18. Chezganov, D. S., Shur, V. Y., Shikhova, V. A., Fedorovych, V. V., Vlasov, E. O., Chuvakova, M. A., Nebogatikov, M. S., Zelenovskiy, P. S., Kholkin, A. L., & Ivleva, L. I. (2020). Domain switching by electron beam irradiation in SBN61:Ce single crystals covered by dielectric layer. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, *67*(1), 191-196. [8821404]. <https://doi.org/10.1109/TUFFC.2019.2938451>
19. Bystrov, V. S., Coutinho, J., Zelenovskiy, P. S., Nuraeva, A. S., Kopyl, S., Filippov, S. V., Zhulyabina, O. A., & Tverdislov, V. A. (2020). Molecular modeling and computational study of the chiral-dependent structures and properties of the self-assembling diphenylalanine peptide nanotubes, containing water molecules. *Journal of Molecular Modeling*, *26*(11), [326]. <https://doi.org/10.1007/s00894-020-04564-5>
20. Hu, Q., Alikin, D. O., Zelenovskiy, P. S., Ushakov, A. D., Chezganov, D. S., Bian, J., Zhao, Y., Tian, Y., Zhuang, Y., Li, J., Jin, L., Xu, Z., Ya. Shur, V., & Wei, X. (2019). Phase distribution and corresponding piezoelectric responses in a morphotropic phase boundary $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3\text{-PbTiO}_3$ single crystal revealed by confocal Raman spectroscopy and piezo-response force microscopy. *Journal of the European Ceramic Society*, *39*(14), 4131-4138. <https://doi.org/10.1016/j.jeurceramsoc.2019.05.046>
21. Zelenovskiy, P. S., Nuraeva, A. S., Arkhipov, S. G., Vasilev, S. G., Bystrov, V. S., Gruzdev, D. A., Waliczek, M., Svitlyk, V., Shur, V. Y., Mafra, L., Kholkin, A. L., & Kopyl, S. A. (2019). Chirality-Dependent Growth of Self-Assembled Diphenylalanine Microtubes. *Crystal Growth and Design*, *19*(11), 6414-6421. <https://doi.org/10.1021/acs.cgd.9b00884>
22. Yang, L., Antanovich, A., Prudnikau, A., Taniya, O. S., Grzhegorzhevskii, K. V., Zelenovskiy, P., Terpinskaya, T., Tang, J., & Artemyev, M. (2019). Highly luminescent Zn-Cu-In-S/ZnS core/gradient shell quantum dots prepared from indium sulfide by cation exchange for cell labeling and polymer composites. *Nanotechnology*, *30*(39), [395603]. <https://doi.org/10.1088/1361-6528/ab2aa2>
23. Bystrov, V. S., Zelenovskiy, P. S., Nuraeva, A. S., Zhulyabina, O. A., Tverdislov, V. A., & Kopyl, S. A. (2019). Molecular modeling and computational study of the chiral-dependent structures and properties of self-assembling diphenylalanine peptide nanotubes. *Journal of Molecular Modeling*, *25*(7), [199]. <https://doi.org/10.1007/s00894-019-4080-x>
24. Shchepetova, O. V., Korsakov, A. V., Zelenovskiy, P. S., & Mikhailenko, D. S. (2019). The Mechanism of Disordered Graphite Formation in UHP Diamond-Bearing Complexes. *Doklady Earth Sciences*, *484*(1), 84-88. <https://doi.org/10.1134/S1028334X19010148>
25. Sokolovsky, D. N., Zelenovskiy, P. S., & Volkova, Y. Y. (2019). Effect of High Pressures on the Electrical and Structural Properties of Fullerene C_{70} . *Bulletin of the Russian Academy of Sciences: Physics*, *83*(6), 730-732. <https://doi.org/10.3103/S1062873819060273>
26. Slabov, V., Vasileva, D., Keller, K., Vasilev, S., Zelenovskiy, P., Kopyl, S., Shur, V. Y., Vinogradov, A., & Kholkin, A. L. (2019). Controlled Growth of Stable β -Glycine via Inkjet Printing. *Crystal Growth and Design*, *19*(7), 3869-3875. <https://doi.org/10.1021/acs.cgd.9b00308>
