Резюме: Шаронов Георгий Владимирович

Адрес

Федеральное государственное бюджетное учреждение науки Институт биоорганической химии им. академиков М.М. Шемякина и Ю.А. Овчинникова Российской академии наук, Москва, Россия

Контакты

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Образование

1997–2003	г. Долгопрудный, Московская обл.	Московский физико-технический институт (МФТИ)	Дипломы бакалавра и магистра прикладных физики и математики. Специализация: физико-химическая биология и биотехнология.

Работа в ИБХ

2020–наст.вр.	Старший научный сотрудник	

Научные интересы

Основной областью научных интересов Шаронова Г.В. является механизм действия рецепторов и передачи сигнала через плазматичекую мембрану. В этих исследованияю особое внимание уделяется роли липидов и цитоскелета.

Степени и звания

	Кандидат наук (Физико-математические науки)

Публикации

1. Shagina IA, Nakonechnaya TO, Izosimova AV, Shabalkina AV, Yuzhakova DV, Skatova VD, Lupyr KR, Muftakhutdinov I, Izraelson M, Davydov AN, Luppov D, Shugay M, Britanova OV, Chudakov DM, **Sharonov GV** (2026). Capturing and Tracking Clonal T-cell Response to Cancer Neoantigens.*Cancer Immunol Res* 14 (6), 1022–1034, 10.1158/2326-6066.CIR-24-1216
2. Shabalkina AV, Izosimova AV, Ryzhichenko EO, Shurganova EV, Myalik DS, Maryanchik SV, Ruppel VK, Knyazev DI, Khilal NR, Barsova EV, Shagina IA, **Sharonov GV** (2025). Nodal Expansion, Tumor Infiltration and Exhaustion of Neoepitope-Specific Th Cells After Prophylactic Peptide Vaccination and Anti-CTLA4 Therapy in Mouse Melanoma B16. *Int J Mol Sci* 26 (13), 6453, 10.3390/ijms26136453
3. Ryzhichenko EO, Shabalkina AV, Maryanchik SV, **Sharonov GV** (2025). Multiplexed Detection of Epitope Specific T-Cell Responses Using CD20 Trogocytosis. *Biochem (Mosc) Suppl Ser A Membr Cell Biol* 19 (2), 202–209, 10.1134/S1990747825700151
4. Krasik SV, Bryushkova EA, **Sharonov GV**, Myalik DS, Shurganova EV, Komarov DV, Shagina IA, Shpudeiko PS, Turchaninova MA, Vakhitova MT, Samoylenko IV, Marinov DT, Demidov LV, Zagaynov VE, Chudakov DM, Serebrovskaya EO (2025). Systematic evaluation of intratumoral and peripheral BCR repertoires in three cancers. *Elife* 13, , 10.7554/eLife.89506
5. Izosimova AV, Shabalkina AV, Myshkin MY, Shurganova EV, Myalik DS, Ryzhichenko EO, Samitova AF, Barsova EV, Shagina IA, Britanova OV, Yuzhakova DV, **Sharonov GV** (2024). Local Enrichment with Convergence of Enriched T-Cell Clones Are Hallmarks of Effective Peptide Vaccination against B16