27. Zelenovskii, P., Romanyuk, K., Vidyasagar, R., Akhmatkhanov, A., Zhao, P., Shur, V. Y., & Kholkin, A. L. (2019). Effect of ferroelectric domains on electric properties of single layer graphene. *Ferroelectrics*, *542*(1), 93-101. <https://doi.org/10.1080/00150193.2019.1574669>
28. Zelenovskiy, P. S., Chezganov, D. S., Greshnyakov, E. D., Gimadeeva, L. V., Soluyanov, D., Pelegov, D. V., & Shur, V. Y. (2019). Raman study of pyroelectric and injected charge induced fields in PLZT 8/65/35 ceramics. *Ferroelectrics*, *542*(1), 102-111. <https://doi.org/10.1080/00150193.2019.1574670>
29. Grzhegorzhevskii, K. V., Zelenovskiy, P. S., Koryakova, O. V., & Ostroushko, A. A. (2019). Thermal destruction of giant polyoxometalate nanoclusters: A vibrational spectroscopy study. *Inorganica Chimica Acta*, *489*, 287-300. <https://doi.org/10.1016/j.ica.2019.01.016>
30. Zelenovskiy, P., Greshnyakov, E., Chezganov, D., Gimadeeva, L., Vlasov, E., Hu, Q., Wei, X., & Shur, V. (2019). Micro-Raman imaging of ferroelectric domain structures in the bulk of PMN-PT single crystals. *Crystals*, *9*(2), [65]. <https://doi.org/10.3390/cryst9020065>
31. Bystrov, V. S., Zelenovskiy, P. S., Nuraeva, A. S., Kopyl, S., Zhulyabina, O. A., & Tverdislov, V. A. (2019). Chiral peculiar properties of self-organization of diphenylalanine peptide nanotubes: Modeling of structure and properties. *Математическая биология и биоинформатика*, *14*(1), 94-125. <https://doi.org/10.17537/2019.14.94>
32. Соколовский, Д. Н., Зеленовский, П. С., & Волкова, Я. Ю. (2019). ВЛИЯНИЕ ВЫСОКОГО ДАВЛЕНИЯ НА ЭЛЕКТРИЧЕСКИЕ И СТРУКТУРНЫЕ СВОЙСТВА ФУЛЛЕРЕНА C_{70} . *Известия Российской академии наук. Серия физическая*, *83*(6), 803-805. <https://doi.org/10.1134/S0367676519060280>
33. Щепетова, О. В., Корсаков, А. В., Зеленовский, П. С., & Михайленко, Д. С. (2019). К ВОПРОСУ О МЕХАНИЗМЕ ОБРАЗОВАНИЯ РАЗУПОРЯДОЧЕННОГО ГРАФИТА В АЛМАЗОНОСНЫХ КОМПЛЕКСАХ СВЕРХВЫСОКИХ ДАВЛЕНИЙ. *Доклады Академии наук*, *484*(2), 215-219. <https://doi.org/10.31857/S0869-56524842215-219>
34. Зеленовский, П. С., & Волкова, Я. Ю. (Ed.) (2019). *Основы интегральной и волоконной оптики: учебное пособие*. Издательство Уральского университета. <http://hdl.handle.net/10995/68355>
35. Hu, Q., Bian, J., Zelenovskiy, P. S., Tian, Y., Jin, L., Wei, X., Xu, Z., & Shur, V. Y. (2018). Symmetry changes during relaxation process and pulse discharge performance of the $\text{BaTiO}_3\text{-Bi}(\text{Mg}_{1/2}\text{Ti}_{1/2})\text{O}_3$ ceramic. *Journal of Applied Physics*, *124*(5), [054101]. <https://doi.org/10.1063/1.5030381>

36. Antanovich, A., Prudnikau, A., Grzhegorzhevskii, K., Zelenovskiy, P., Ostroushko, A., Kuznetsov, M. V., Chuvilin, A., & Artemyev, M. V. (2018). Colloidal branched CdSe/CdS 'nanospiders' with 2D/1D heterostructure. *Nanotechnology*, 29(39), [395604]. <https://doi.org/10.1088/1361-6528/aad29c>
37. Demin, A. M., Mekhaev, A. V., Esin, A. A., Kuznetsov, D. K., Zelenovskiy, P. S., Shur, V. Y., & Krasnov, V. P. (2018). Immobilization of PMIDA on Fe₃O₄ magnetic nanoparticles surface: Mechanism of bonding. *Applied Surface Science*, 440, 1196-1203. <https://doi.org/10.1016/j.apsusc.2018.01.147>
38. Safaryan, S., Slabov, V., Kopyl, S., Romanyuk, K., Bdikin, I., Vasilev, S., Zelenovskiy, P., Shur, V. Y., Uslamin, E. A., Pidko, E. A., Vinogradov, A. V., & Kholkin, A. L. (2018). Diphenylalanine-Based Microribbons for Piezoelectric Applications via Inkjet Printing. *ACS Applied Materials and Interfaces*, 10(12), 10543-10551. <https://doi.org/10.1021/acsami.7b19668>
39. Bystrov, V. S., Kopyl, S. A., Zelenovskiy, P., Zhulyabina, O. A., Tverdislov, V. A., Salehli, F., Ghermani, N. E., Shur, V. Y., & Kholkin, A. L. (2018). Investigation of physical properties of diphenylalanine peptide nanotubes having different chiralities and embedded water molecules. *Ferroelectrics*, 525(1), 168-177. <https://doi.org/10.1080/00150193.2018.1432832>
40. Zelenovskiy, P. S., Koryukova, T. A., Yuzhakov, V. V., Vasilev, S. G., Nuraeva, A. S., Gunina, E. V., Chezganov, D. S., Kholkin, A. L., & Shur, V. Y. (2018). Piezoelectric properties and Young's moduli of diphenylalanine microtubes—oxide nanoparticles composites. *Ferroelectrics*, 525(1), 146-155. <https://doi.org/10.1080/00150193.2018.1432826>
41. Zelenovskiy, P. S. (2018). Dispersion relations and lattice dynamics of diphenylalanine nanotubes. *Journal of Physics: Conference Series*, 1092, [012172]. <https://doi.org/10.1088/1742-6596/1092/1/012172>
42. Gruzdev, D. A., Nuraeva, A. S., Slepukhin, P. A., Levit, G. L., Zelenovskiy, P. S., Shur, V. Y., & Krasnov, V. P. (2018). Piezoactive amino acid derivatives containing fragments of planar-chiral ortho-carboranes. *Journal of Materials Chemistry C*, 6(32), 8638-8645. <https://doi.org/10.1039/c8tc02266f>
43. Осадченко, В. Х., Волкова, Я. Ю., Германенко, А. В., Зеленовский, П. С., & Волкова, Я. Ю. (Ed.) (2018). *Базовые элементы цифровой техники: учебно-методическое пособие*. Издательство Уральского университета. <http://hdl.handle.net/10995/62198>
44. Shchepetova, O. V., Korsakov, A., Mikhailenko, D., Zelenovskiy, P., Shur, V., & Ohfuji, H. (2017). Forbidden mineral assemblage coesite-disordered graphite in diamond-bearing kyanite gneisses (Kokchetav Massif). *Journal of Raman Spectroscopy*, 48(11), 1606-1612. <https://doi.org/10.1002/jrs.5167>
45. Nikolenko, E. I., Sharygin, I. S., Alifirova, T. A., Korsakov, A. V., Zelenovskiy, P. S., & Shur, V. Y. (2017). Graphite-bearing mineral assemblages in the mantle beneath Central Aldan superterrane of North Asian craton: combined confocal micro-Raman and electron microprobe characterization. *Journal of Raman Spectroscopy*, 48(11), 1597-1605. <https://doi.org/10.1002/jrs.5163>
46. Yushina, I. D., Batalov, V. I., Bartashevich, E. V., Davydov, A. O., Zelenovskiy, P. S., & Masunov, A. E. (2017). Raman spectroscopy and theoretic study of hyperpolarizability effect in diiodobutenyl-bis-thioquinolinium triiodide at low temperature. *Journal of Raman Spectroscopy*, 48(11), 1411-1413. <https://doi.org/10.1002/jrs.5159>
47. Zelenovskiy, P. S., Krylov, A. S., Kholkin, A. L., & Davydov, A. O. (2017). Raman study of structural transformations in self-assembled diphenylalanine nanotubes at elevated temperatures. *Journal of Raman Spectroscopy*, 48(11), 1401-1405. <https://doi.org/10.1002/jrs.5084>
48. Zelenovskiy, P. S., Yuzhakov, V. V., Vasilev, S. G., Kholkin, A. L., & Ya Shur, V. (2017). Local Young's moduli of as-grown and annealed diphenylalanine nanotubes. *IOP Conference Series: Materials Science and Engineering*, 256(1), [012012]. <https://doi.org/10.1088/1757-899X/256/1/012012>
49. Hu, Q., Jin, L., Zelenovskiy, P. S., Shur, V. Y., Zhuang, Y., Xu, Z., & Wei, X. (2017). Relaxation behavior and electrical inhomogeneity in 0.9BaTiO₃-0.1Bi(Mg_{1/2}Ti_{1/2})O₃ ceramic. *Ceramics International*, 43(15), 12828-12834. <https://doi.org/10.1016/j.ceramint.2017.06.173>