Melanoma. *Vaccines (Basel)* 12 (4), 345, 10.3390/vaccines12040345
6. Goncharov MM, Bryushkova EA, Sharayev NI, Skatova VD, Baryshnikova AM, **Sharonov GV**, Karnaukhov V, Vakhitova MT, Samoylenko IV, Demidov LV, Lukyanov S, Chudakov DM, Serebrovskaya EO (2022). Pinpointing the tumor-specific T-cells via TCR clusters.*Elife* 11, , 10.7554/eLife.77274
7. Izraelson M, Metsger M, Davydov AN, Shagina IA, Dronina MA, Obraztsova AS, Miskevich DA, Mamedov IZ, Volchkova LN, Nakonechnaya TO, Shugay M, Bolotin DA, Staroverov DB, **Sharonov GV**, Kondratyuk EY, Zagaynova EV, Lukyanov S, Shams I, Britanova OV, Chudakov DM (2021). Distinct organization of adaptive immunity in the long-lived rodent Spalax galili. *Nat Aging* 1 (2), 179–189, 10.1038/s43587-021-00029-3
8. **Sharonov GV**, Nekrasova OV, Kudryashova KS, Kirpichnikov MP, Feofanov AV (2021). Bioengineered System for High Throughput Screening of Kv1 Ion Channel Blockers. *Bioengineering (Basel)* 8 (11), 187, 10.3390/bioengineering8110187
9. Izosimova AV, Yuzhakova DV, Skatova VD, Volchkova LN, Zagainova EV, Chudakov DM, **Sharonov GV** (2021). Deciphering repertoire of b16 melanoma reactive tcrs by immunization, in vitro restimulation and sequencing of ifnγ-secreting t cells. *Int J Mol Sci* 22 (18), , 10.3390/ijms22189859
10. Druzhkova I, Shirmanova M, Ignatova N, Dudenkova V, Lukina M, Zagaynova E, Safina D, Kostrov S, Didych D, Kuzmich A, **Sharonov G**, Rakitina O, Alekseenko I, Sverdlov E (2020). Expression of EMT-Related Genes in Hybrid E/M Colorectal Cancer Cells Determines Fibroblast Activation and Collagen Remodeling. *Int J Mol Sci* 21 (21), 1–26, 10.3390/ijms21218119
11. Yuzhakova DV, Volchkova LN, Pogorelyy MV, Serebrovskaya EO, Shagina IA, Bryushkova EA, Nakonechnaya TO, Izosimova AV, Zavyalova DS, Karabut MM, Izraelson M, Samoylenko IV, Zagainov VE, Chudakov DM, Zagaynova EV, **Sharonov GV** (2020). Measuring Intratumoral Heterogeneity of Immune Repertoires. *Front Oncol* 10, 512, 10.3389/fonc.2020.00512
12. Zhigalova EA, Izosimova AI, Yuzhakova DV, Volchkova LN, Shagina IA, Turchaninova MA, Serebrovskaya EO, Zagaynova EV, Chudakov DM, **Sharonov GV** (2020). RNA-Seq-Based TCR Profiling Reveals Persistently Increased Intratumoral Clonality in Responders to Anti-PD-1 Therapy. *Front Oncol* 10, 385, 10.3389/fonc.2020.00385
13. Balatskaya MN, Baglay AI, Rubtsov YP, **Sharonov GV** (2020). Analysis of GPI-Anchored Receptor Distribution and Dynamics in Live Cells by Tag-mediated Enzymatic Labeling and FRET. *Methods Protoc.* 3 (2), 1–20, 10.3390/mps3020033
14. **Sharonov GV**, Serebrovskaya EO, Yuzhakova DV, Britanova OV, Chudakov DM (2020). B cells, plasma cells and antibody repertoires in the tumour microenvironment. *Nat Rev Immunol* 20 (5), 294–307, 10.1038/s41577-019-0257-x
15. Balatskaya MN, **Sharonov GV**, Baglay AI, Rubtsov YP, Tkachuk VA (2019). Different spatiotemporal organization of GPI-anchored T-cadherin in response to low-density lipoprotein and adiponectin. *BIOCHIM BIOPHYS ACTA* 1863 (11), 129414, 10.1016/j.bbagen.2019.129414
16. Isaeva OI, **Sharonov GV**, Serebrovskaya EO, Turchaninova MA, Zaretsky AR, Shugay M, Chudakov DM (2019). Intratumoral immunoglobulin isotypes predict survival in lung adenocarcinoma subtypes.*J Immunother Cancer* 7 (1), 279, 10.1186/s40425-019-0747-1
17. Shaimanov AN, Orlikovsky NA, Khabushev EM, Zverev AV, Pishimova AA, **Sharonov GV**, Yankovskii GM, Rodionov IA, Baryshev AV (2018). Interfering surface and localized plasmon: Tuning the Wood anomaly for biosensing. *Photonics Nanostruct* 32, 1–5, 10.1016/j.photonics.2018.08.003
18. Davydov AN, Obraztsova AS, Lebedin MY, Turchaninova MA, Staroverov DB, Merzlyak EM, **Sharonov GV**, Kladova O, Shugay M, Britanova OV, Chudakov DM (2018). Comparative Analysis of B-Cell Receptor Repertoires Induced by Live Yellow Fever Vaccine in Young and Middle-Age Donors. *Front Immunol* 9 (OCT), 2309, 10.3389/fimmu.2018.02309
19. **(конференция)** Shaimanov AN, Orlikovsky NA, Khabushev EM, Zverev AV, Pishimova AA, **Sharonov GV**, Yankovskii GM, Rodionov IA, Baryshev AV (2018). Wood's anomaly for plasmonic biosensor based on 1D magnetooptical nanostructure. *J Phys Conf Ser* 1092, , 10.1088/1742-6596/1092/1/012134
20. **(конференция)** Kornienko VV, Khabushev EM, Shaimanov AN, **Sharonov GV**, Afanasyev KN,