50. Vigorov, A. Y., Gruzdev, D. A., Nuraeva, A. S., Chulakov, E. N., Sadretdinova, L. S., Slepukhin, P. A., Zelenovskiy, P. S., Shur, V. Y., Krasnov, V. P., & Ustinova, V. O. (2017). Synthesis and piezoelectric properties of N-phthaloylglutamic acid derivatives. *Russian Chemical Bulletin*, 66(8), 1439-1445. <https://doi.org/10.1007/s11172-017-1905-6>
51. Seyedhosseini, E., Romanyuk, K., Vasileva, D., Vasilev, S., Nuraeva, A., Zelenovskiy, P., Ivanov, M., Morozovska, A. N., Shur, V. Y., Lu, H., Gruverman, A., & Kholkin, A. L. (2017). Self-Assembly of Organic Ferroelectrics by Evaporative Dewetting: A Case of beta-Glycine. *ACS Applied Materials and Interfaces*, 9(23), 20029-20037. <https://doi.org/10.1021/acsami.7b02952>
52. Pelegov, D. V., Slautin, B. N., Gorshkov, V. S., Zelenovskiy, P. S., Kiselev, E. A., Kholkin, A. L., & Shur, V. Y. (2017). Raman spectroscopy, "big data", and local heterogeneity of solid state synthesized lithium titanate. *Journal of Power Sources*, 346, 143-150. <https://doi.org/10.1016/j.jpowsour.2017.02.024>
53. Shur, V. Y., Akhmatkhanov, A. R., Chuvakova, M. A., Dolbilov, M. A., Zelenovskiy, P. S., & Lobov, A. I. (2017). Formation of self-organized domain structures with charged domain walls in lithium niobate with surface layer modified by proton exchange. *Journal of Applied Physics*, 121(10), [104101]. <https://doi.org/10.1063/1.4978014>

54. Nuraeva, A. S., Zelenovskiy, P. S., Slashchev, A., Gruzdev, D. A., Slepukhin, P. A., Olshevskaya, V. A., Krasnov, V. P., & Shur, V. Y. (2017). Morphology and piezoelectric characterization of thin films and microcrystals of ortho-carboranyl derivatives of (S)-glutamine and (S)-asparagine. *Ferroelectrics*, *509*(1), 113-123. <https://doi.org/10.1080/00150193.2017.1295430>
55. Pelegov, D. V., Slautin, B. N., Zelenovskiy, P. S., Kuznetsov, D. K., Kiselev, E. A., Alikin, D. O., Kholkin, A. L., & Shur, V. Y. (2017). Single particle structure characterization of solid-state synthesized $\text{Li}_4\text{Ti}_5\text{O}_{12}$. *Journal of Raman Spectroscopy*, *48*(2), 278-283. <https://doi.org/10.1002/jrs.4999>
56. Ivanov, M., Bak, O., Kopyl, S., Vasilev, S., Zelenovskiy, P., Shur, V., Gruverman, A., & Kholkin, A. (2017). High Resolution Piezoresponse Force Microscopy Study of Self-Assembled Peptide Nanotubes. *MRS Advances*, *2*(2), 63-69. <https://doi.org/10.1557/adv.2016.658>
57. Shur, V. Y., Zelenovskiy, P., & Bourson, P. (2017). Investigation of domain walls in PPLN by confocal raman microscopy and PCA analysis. In *5TH INTERNATIONAL CONFERENCE NEW ACHIEVEMENTS IN MATERIALS AND ENVIRONMENTAL SCIENCE (NAMES'16)* (Journal of Physics Conference Series; Vol. 879). Institute of Physics Publishing (IOP). <https://doi.org/10.1088/1742-6596/879/1/012001>
58. Соколовский, Д. Н., Волкова, Я. Ю., Зеленовский, П. С., & Бабушкин, А. Н. (2017). ВЛИЯНИЕ ВЫСОКОГО ДАВЛЕНИЯ НА ЭЛЕКТРИЧЕСКОЕ СОПРОТИВЛЕНИЕ И СТРУКТУРУ ДВУСТЕННЫХ УГЛЕРОДНЫХ НАНОТРУБОК. *Известия высших учебных заведений. Серия: Химия и химическая технология*, *60*(9), 52-56. <https://doi.org/10.6060/tcct.2017609.8y>
59. Устинова, В. О., Вигоров, А. Ю., Груздев, Д. А., Нураева, А. С., Низова, И. А., Чулаков, Е. Н., Садретдинова, Л. Ш., Слепухин, П. А., Зеленовский, П. С., Шур, В. Я., & Краснов, В. П. (2017). СИНТЕЗ И ПЬЕЗОЭЛЕКТРИЧЕСКИЕ СВОЙСТВА ПРОИЗВОДНЫХ N-ФТАЛОИЛГЛУТАМИНОВОЙ КИСЛОТЫ. *Известия Академии наук. Серия химическая*, (8), 1439-1445.
60. Zelenovskiy, P., Kornev, I., Vasilev, S., & Kholkin, A. (2016). On the origin of the great rigidity of self-assembled diphenylalanine nanotubes. *Physical Chemistry Chemical Physics*, *18*(43), 29681-29685. <https://doi.org/10.1039/c6cp04337b>
61. Mikhailenko, D. S., Korsakov, A. V., Zelenovskiy, P. S., & Golovin, A. V. (2016). Graphite-diamond relations in mantle rocks: Evidence from an eclogitic xenolith from the Udachnaya kimberlite (Siberian Craton). *American mineralogist*, *101*(9-10), 2155-2167. <https://doi.org/10.2138/am-2016-5657>
62. Mikhailenko, D. S., Korsakov, A. V., Golovin, A. V., Zelenovskiy, P. S., & Pohilenko, N. P. (2016). The first finding of graphite inclusion in diamond from mantle rocks: The result of the study of eclogite xenolith from Udachnaya pipe (Siberian craton). *Doklady Earth Sciences*, *469*(2), 870-873. <https://doi.org/10.1134/S1028334X16080250>
63. Vasilev, S., Zelenovskiy, P., Vasileva, D., Nuraeva, A., Shur, V. Y., & Kholkin, A. L. (2016). Piezoelectric properties of diphenylalanine microtubes prepared from the solution. *Journal of Physics and Chemistry of Solids*, *93*, 68-72. <https://doi.org/10.1016/j.jpics.2016.02.002>
64. Bystrov, V. S., Seyedhosseini, E., Bdikin, I. K., Kopyl, S., Kholkin, A. L., Vasilev, S. G., Zelenovskiy, P. S., Vasileva, D. S., & Shur, V. Y. (2016). Glycine nanostructures and domains in beta-glycine: Computational modeling and PFM observations. *Ferroelectrics*, *496*(1), 28-45. <https://doi.org/10.1080/00150193.2016.1157435>
65. Neradovskiy, M. M., Shur, V. Y., Mingaliev, E. A., Zelenovskiy, P. S., Ushakova, E. S., Tronche, H., Baldi, P., & De Micheli, M. P. (2016). Investigation of domain kinetics in congruent lithium niobate modified by proton exchange. *Ferroelectrics*, *496*(1), 110-119. <https://doi.org/10.1080/00150193.2016.1155036>
66. Nuraeva, A. S., Vasileva, D. S., Vasilev, S. G., Zelenovskiy, P. S., Gruzdev, D. A., Krasnov, V. P., Olshevskaya, V. A., Kalinin, V. N., & Shur, V. Y. (2016). Piezoelectric and ferroelectric properties of organic single crystals and films derived from chiral 2-methoxy and 2-amino acids. *Ferroelectrics*, *496*(1), 1-9. <https://doi.org/10.1080/00150193.2016.1155037>
67. Zelenovskiy, P., Vasileva, D., Nuraeva, A., Vasilev, S., Khazamov, T., Dikushina, E., Shur, V. Y., & Kholkin, A. L. (2016). Spin coating formation of self-assembled ferroelectric β -glycine films. *Ferroelectrics*, *496*(1), 10-19. <https://doi.org/10.1080/00150193.2016.1157434>
68. Da Cunha Rodrigues, G., Zelenovskiy, P., Romanyuk, K., Luchkin, S., Kopelevich, Y., & Kholkin, A. (2016). Correspondence: Reply to 'On the nature of strong piezoelectricity in graphene on SiO₂'. *Nature Communications*, *7*, [11571]. <https://doi.org/10.1038/ncomms11571>
69. Shur, V. Y., Kosobokov, M. S., Mingaliev, E. A., Kuznetsov, D. K., & Zelenovskiy, P. S. (2016). Formation of snowflake domains during fast cooling of lithium tantalate crystals. *Journal of Applied Physics*, *119*(14), [144101]. <https://doi.org/10.1063/1.4945671>
70. Nuraeva, A., Vasilev, S., Vasileva, D., Zelenovskiy, P., Chezganov, D., Esin, A., Kopyl, S., Romanyuk, K., Shur, V. Y., & Kholkin, A. L. (2016). Evaporation-Driven Crystallization of Diphenylalanine Microtubes for Microelectronic Applications. *Crystal Growth and Design*, *16*(3), 1472-1479. <https://doi.org/10.1021/acs.cgd.5b01604>

71. Шур, В. Я., Абрамов, А. С., Аликин, Д. О., Батулин, И. С., Есин, А. А., Зеленовский, П. С., Кособоков, М. С., Линкер, Э. А., Макарова, С. А., Мингалиев, Е. А., Пелегова, Е. В., Пряхина, В. И., Слаутин, Б. Н., Турыгин, А. П., Ушаков, А. Д., Холкин, А. Л., & Чезганов, Д. С. (2016). *Исследование доменной структуры и фазового состава легированных бессвинцовых пьезокерамик на основе BiFeO_3 и $(\text{K,Na})\text{NbO}_3$: Экспериментальные исследования, обобщение результатов : Этап 2 (заключительный)*. Федеральное государственное автономное образовательное учреждение высшего профессионального образования "Уральский федеральный университет им. первого Президента России Б.Н. Ельцина". <http://elar.urfu.ru/handle/10995/47132>
72. Михайленко, Д. С., Корсаков, А. В., Головин, А. В., Зеленовский, П. С., & Похиленко, Н. П. (2016). ПЕРВАЯ НАХОДКА ВКЛЮЧЕНИЙ ГРАФИТА В АЛМАЗЕ ИЗ МАНТИЙНЫХ ПОРОД: ПО ДАННЫМ ИЗУЧЕНИЯ КСЕНОЛИТА ЭКЛОГИТА ИЗ КИМБЕРЛИТОВОЙ ТРУБКИ УДАЧНАЯ (СИБИРСКИЙ КРАТОН). *Доклады Академии наук*, 469(6), 717-720. <https://doi.org/10.7868/S086956521624021X>
73. Соколовский, Д. Н., Волкова, Я. Ю., Зеленовский, П. С., & Бабушкин, А. Н. (2016). Фазовые превращения углеродных нанотрубок при высоких давлениях. *Физическое образование в ВУЗах*, 22(S1), 19-21.