Merzlikin AM, Yankovskii GM, Baryshev AV (2018). Plasmonic Photonic Crystal Slab: Surface Wave-Assisted Binding for Lipoprotein Detection. *International Conference on Optical MEMS and Nanophotonics* 2018, , 10.1109/OMN.2018.8454527

21. Lyukmanova EN, Bychkov ML, **Sharonov GV**, Efremenko AV, Shulepko MA, Kulbatskii DS, Shenkarev ZO, Feofanov AV, Dolgikh DA, Kirpichnikov MP (2018). Human secreted proteins SLURP-1 and SLURP-2 control the growth of epithelial cancer cells via interactions with nicotinic acetylcholine receptors. *Br J Pharmacol* 175 (11), 1973–1986, 10.1111/bph.14194
22. Mitkin NA, Muratova AM, **Sharonov GV**, Korneev KV, Sviriaeva EN, Mazurov D, Schwartz AM, Kuprash DV (2017). p63 and p73 repress CXCR5 chemokine receptor gene expression in p53-deficient MCF-7 breast cancer cells during genotoxic stress. *BIOCHIM BIOPHYS ACTA* 1860 (12), 1169–1178, 10.1016/j.bbagrm.2017.10.003
23. Bocharov EV, **Sharonov GV**, Bocharova OV, Pavlov KV (2017). Conformational transitions and interactions underlying the function of membrane embedded receptor protein kinases. *BIOCHIM BIOPHYS ACTA* 1859 (9), 1417–1429, 10.1016/j.bbamem.2017.01.025
24. Serebrovskaya EO, Yuzhakova DV, Ryumina AP, Druzhkova IN, **Sharonov GV**, Kotlobay AA, Zagaynova EV, Lukyanov SA, Shirmanova MV (2016). Soluble OX40L favors tumor rejection in CT26 colon carcinoma model. *Cytokine* 84, 10–16, 10.1016/j.cyto.2016.05.005
25. **Sharonov GV**, Balatskaya MN, Tkachuk VA (2016). Glycosylphosphatidylinositol-anchored proteins as regulators of cortical cytoskeleton. *Biochemistry (Mosc)* 81 (6), 636–650, 10.1134/S0006297916060110
26. Sarkisyan KS, Bolotin DA, Meer MV, Usmanova DR, Mishin AS, **Sharonov GV**, Ivankov DN, Bozhanova NG, Baranov MS, Soylemez O, Bogatyreva NS, Vlasov PK, Egorov ES, Logacheva MD, Kondrashov AS, Chudakov DM, Putintseva EV, Mamedov IZ, Tawfik DS, Lukyanov KA, Kondrashov FA (2016). Local fitness landscape of the green fluorescent protein. *Nature* 533 (7603), 397–401, 10.1038/nature17995
27. Tyurin-Kuzmin PA, Zhdanovskaya ND, Sukhova AA, Sagaradze GD, Albert EA, Ageeva LV, **Sharonov GV**, Vorotnikov AV, Tkachuk VA (2016). Nox4 and duox1/2 mediate redox activation of mesenchymal cell migration by PDGF. *PLoS One* 11 (4), e0154157, 10.1371/journal.pone.0154157