74. Korsakov, A. V., Toporski, J., Dieing, T., Yang, J., & Zelenovskiy, P. S. (2015). Internal diamond morphology: Raman imaging of metamorphic diamonds. *Journal of Raman Spectroscopy*, 46(10), 880-888. <https://doi.org/10.1002/jrs.4738>
75. Seyedhosseini, E., Kholkin, A. L., Vasileva, D., Nuraeva, A., Vasilev, S., Zelenovskiy, P., & Shur, V. Y. (2015). Patterning and Nanoscale Characterization of Ferroelectric Amino Acid Beta-glycine. In *2015 Joint IEEE International Symposium on the Applications of Ferroelectric, International Symposium on Integrated Functionalities and Piezoelectric Force Microscopy Workshop, ISAF/ISIF/PFM 2015* (pp. 207-210). [7172707] Institute of Electrical and Electronics Engineers Inc.. <https://doi.org/10.1109/ISAF.2015.7172707>
76. Volkova, Y. Y., Sokolovsky, D. N., Zelenovsky, P. S., & Babushkin, A. N. (2015). Conductivity of double-walled carbon nanotubes at pressures of up to 30 GPa. *Bulletin of the Russian Academy of Sciences: Physics*, 79(6), 740-742. <https://doi.org/10.3103/S1062873815060374>
77. Rodrigues, G. D. C., Zelenovskiy, P., Romanyuk, K., Luchkin, S., Kopelevich, Y., & Kholkin, A. (2015). Strong piezoelectricity in single-layer graphene deposited on SiO_2 grating substrates. *Nature Communications*, 6, [7572]. <https://doi.org/10.1038/ncomms8572>
78. Trivedi, H., Shvartsman, V. V., Lupascu, D. C., Medeiros, M. S. A., Pullar, R. C., Kholkin, A. L., Zelenovskiy, P., Sosnovskikh, A., & Shur, V. Y. (2015). Local manifestations of a static magnetoelectric effect in nanostructured BaTiO_3 - BaFe_2O_9 composite multiferroics. *Nanoscale*, 7(10), 4489-4496. <https://doi.org/10.1039/c4nr05657d>
79. Shur, V. Y., Neradovskiy, M. M., Dolbilov, M. A., Lobov, A. I., Zelenovskiy, P. S., Ushakov, A. D., Ushakova, E. S., Quillier, E., Baldi, P., & De Micheli, M. P. (2015). Formation of broad domain boundary in congruent lithium niobate modified by proton exchange. *Ferroelectrics*, 476(1), 146-155. <https://doi.org/10.1080/00150193.2015.998946>
80. Zelenovskiy, P. S., Shur, V. Y., Nuraeva, A. S., Vasilev, S. G., Vasileva, D. S., Alikin, D. O., Chezmanov, D. S., Krasnov, V. P., & Kholkin, A. L. (2015). Morphology and piezoelectric properties of diphenylalanine microcrystals grown from methanol-water solution. *Ferroelectrics*, 475(1), 127-134. <https://doi.org/10.1080/00150193.2015.995577>
81. Volkova, Y. Y., Sokolovsky, D. N., Zelenovsky, P. S., Andreeva, A. G., & Babushkin, A. N. (2015). Structural transitions in double-walled carbon nanotubes at high pressure. *Journal of Physics: Conference Series*, 653(1), [012097]. <https://doi.org/10.1088/1742-6596/653/1/012097>
82. Соколовский, Д. Н., Волкова, Я. Ю., Зеленовский, П. С., & Бабушкин, А. Н. (2015). ПРОВОДИМОСТЬ ДВУСТЕННЫХ УГЛЕРОДНЫХ НАНОТРУБОК ПРИ ВЫСОКИХ ДАВЛЕНИЯХ. *Физическое образование в ВУЗах*, 21(1), 56.