28. Zlobovskaya OA, Sergeeva TF, Shirmanova MV, Dudenkova VV, **Sharonov GV**, Zagaynova EV, Lukyanov KA (2016). Genetically encoded far-red fluorescent sensors for caspase-3 activity. *Biotechniques* 60 (2), 62–68, 10.2144/000114377
29. Sarkisyan KS, Zlobovskaya OA, Gorbachev DA, Bozhanova NG, **Sharonov GV**, Staroverov DB, Egorov ES, Ryabova AV, Solntsev KM, Mishin AS, Lukyanov KA (2015). KillerOrange, a genetically encoded photosensitizer activated by blue and green light. *PLoS One* 10 (12), e0145287, 10.1371/journal.pone.0145287
30. Sarkisyan KS, Goryashchenko AS, Lidsky PV, Gorbachev DA, Bozhanova NG, Gorokhovatsky AY, Pereverzeva AR, Ryumina AP, Zherdeva VV, Savitsky AP, Solntsev KM, Bommarius AS, **Sharonov GV**, Lindquist JR, Drobizhev M, Hughes TE, Rebane A, Lukyanov KA, Mishin AS (2015). Green Fluorescent Protein with Anionic Tryptophan-Based Chromophore and Long Fluorescence Lifetime. *Biophys J* 109 (2), 380–389, 10.1016/j.bpj.2015.06.018
31. Egorov ES, Merzlyak EM, Shelenkov AA, Britanova OV, **Sharonov GV**, Staroverov DB, Bolotin DA, Davydov AN, Barsova E, Lebedev YB, Shugay M, Chudakov DM (2015). Quantitative profiling of immune repertoires for minor lymphocyte counts using unique molecular identifiers. *J Immunol* 194 (12), 6155–6163, 10.4049/jimmunol.1500215
32. **Sharonov GV**, Bocharov EV, Kolosov PM, Astapova MV, Arseniev AS, Feofanov AV (2014). Point mutations in dimerization motifs of the transmembrane domain stabilize active or inactive state of the EphA2 receptor tyrosine kinase. *J Biol Chem* 289 (21), 14955–14964, 10.1074/jbc.M114.558783
33. Turchaninova MA, Britanova OV, Bolotin DA, Shugay M, Putintseva EV, Staroverov DB, **Sharonov G**, Shcherbo D, Zvyagin IV, Mamedov IZ, Linnemann C, Schumacher TN, Chudakov DM (2013). Pairing of T-cell receptor chains via emulsion PCR. *Eur J Immunol* 43 (9), 2507–2515, 10.1002/eji.201343453
34. Nekrasova OV, **Sharonov GV**, Tikhonov RV, Kolosov PM, Astapova MV, Yakimov SA, Tagvey AI, Korchagina AA, Bocharova OV, Wulfson AN, Feofanov AV, Kirpichnikov MP (2012). Receptor-binding

domain of ephrin-A1: Production in bacterial expression system and activity. *Biochemistry (Mosc)* 77 (12), 1387–1394, 10.1134/S0006297912120073

35. Serebrovskaya EO, Gorodnicheva TV, Ermakova GV, Solovieva EA, **Sharonov GV**, Zagaynova EV, Chudakov DM, Lukyanov S, Zaraisky AG, Lukyanov KA (2011). Light-induced blockage of cell division with a chromatin-targeted phototoxic fluorescent protein. *Biochem J* 435 (1), 65–71, 10.1042/BJ20101217
36. Mamedov IZ, Britanova OV, Bolotin DA, Chkalina AV, Staroverov DB, Zvyagin IV, Kotlobay AA, Turchaninova MA, Fedorenko DA, Novik AA, **Sharonov GV**, Lukyanov S, Chudakov DM, Lebedev YB (2011). Quantitative tracking of T cell clones after haematopoietic stem cell transplantation.*EMBO Mol Med* 3 (4), 201–207, 10.1002/emmm.201100129
37. Mamedov IZ, Britanova OV, Chkalina AV, Staroverov DB, Amosova AL, Mishin AS, Kurnikova MA, Zvyagin IV, Mutovina ZY, Gordeev AV, Khaidukov SV, **Sharonov GV**, Shagin DA, Chudakov DM, Lebedev YB (2009). Individual characterization of stably expanded T cell clones in ankylosing spondylitis patients. *Autoimmunity* 42 (6), 525–536, 10.1080/08916930902960362
38. Chertkova RV, **Sharonov GV**, Feofanov AV, Bocharova OV, Latypov RF, Chernyak BV, Arseniev AS, Dolgikh DA, Kirpichnikov MP (2008). Proapoptotic activity of cytochrome c in living cells: Effect of K72 substitutions and species differences. *Mol Cell Biochem* 314 (12), 85–93, 10.1007/s11010-008-9768-7
39. **Sharonov GV**, Karmakova TA, Kassies R, Pljutinskaya AD, Grin MA, Refregiers M, Yakubovskaya RI, Mironov AF, Maurizot JC, Vigny P, Otto C, Feofanov AV (2006). Cycloimide bacteriochlorin p derivatives: Photodynamic properties and cellular and tissue distribution. *J Free Radic Biol Med* 40 (3), 407–419, 10.1016/j.freeradbiomed.2005.08.028
40. Nazarova AI, Feofanov AV, Karmakova TA, **Sharonov GV**, Plyutinskaya AD, Yakubovskaya RI, Lebedeva VS, Mironov AF, Maurizot JC, Vigny P (2005). Effect of substituents on photochemical and biological properties of 13,15-N-cycloimide derivatives of chlorin p6. *Bioorg Khim* 31 (5), 535–548.
41. Nazarova AI, Feofanov AV, Karmakova TA, **Sharonov GV**, Plyutinskaya AD, Yakubovskaya RI, Lebedeva VS, Mironov AF, Maurizot JC, Vigny P (2005). Effect of substituents on photochemical and biological properties of 13,15-N-cycloimide derivatives of chlorin p6. *Russ. J. Bioorganic Chem.* 31 (5), 482–494, 10.1007/s11171-005-0066-9
42. Feofanov AV, **Sharonov GV**, Astapova MV, Rodionov DI, Utkin YN, Arseniev AS (2005). Cancer cell injury by cytotoxins from cobra venom is mediated through lysosomal damage. *Biochem J* 390 (1), 11–18, 10.1042/BJ20041892
43. **Sharonov GV**, Feofanov AV, Bocharova OV, Astapova MV, Dedukhova VI, Chernyak BV, Dolgikh DA, Arseniev AS, Skulachev VP, Kirpichnikov MP (2005). Comparative analysis of proapoptotic activity of cytochrome c mutants in living cells. *Apoptosis* 10 (4), 797–808, 10.1007/s10495-005-0366-9
44. Feofanov AV, **Sharonov GV**, Dubinnyj MA, Astapova MV, Kudelina IA, Dubovskij PV, Rodionov DI, Utkin YN, Arseniev AS (2004). Comparative study of structure and activity of cytotoxins from venom of the cobras Naja oxiana, Naja kaouthia, and Naja haje. *Biochemistry (Mosc)* 69 (10), 1410–1421.
45. Feofanov AV, **Sharonov GV**, Dubinnyi MA, Astapova MV, Kudelina IA, Dubovskii PV, Rodionov DI, Utkin YN, Arseniev AS (2004). Comparative study of structure and activity of cytotoxins from venom of the cobras naja oxiana, naja kaouthia, and naja haje. *Biochemistry (Mosc)* 69 (10), 1148–1157, 10.1023/B:BIRY.0000046890.46901.7e
46. Feofanov A, **Sharonov G**, Grichine A, Karmakova T, Pljutinskaya A, Lebedeva V, Ruziyev R, Yakubovskaya R, Mironov A, Refregier M, Maurizot JC, Vigny P (2004). Comparative Study of Photodynamic Properties of 13,15-N-cycloimide Derivatives of Chlorin p6. *Photochem Photobiol* 79 (2), 172–188, 10.1562/0031-8655(2004)079<0172:CSOPPO>2.0.CO;2
47. Filatov AV, Shmigol IB, **Sharonov GV**, Feofanov AV, Volkov Y (2003). Direct and indirect antibody-induced TX-100 resistance of cell surface antigens. *Immunol Lett* 85 (3), 287–295, 10.1016/S0165-2478(02)00244-4
48. Filatov AV, Shmigol IB, Kuzin II, **Sharonov GV**, Feofanov AV (2003). Resistance of cellular membrane antigens to solubilization with Triton X-100 as a marker of their association with lipid rafts - Analysis by

flow cytometry. *Immunotechnology* 278 (12), 211–219, 10.1016/S0022-1759(03)00188-1