83. Волкова, Я. Ю., Соколовский, Д. Н., Зеленовский, П. С., & Бабушкин, А. Н. (2015). ПРОВОДИМОСТЬ ДВУСТЕННЫХ УГЛЕРОДНЫХ НАНОТРУБОК ПРИ ДАВЛЕНИЯХ ДО 30 ГПА. *Известия Российской академии наук. Серия физическая*, 79(6), 817. <https://doi.org/10.7868/S0367676515060411>
84. Shur, V. Y., & Zelenovskiy, P. S. (2014). Micro- and nanodomain imaging in uniaxial ferroelectrics: Joint application of optical, confocal Raman, and piezoelectric force microscopy. *Journal of Applied Physics*, 116(6), [066802]. <https://doi.org/10.1063/1.4891397>
85. Isakov, D., Petukhova, D., Vasilev, S., Nuraeva, A., Khazamov, T., Seyedhosseini, E., Zelenovskiy, P., Shur, V. Y., & Kholkin, A. L. (2014). In Situ Observation of the Humidity Controlled Polymorphic Phase Transformation in Glycine Microcrystals. *Crystal Growth and Design*, 14(8), 4138-4142. <https://doi.org/10.1021/cg500747x>
86. Seyedhosseini, E., Ivanov, M., Bystrov, V., Bdikin, I., Zelenovskiy, P., Shur, V. Y., Kudryavtsev, A., Mishina, E. D., Sigov, A. S., & Kholkin, A. L. (2014). Growth and Nonlinear Optical Properties of beta-Glycine Crystals Grown on Pt Substrates. *Crystal Growth and Design*, 14(6), 2831-2837. <https://doi.org/10.1021/cg500111a>
87. Isakov, D., de Matos Gomes, E., Almeida, B., Kholkin, A. L., Zelenovskiy, P., Neradovskiy, M., & Shur, V. Y. (2014). Energy harvesting from nanofibers of hybrid organic ferroelectric dabcoHReO_4 . *Applied Physics Letters*, 104(3), [032907]. <https://doi.org/10.1063/1.4862437>

88. Volkova, Y. Y., Zelenovskiy, P. S., Sokolovskiy, D. N., & Babushkin, A. N. (2014). Structural transformations in single-wall carbon nanotubes under high pressure. *Bulletin of the Russian Academy of Sciences: Physics*, 78(4), 285-287. <https://doi.org/10.3103/S1062873814040327>
89. Shur, V. Y., Shikhova, V. A., Zelenovskiy, P. S., Pelegov, D. V., Ivleva, L. I., & Dec, J. (2014). Formation of self-assembled nanodomain structures in single crystals of uniaxial ferroelectrics lithium niobate, lithium tantalate and strontium-barium niobate. *Journal of Advanced Dielectrics*, 4(1), [1450006]. <https://doi.org/10.1142/S2010135X14500064>
90. Волкова, Я. Ю., Зеленовский, П. С., Соколовский, Д. Н., & Бабушкин, А. Н. (2014). СТРУКТУРНЫЕ ПЕРЕХОДЫ В ОДНОСТЕННЫХ УГЛЕРОДНЫХ НАНОТРУБКАХ ПРИ ВЫСОКИХ ДАВЛЕНИЯХ. *Известия Российской академии наук. Серия физическая*, 78(4), 430-432. <https://doi.org/10.7868/S0367676514040449>
91. Noël, M., Volkova, Y., Mases, M., Zelenovskiy, P., Babushkin, A., & Soldatov, A. V. (2013). Effects of non-hydrostatic pressure on electrical resistance of bundled single-wall carbon nanotubes. In *IOP Conference Series: Materials Science and Engineering* (1 ed., Vol. 48). [012013] (IOP Conference Series-Materials Science and Engineering; Vol. 48). Institute of Physics Publishing (IOP). <https://doi.org/10.1088/1757-899X/48/1/012013>
92. Shur, V. Y., Shikhova, V. A., Ilevlev, A. V., Zelenovskiy, P. S., Neradovskiy, M. M., Pelegov, D. V., & Ivleva, L. I. (2012). Nanodomain structures formation during polarization reversal in uniform electric field in strontium barium niobate single crystals. *Journal of Applied Physics*, 112(6), [064117]. <https://doi.org/10.1063/1.4754511>
93. Akhmatkhanov, A. R., Shur, V. Y., Baturin, I. S., Zorikhin, D. V., Lukmanova, A. M., Zelenovskiy, P. S., & Neradovskiy, M. M. (2012). Domain kinetics in lithium niobate single crystals with photoresist dielectric layer. *Ferroelectrics*, 439(1), 3-12. <https://doi.org/10.1080/00150193.2012.743369>
94. Zelenovskiy, P. S., Shikhova, V. A., Ilevlev, A. V., Neradovskiy, M. M., & Shur, V. Y. (2012). Micro-Raman visualization of domain structure in strontium barium niobate single crystals. *Ferroelectrics*, 439(1), 33-39. <https://doi.org/10.1080/00150193.2012.746890>
95. Shur, V. Y., Zelenovskiy, P. S., Nebogatikov, M. S., Alikin, D. O., Sarmanova, M. F., Ilevlev, A. V., Mingaliev, E. A., & Kuznetsov, D. K. (2011). Investigation of the nanodomain structure formation by piezoelectric force microscopy and Raman confocal microscopy in LiNbO₃ and LiTaO₃ crystals. *Journal of Applied Physics*, 110(5), [052013]. <https://doi.org/10.1063/1.3623778>
96. Zelenovskiy, P. S., Shur, V. Y., Kuznetsov, D. K., Mingaliev, E. A., Fontana, M., & Bourson, P. (2011). Visualization of nanodomains in lithium niobate single crystals by scanning laser confocal Raman microscopy. *Physics of the Solid State*, 53(1), 109-113. <https://doi.org/10.1134/S1063783411010367>
97. Зеленовский, П. С., Шур, В. Я., Кузнецов, Д. К., Мингалиев, Е. А., Fontana, M. D., & Bourson, P. (2011). ВИЗУАЛИЗАЦИЯ НАНОДОМЕНОВ В МОНОКРИСТАЛЛАХ НИОБАТА ЛИТИЯ МЕТОДОМ СКАНИРУЮЩЕЙ ЛАЗЕРНОЙ КОНФОКАЛЬНОЙ МИКРОСКОПИИ КОМБИНАЦИОННОГО РАССЕЯНИЯ. *Физика твердого тела*, 106-109.
98. Zelenovskiy, P. S., Shur, V. Y., Bourson, P., Fontana, M. D., Kuznetsov, D. K., & Mingaliev, E. A. (2010). Raman study of neutral and charged domain walls in lithium niobate. *Ferroelectrics*, 398(1), 34-41. <https://doi.org/10.1080/00150193.2010.489810>
99. Shur, V. Y., Shishkin, E. I., Nikolaeva, E. V., Nebogatikov, M. S., Alikin, D. O., Zelenovskiy, P. S., Sarmanova, M. F., & Dolbilov, M. A. (2010). Study of nanoscale domain structure formation using Raman confocal microscopy. *Ferroelectrics*, 398(1), 91-97. <https://doi.org/10.1080/00150193.2010.489838>
100. Zelenovskiy, P. S., Fontana, M. D., Shur, V. Y., Bourson, P., & Kuznetsov, D. K. (2010). Raman visualization of micro- and nanoscale domain structures in lithium niobate. *Applied Physics A: Materials Science and Processing*, 99(4), 741-744. <https://doi.org/10.1007/s00339-010-5621-4>
101. Lobov, A. I., Shur, V. Y., Kuznetsov, D. K., Negashev, S. A., Pelegov, D. V., Shishkin, E. I., & Zelenovskiy, P. S. (2008). Discrete switching by growth of nano-scale domain rays under highly-nonequilibrium conditions in lithium niobate single crystals. *Ferroelectrics*, 373(1 PART 1), 99-108. <https://doi.org/10.1080/00150190802408812>
102. Kuznetsov, D. K., Shur, V. Y., Negashev, S. A., Lobov, A. I., Pelegov, D. V., Shishkin, E. I., Zelenovskiy, P. S., Platonov, V. V., Ivanov, M. G., & Osipov, V. V. (2008). Formation of nano-scale domain structures in lithium niobate using high-intensity laser irradiation. *Ferroelectrics*, 373(1 PART 1), 133-138. <https://doi.org/10.1080/00150190802409059>
103. Shur, V. Y., Kuznetsov, D. K., Lobov, A. I., Shishkin, E. I., Zelenovskii, P. S., Osipov, V. V., Ivanov, M. G., Orlov, A. N., & Platonov, V. V. (2008). Formation of nanodomain structures in lithium niobate as a result of pulsed laser irradiation. *Bulletin of the Russian Academy of Sciences: Physics*, 72(2), 181-183. <https://doi.org/10.1007/s11954-008-2011-6>
104. Шур, В. Я., Кузнецов, Д. К., Лобов, А. И., Шишкин, Е. И., Зеленовский, П. С., Осипов, В. В., Иванов, М. Г., Орлов, А. Н., & Платонов, В. В. (2008). ФОРМИРОВАНИЕ НАНОДОМЕННЫХ СТРУКТУР В РЕЗУЛЬТАТЕ ИМПУЛЬСНОГО ЛАЗЕРНОГО ОБЛУЧЕНИЯ НИОБАТА ЛИТИЯ. *Известия Российской академии наук. Серия физическая*, 72(2), 198-200.

105. Shur, V. Y., Rumyantsev, E. L., Shur, A. G., Lobov, A. I., Kuznetsov, D. K., Shishkin, E. I., Nikolaeva, E. V., Dolbilov, M. A., Zelenovskiy, P. S., Gallo, K., & De Micheli, M. P. (2007). Nanoscale domain effects in ferroelectrics. Formation and evolution of self-assembled structures in LiNbO_3 and LiTaO_3 . *Ferroelectrics*, 354(1), 145-157. <https://doi.org/10.1080/00150190701454818>